

CERTAIN WELDED CARBON STEEL PIPES AND TUBES FROM TAIWAN

**Determination of the Commission
in Investigation No. 731-TA-349
(Final) Under the Tariff Act
of 1930, Together With
the Information Obtained
in the Investigation**



USITC PUBLICATION 1994

JULY 1987

UNITED STATES INTERNATIONAL TRADE COMMISSION

COMMISSIONERS

Susan Liebeler, Chairman
Anne E. Brunsdale, Vice Chairman
Alfred E. Eckes
Seeley G. Lodwick
David B. Rohr

Staff Assigned:

Valerie Newkirk, Office of Investigations
Norbert Gannon, Office of Industries
Jeff Anspacher, Office of Economics
Jerald Tepper, Office of Investigations
Mary White, Office of the General Counsel

Bob Carpenter, Supervisory Investigator

Address all communications to
Kenneth R. Mason, Secretary to the Commission
United States International Trade Commission
Washington, DC 20436

C O N T E N T S

	<u>Page</u>
Determination.....	1
Views of Chairman Liebeler and Vice Chairman Brunsdale.....	3
Additional Views of Chairman Liebeler.....	27
Additional Views of Vice Chairman Anne E. Brunsdale.....	45
Views of Commissioner Lodwick.....	89
Dissenting Views of Commissioners Alfred Eckes and David Rohr.....	95
Information obtained in the investigation:	
Introduction.....	A-1
Previous Commission investigations.....	A-2
The products:	
Description and uses.....	A-2
Manufacturing process.....	A-5
U.S. tariff treatment.....	A-5
Nature and extent of the LTFV sales.....	A-6
The President's program on voluntary restraints of exports to the United States.....	A-6
The European Community Pipe and Tube Agreement.....	A-7
The producers in Taiwan.....	A-8
U.S. producers.....	A-10
U.S. importers.....	A-13
The U.S. market.....	A-14
Channels of distribution.....	A-14
Apparent U.S. consumption.....	A-14
Consideration of alleged material injury to an industry in the United States:	
U.S. production, capacity, and capacity utilization.....	A-16
U.S. producers' domestic shipments.....	A-18
U.S. exports.....	A-18
U.S. producers' inventories.....	A-20
U.S. producers' imports.....	A-20
U.S. employment and wages.....	A-21
Financial experience of U.S. producers:	
Operations on welded carbon steel pipes and tubes.....	A-23
Operations on light-walled rectangular pipes and tubes.....	A-25
Investment in productive facilities.....	A-29
Capital expenditures and research and development expenses..	A-29
Capital and investment.....	A-30
The question of alleged threat of material injury:	
Consideration factors.....	A-30
U.S. importers' inventories.....	A-30
Consideration of the causal relationship between the alleged material injury and the LTFV imports:	
U.S. imports.....	A-31
Market penetration.....	A-31
Prices.....	A-37
Domestic prices.....	A-38
Taiwan prices.....	A-39
Lost sales and lost revenues.....	A-41
Exchange rates.....	A-41

CONTENTS

	<u>Page</u>
Appendix A. <u>Federal Register</u> notice of the Commission.....	A-43
Appendix B. <u>Federal Register</u> notice of the Department of Commerce.....	A-47
Appendix C. List of witnesses.....	A-53
Appendix D. Light-walled rectangular pipes and tubes: capacity, production, shipments, inventories, and employment, West Coast region, by firms.....	A-57
Appendix E. Light-walled rectangular pipes and tubes: U.S. imports for consumption from Taiwan and Singapore and market penetration, by regions.....	A-65

Tables

	<u>Page</u>
1. Light-walled rectangular pipes and tubes: Current and recent title VII investigations since January 1984, most recent dumping and subsidy margins, and import-to-consumption ratios, by countries, 1984-86, January-March 1986, and January-March 1987.....	A-3
2. Light-walled rectangular pipes and tubes: Yieh Hsing's capacity, production, domestic shipments, exports, and yearend inventories, 1983-86, and estimated 1987.....	A-9
3. Light-walled rectangular pipes and tubes: U.S. producers, plant locations, and their shares of domestic shipments, and positions on the petition, by firms, 1986.....	A-11
4. Light-walled rectangular pipes and tubes: Apparent U.S. consumption, by regions, 1984-86, January-March 1986, and January-March 1987.....	A-15
5. Light-walled rectangular pipes and tubes: U.S. production, capacity and capacity utilization, by regions, 1984-86, January-March 1986, January-March 1987.....	A-17
6. Light-walled rectangular pipes and tubes: U.S. producers' domestic shipments produced within and outside the West Coast region, by destinations, 1984-86, January-March 1986, and January-March 1987...	A-19
7. Average number of production and related workers producing light-walled rectangular pipes and tubes, hours worked, wages and total compensation paid to such employees, and labor productivity, hourly compensation, and unit labor production costs, 1984-86, January-March 1986, and January-March 1987.....	A-22
8. Income-and-loss experience of 14 U.S. producers on their operations producing all welded carbon steel pipes and tubes in their establishments within which light-walled rectangular pipes and tubes are produced, accounting years 1984-86, and interim periods ended Mar. 31, 1986, and Mar. 31, 1987.....	A-24
9. Income-and-loss experience of 4 U.S. producers on their operations producing all welded carbon steel pipes and tubes in establishments within which light-walled rectangular pipes and tubes are produced, accounting years 1984-86, and interim periods ended Mar. 31, 1986, and Mar. 31, 1987.....	A-26

CONTENTS

	<u>Page</u>
10. Income-and-loss experience of 7 U.S. West Coast region producers on their operations producing all welded carbon steel pipes and tubes in establishments within which light-walled rectangular pipes and tubes are produced, by companies, accounting years 1984-86, and interim periods ended Mar. 31, 1986, and Mar. 31, 1987.....	A-27
11. Income-and-loss experience of 3 U.S. producers on their operations producing light-walled rectangular pipes and tubes, accounting years 1984-86, and interim periods ended Mar. 31, 1986, and Mar. 31, 1987.....	A-28
12. Light-walled rectangular pipes and tubes: U.S. imports for consumption, by principal sources, 1984-86, January-February 1986, and January-February 1987.....	A-32
13. Light-walled rectangular pipes and tubes: U.S. imports for consumption, from selected sources, by regions, 1984-86, January-March 1986, and January-March 1987.....	A-33
14. Light-walled rectangular pipes and tubes from Taiwan: U.S. imports for consumption, by month, January 1986-April 1987.....	A-34
15. Light-walled rectangular pipes and tubes: Apparent U.S. consumption, imports, and market penetration, by regions, 1984-86, January-March 1986, and January-April 1987.....	A-35
16. Light-walled rectangular pipes and tubes: Value-based apparent U.S. consumption, imports, and market penetration, by regions, 1984-86, January-March 1986, and January-April 1987.....	A-36
17. Light-walled rectangular pipes and tubes: Weighted-average f.o.b. sales prices to distributors for U.S.-produced products, by quarters, January 1985-March 1987.....	A-39
18. Light-walled rectangular pipes and tubes: Weighted-average f.o.b. sales prices to distributors in the Western United States, for U.S.- and Taiwan-produced products, and margins of underselling, by quarters, January 1985-March 1987.....	A-40
19. Light-walled rectangular pipes and tubes: Weighted-average f.o.b. sales prices to end users in the Western United States, for U.S.- and Taiwan-produced products, and margins of underselling (overselling), by quarters, January 1985-March 1987.....	A-40
20. Nominal-exchange-rate equivalents of the New Taiwan dollar in U.S. dollars, real-exchange-rate equivalents, and producer price indicators in the United States and Taiwan, indexed by quarters, January 1984-December 1986.....	A-42

CONTENTS

	<u>Page</u>
D-1. Light-walled rectangular pipes and tubes: U.S. production, capacity, and capacity utilization, West Coast region, by firms, 1984-86, January-March 1986, and January-March 1987.....	A-59
D-2. Light-walled rectangular pipes and tubes: U.S. producers' domestic shipments produced within the West Coast region, by destinations and by firms, and total domestic shipments, 1984-86, January-March 1986, and January-March 1987.....	A-60
D-3. Light-walled rectangular pipes and tubes: U.S. producers' inventories, West Coast region, by firms, 1984-86, January-March 1986 and January-March 1987.....	A-61
D-4. Average number of production and related workers producing light-walled rectangular pipes and tubes, hours worked, wages and total compensation paid to such employees, West Coast region, by firms, 1984-86, January-March 1986, and January-March 1987.....	A-62
E-1. Light-walled rectangular pipes and tubes: U.S. imports for consumption from Taiwan and Singapore, by regions, 1984-86, January-March 1986, and January-March 1987.....	A-67
E-2. Light-walled rectangular pipes and tubes: Volume of imports from Taiwan and Singapore and market penetration, by regions, 1984-86, January-March 1986, and January-March 1987.....	A-68
E-3. Light-walled rectangular pipes and tubes: Value of imports from Taiwan and Singapore and market penetration, by regions, 1984-86, January-March 1986, and January-March 1987.....	A-69

Note.--Information that would reveal the 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. 731-TA-349 (Final)

CERTAIN WELDED CARBON STEEL PIPES AND TUBES FROM TAIWAN

Determination

On the basis of the record 1/ developed in the subject investigation, the Commission determines, pursuant to section 735(b) of the Tariff Act of 1930 (19 U.S.C. § 1673d(b)), that an industry in the United States is not materially injured or threatened with material injury, 2/ and the establishment of an industry in the United States is not materially retarded, by reason of imports from Taiwan of certain welded carbon steel pipes and tubes, provided for in item 610.4928 of the Tariff Schedules of the United States, that have been found by the Department of Commerce to be sold in the United States at less than fair value (LTFV).

Background

The Commission instituted this investigation effective March 17, 1987, following a preliminary determination by the Department of Commerce that imports of certain welded carbon steel pipes and tubes from Taiwan were being sold at LTFV within the meaning of section 731 of the Act (19 U.S.C. § 1673). 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 April 2, 1987 (52 F.R. 10642). The hearing was held in Washington, DC, on June 10, 1987, and all persons who requested the opportunity were permitted to appear in person or by counsel.

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/ Commissioner Eckes and Commissioner Rohr determine that an industry in the United States is threatened with material injury.

VIEWS OF CHAIRMAN LIEBELER AND VICE CHAIRMAN BRUNSDALE

We determine that an industry in the United States is not materially injured or threatened with material injury by reason of imports of welded carbon steel light-walled rectangular pipes and tubes (L-WR pipes) from Taiwan that are sold at less than fair value (LTFV). ^{1/} ^{2/}

Like product/domestic industry ^{3/}

The Commission is required to define the scope of the relevant domestic industry for the purpose of assessing material injury. "Industry" means "the domestic producers as a whole of a like product, or those producers whose

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

^{2/} Commissioner Lodwick also determines that an industry in the United States is not materially injured or threatened with material injury by reason of imports of welded carbon steel light-walled rectangular pipes and tubes (L-WR pipe) from Taiwan that are sold at less than fair value (LTFV). See Views of Commissioner Lodwick, infra.

^{3/} As noted in the preliminary determination of the subject investigation, there have been several Commission investigations of L-WR pipe from Taiwan: Certain Welded Carbon Steel Pipes and Tubes from Taiwan, Inv. No. 731-TA-211 (Final), USITC Pub. 1799 at 3-4 (Jan. 1986) (hereafter cited "L-WR pipe from Taiwan"). The Commission also investigated L-WR pipe from Taiwan in Certain Welded Carbon Steel Pipes and Tubes from the Republic of Korea and Taiwan, Invs. Nos. 731-TA-131 to 132 (Preliminary), USITC Pub. 1389 (June 1983) (hereafter cited "Korea and Taiwan"), and in Certain Welded Carbon Steel Pipes and Tubes from Taiwan and Venezuela, Invs. Nos. 731-TA-211 to 212 (Preliminary), USITC Pub. 1639 (Feb. 1985) (hereafter cited "Taiwan and Venezuela"). Another case involving the L-WR pipe industry is Certain Welded Carbon Steel Pipes and Tubes from the Philippines and Singapore, Invs. Nos. 731-TA-293, 294, and 296 (Final), USITC Pub. 1907 (Nov. 1986) (hereafter cited "The Philippines and Singapore").

collective output of the like product constitutes a major proportion of the total domestic production of that product." ^{4/} "Like product" means "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation" ^{5/ 6/}

The Commission has in prior investigations found the like product to be L-WR pipe and the domestic industry to consist of the producers of L-WR pipe. ^{7/} None of the parties in the preliminary investigation urged us to alter our prior determinations, and no facts have come to light in this final investigation indicating that we ought to do so. Accordingly, we adopt the definitions of like product and domestic industry made in our earlier determinations.

^{4/} 19 U.S.C. § 1677(4)(A).

^{5/} 19 U.S.C. § 1677(10). See also S. Rep. No. 249, 96th Cong., 1st Sess. 90-91 (1979).

^{6/} The "article subject to an investigation" is defined by the scope of the Department of Commerce's (Commerce) investigation. Commerce has defined the scope of this investigation as light-walled welded carbon steel pipes and tubes, of rectangular (including square) cross-section having a wall thickness of less than 0.156 inch, as provided for in item 610.4928 of the Tariff Schedules of the United States Annotated. 51 Fed. Reg. 37950-51 (Oct. 27, 1986).

^{7/} See Korea and Taiwan, supra, at 8-9; Taiwan and Venezuela, supra, at 7; L-WR pipe from Taiwan, supra, at 4; The Philippines and Singapore, supra, at 5; see also The Philippines and Singapore, supra, and cases cited therein at 5, n.13 in which we note that pipes and tubes of rectangular (including square) cross-section having a wall thickness of 0.156 inch or greater are considered heavy-walled rectangular tubing.

Regional industry

Petitioner urges that we analyze the impact of dumped imports on a regional industry in the event that we find no causation of material injury to the national industry. ^{8/} The regional industry proposed by Petitioner would be the "Western Region" composed of Washington, Oregon, California, Nevada, Arizona, and Utah. As we discuss below, the same regional industry argument has been unsuccessfully advanced by Petitioner twice in the last year and one-half.

In appropriate circumstances, a product market in the United States may be divided into two or more markets and the producers within each market may be treated as if they were a separate industry if—

- (i) the producers within such market sell all or almost all of their production of the like product in that market, and
- (ii) the demand in that market is not supplied, to any substantial degree, by producers of the product located outside the market.

In such circumstances, material injury, the threat of material injury, or material retardation of the establishment of an industry may be found to exist with respect to such a regional industry even if the domestic industry as a whole, or those producers whose collective output of a like product constitutes a major proportion of the total domestic production of that product, is not injured, if there is a concentration of subsidized or dumped imports into such an isolated market and if the producers of all, or almost

^{8/} Petition at 32.

all, of the production within that market are being materially injured or threatened by material injury. ^{9/} As the Commission observed in Rock Salt from Canada: "A mechanical application of the statutory criteria does not include an analysis of regional industry. The statutory language 'appropriate circumstances' and 'may be treated' allows for discretion in finding a regional market" ^{10/}

In two recent investigations involving the same products at issue here, the Commission declined to find that there was a sufficiently high ratio of imports into the western region to suggest that it was appropriate to find material injury or threat on a regional basis. In Certain Welded Steel Pipes and Tubes from Taiwan, ^{11/} the facts showed that in the last year of the investigation over 79 percent of Taiwan L-WR imports entered the western region of the United States. The Commission concluded that "there is some question whether the proposed region satisfies the additional statutory requirement that imports are to be concentrated in the region." ^{12/} In Certain Welded Carbon Steel Pipes and Tubes from the Philippines, and Singapore, ^{13/} the Commission majority likewise declined Petitioner's invitation to analyze injury on a regional basis. The facts in that case

^{9/} 19 U.S.C. § 1677(4)(C).

^{10/} Inv. No. 731-TA-239 (Final), USITC Pub. 1798 at 5 (1986).

^{11/} Inv. No. 731-TA-211 (Final), USITC Pub. 1799 (1986).

^{12/} Id. at 4.

^{13/} Invs. Nos. 731-TA-293, 294 and 296 (Final), USITC Pub. 1907 (1986).

showed that of all cumulated imports from Singapore and Taiwan, shipments into the western region ranged from 84.1 percent in 1984 to 69.2 percent in January-June 1986. ^{14/} In both of these cases, import ratios in the range of 70 to 80 percent were not sufficient to persuade the Commission that concentration was present and causation of material injury should be analyzed on a regional basis. ^{15/}

The facts in this case suggest no reason why a different result should be reached on Petitioner's regional industry argument here. On a quantity basis, the reported ratio of Taiwan L-WR imports into the western region was 79.2 percent in 1984, 66.3 percent in 1985, and 72 percent in 1986. On a value basis the reported ratio of Taiwan imports was 76.8 percent in 1984, 69.3 percent in 1985, and 73.2 percent in 1986. ^{16/} Ratios at these levels did not persuade the Commission to accept Petitioner's regional industry argument in the earlier cases, and in our view, they should not persuade us to accept Petitioner's argument now. ^{17/}

^{14/} Id. at 7, n.19.

^{15/} In each case the Commission considered injury to the proposed regional industry only as an afterthought.

^{16/} Report of the Commission (Report) at A-33, Table 13.

^{17/} Vice Chairman Brunsdale believes that discretion to find material injury or threat to a regional industry should be exercised carefully. Because antidumping duties cannot be applied on a regional basis, the consequence of finding material injury or threat thereof to a regional industry may be to extend "relief" to a vast sector of the domestic industry that has not been materially injured by the subject imports. In this case, for example, western regional consumption of L-WR has hovered around only 40
(Footnote continued on next page)

In order to find material injury or threat of material injury to a regional industry, the facts must show that a truly "isolated or separate geographic market" exists. ^{18/} It is our view that it is crucially important in this analysis that the facts show a history of consistently high ratios of the subject imports in the region under consideration in order to constitute the required "concentration" under the statute. ^{19/}

Condition of the domestic L-WR pipe industry

In assessing the condition of the domestic industry, the Commission considers, among other factors, domestic consumption, production, capacity, capacity utilization, shipments, inventories, employment, and financial performance. ^{20/} For the purposes of this final investigation, the Commission considered data for the period of 1984 through March 1987. ^{21/}

(Footnote continued from previous page)
percent of total U.S. consumption during the period of the investigation. During that same period, western regional shipments have never exceeded 38 percent on a quantity basis, and 35 percent on a value basis, of total U.S. domestic shipments of L-WR pipe products. Report at A-19, Table 6.

^{18/} See Rock Salt from Canada, supra, n.10 at 5.

^{19/} If a consistently high ratio of imports is not shown, it amplifies the risk that relief will be extended to an entire industry when only a small portion of the industry actually has been adversely affected by the subject imports.

^{20/} 19 U.S.C. § 1677(7)(C)(iii).

^{21/} While data were gathered for the first quarter of 1987, they must be treated with a great deal of caution. Because the data can be affected by
(Footnote continued on next page)

The data, particularly those comparing 1986 to earlier years, reveal that the industry's condition is mixed.

Apparent U.S. consumption of L-WR pipe was 294,663 tons in 1984, declined by 3.7 percent to 283,664 tons in 1985, and then increased by 4.8 percent to 297,311 tons in 1986. ^{22/} Over the same period, U.S. production increased by 6.7 percent, rising from 185,141 tons in 1984 and 186,422 tons in 1985, to

(Footnote continued from previous page)

isolated non-recurring events, a single quarter is generally too short a period to provide a reliable picture of production and financial indicators. Nonetheless, the interim data in this case reflect the generally positive condition of the domestic industry. Apparent consumption was 75,684 tons or 8.8 percent lower in January-March 1987 interim as compared with 82,979 tons in interim 1986. Report at A-15. We note that this decline corresponded with a sharp drop in total imports. Comparing the interim period of January-March 1986 with the corresponding interim of 1987, L-WR pipe production increased from 53,641 tons to 54,217 tons. Id. at A-17. Capacity increased in interim 1987 as did capacity utilization which was 61.5 percent in interim 1987 as compared with 60.9 percent in interim 1986. Id. Data collected for interim 1986 as compared with interim 1987 indicate that domestic shipments fell only slightly by 0.5 percent from 60,834 tons to 60,524 tons. Id. at A-18-19. The number of employees engaged in the production of L-WR pipe, the number of hours worked, and total compensation paid to these employees rose in interim 1987 as compared with interim 1986. Id. at A-22. Net sales were roughly the same for interim 1987 and interim 1986, although net income as a ratio of net sales declined somewhat in interim 1987 as compared with interim 1986. Id. at A-24. We note that some of financial interim data suggest some deterioration in the operating income for the industry; however, we do not find this alone particularly persuasive of injury considering that it represents only the first three months of the year. Interim data are useful primarily when they confirm prior trends. Moreover, the three preceding years for which we have complete data are more profitable. It would be speculative to identify a reversal of trends based on a three-month interim period.

^{22/} Id. at A-15.

197,619 tons in 1986. ^{23/} Meanwhile, domestic shipments showed greater strength, rising by 5.2 percent from 190,236 tons in 1984 to 200,188 tons in 1985, and by 13.9 percent to 227,706 tons in 1986. ^{24/}

U.S. producers' inventories of L-WR pipe declined throughout the period of investigation—from 11,698 tons in 1984 to 11,503 tons in 1985, 11,219 tons in 1986, and 10,778 tons as of March 31, 1987. ^{25/} The inventory-to-domestic-shipments ratio also declined steadily, from 6.4 percent in 1984 to 5.3 percent as of March 31, 1987. ^{26/}

The number of workers employed in the production of L-WR pipe decreased from 374 in 1984 to 305 in 1985, and then increased to 416 in 1986. ^{27/} The number of hours worked and the total compensation paid to these employees followed the same trend, falling from 1984 to 1985, and rising sharply in 1986. ^{28/}

Capacity was stable and capacity utilization increased somewhat during the period under investigation. Capacity to produce L-WR pipe increased 3.8 percent from 1984 to 1985 and then decreased 3.4 percent from 1985 to

^{23/} Id. at A-17.

^{24/} Id. at A-18-19.

^{25/} Id. at A-20.

^{26/} Id.

^{27/} Id. at A-22.

^{28/} Id.

1986, ^{29/} ending up only slightly higher than it was in 1984. ^{30/}
Capacity utilization fell from 54.5 percent in 1984 to 52.5 percent in 1985,
and then rose to 58.2 percent in 1986. ^{31/} ^{32/}

Of the 24 known domestic producers, only three provided useable financial data, including income-and-loss data, that separated their L-WR pipe operations from their other products. ^{33/} However, 14 domestic producers provided useable data for the establishments within which L-WR pipe are manufactured. The data in the record show that there are significant supply side links between domestic L-WR pipe production and the production of other types of welded carbon steel pipes and tubes. ^{34/}

^{29/} Id. at A-17.

^{30/} Id.

^{31/} Id.

^{32/} The Commission, in its questionnaire, requested the domestic producers to provide detailed information concerning their capacity to produce welded carbon steel pipes and tubes. Domestic producers responded to the effect that, in aggregate, they devoted an average of 35.0 percent of their total productive capacity to the production of L-WR pipe in 1984 and 1985, and 34.0 percent in 1986. Id.

We believe that because there is close substitutability of supply between standard, line, and L-WR pipes and because producers can readily convert capacity to production of other pipe products, it may be misleading to determine capacity and capacity utilization simply by arbitrarily allocating productive resources to one product or another. In fact, some producers have switched production from L-WR pipe to other types of pipes and tubes. Id. at A-10 and A-12. In our view, capacity and capacity utilization might be better evaluated on a product-line basis. 19 U.S.C. § 1677(4)(D).

^{33/} Report at A-25.

^{34/} Id. at A-12 and A-16-17.

The Commission is directed to undertake a product line analysis if the available data do not permit separate identification of domestic production in terms of such criteria as (1) producers' profits and (2) the production processes. ^{35/} In previous investigations involving pipes and tubes, we have concluded that separate identification of producers' profits and the production process was impossible based on available data, and accordingly relied on aggregate data for the entire product line. ^{36/} Therefore, we conducted our analysis of the financial condition of the domestic industry on the basis of operations producing all welded carbon steel pipes and tubes in establishments where L-WR pipe is also manufactured. We did this in an effort to base our decision on the most accurate financial data. This approach, also adopted in our preliminary determination, avoids the allocation problems associated with the financial data used in previous welded carbon steel pipes and tubes investigations, and provides the most accurate picture available of the domestic L-WR pipe industry's financial condition. ^{37/}

^{35/} 19 U.S.C. § 1677(4)(D).

^{36/} For a more complete discussion of the reasons for using a product line analysis, see Certain Welded Carbon Steel Pipes and Tubes from Taiwan, Inv. No. 731-TA-349 (Preliminary), USITC Pub. 1906 at 37-40 (Nov. 1986) (Views of Vice Chairman Brunsdale); also see Certain Welded Carbon Steel Pipes and Tubes from the Philippines and Singapore, Invs. Nos. 731-TA-293, 294, and 296 (Final), USITC Pub. 1907 at 19-24 (Nov. 1986) (Views of Chairman Liebeler); see Certain Welded Carbon Steel Pipes and Tubes from India, Taiwan, and Turkey, Invs. Nos. 731-TA-271 to 273 (Final), USITC Pub. 1839 (Apr. 1986) (Views of Vice Chairman Liebeler and Commissioner Brunsdale at 35-39) (Additional Views of Commissioner Brunsdale at 49).

^{37/} See Certain Welded Carbon Steel Pipes and Tubes from Taiwan, Inv. No. 731-TA-349 (Preliminary), USITC Pub. 1906 (Nov. 1986) (Additional Views of Vice Chairman Brunsdale at 37-39).

Net sales of welded carbon steel pipes and tubes remained relatively constant throughout the period of investigation—\$369 million in 1984 and 1985, \$371 million in 1986, and \$83 million in both interim 1986 and 1987. ^{38/} Operating income declined over the period from \$23 million in 1984 to \$22 million in 1985, and \$21 million in 1986. Operating income was \$3.6 million in interim 1987 as compared with \$6.3 million for interim 1986. ^{39/} Net income as a ratio to net sales declined over the period of investigation from 5.0 percent in 1984 to 4.8 percent in 1985, 4.7 percent in 1986, and 3.3 percent for interim 1987 as compared with 5.8 percent for interim 1986. The number of firms reporting net losses varied from four in 1984 to three in 1986.

Although the majority of the production indicators suggest to us that the domestic industry is relatively healthy, the financial indicators present a less optimistic picture. Therefore we assume arguendo that the domestic industry is materially injured and proceed to a consideration of whether material injury has been caused by dumped imports.

Were we to find that a regional industry existed in this case, we would not come to any different conclusion regarding actual or threatened material injury. As the Commission observed in Rock Salt From Canada, supra:

We note that the standard for injury to a regional industry is more restrictive in order to compensate for the narrow focus of regionality. To find

^{38/} Report at A-24.

^{39/} Id.

injury, the Commission must determine whether the producers of all or almost all, of the production within that market are materially injured or threatened with material injury . . . by reason of the LTFV imports. 40/

This higher standard of injury is not satisfied in this case.

The overall trend of most economic indicators in the western region is similar to the national industry trends—generally stable. Although apparent consumption rose in the western region from 1984 to 1985 and then dropped sharply in 1986 (in contrast to the national trend), it is readily apparent that this sharp drop came largely out of imports, not domestic production. Domestic shipments rose from 69,136 tons in 1984 to 69,792 tons in 1985, and then increased dramatically in 1986, the same year that apparent consumption dropped. We note that both apparent consumption and domestic shipments for interim 1987 were less than the corresponding period in 1986; however, we also note that imports declined and that the value of domestic shipments was higher in interim 1987 than in interim 1986. 41/

Production in the western region increased steadily throughout the period of investigation. 42/ End-of-period inventories held by West Coast producers were almost 11 percent lower at the end of the first quarter of 1987 than they had been at the end of 1984. 43/ The number of hours worked and

40/ 19 U.S.C. § 1677(4)(C) (emphasis added).

41/ Report at A-15 and A-19.

42/ Id. at A-17.

43/ Id. at A-20.

the total compensation paid to western region employees increased steadily over the period of the investigation. ^{44/}

Questionnaire responses received by the Commission indicate that the financial performance of producers in the western region varied from company to company. Producers accounting for a significant portion of western region L-WR production fared substantially better financially in 1986 and the first quarter of 1987 than in previous periods. Three companies, accounting for around 40 percent of western region production, had higher net sales in 1986 than in 1985, and two of those companies (about one-fourth of western region shipments) had steadily increasing sales from 1984 through the first quarter of 1987. Total L-WR production and operating income for these three companies were also higher in 1986 than in previous years. ^{45/}

While some producers are doing worse than others, it is readily apparent that the producers of "all or almost all" of the production in the western region are not suffering material injury. Were we to find a regional industry, the applicable standard of injury would not be met.

Cumulation ^{46/}

Petitioners argue that the Commission is obliged to cumulate imports of L-WR pipe from Taiwan with imports of L-WR pipe from Singapore. The imports

^{44/} Id. at A-21.

^{45/} Report at A-27, Table 10 and A-60, Table D-2.

^{46/} Chairman Liebler does not join the discussion of cumulation and provides her analysis of cumulation in her Additional Views, infra.

from Singapore in question were the subject of the Commission's final affirmative determination roughly eight months ago in Certain Welded Carbon Steel Pipes and Tubes from the Philippines and Singapore.^{47/} In that case the Commission unanimously determined that an industry in the United States was not then being materially injured by reason of dumped imports from Singapore. However, based on evidence regarding Singapore's production capacity and intention to export to the U.S. market, three Commissioners concluded that the domestic L-WR pipe industry was threatened with material injury, while the other other three Commissioners found no threat of material injury. Nonetheless, because of the provisions of Section 771(11) of the Tariff Act,^{48/} the Commission's evenly divided vote became an affirmative determination by the Commission.

Petitioner argues that the L-WR pipe imports from Singapore must be cumulated even though they have been "fairly traded" at least since November 1986 when the antidumping order in the Singapore case went into effect. I have previously declined to cumulate imports subject to previously issued antidumping or countervailing duty orders,^{49/} and Petitioners have presented no persuasive reason why I should change my position on this matter.

^{47/} Invs. Nos. 731-TA-293, 294, and 296 (Final), USITC Pub. 1907 (Nov. 1986).

^{48/} 19 U.S.C. § 1677(11).

^{49/} See Certain Welded Carbon Steel Pipes and Tubes from India, Taiwan and Turkey, Invs. Nos. 731-TA-271 to 273 (Final), USITC Pub. 1839 at 46-49 (Apr. 1986); Certain Welded Carbon Steel Pipes and Tubes from Turkey and Thailand, Inv. No. 701-TA-253 (Final), USITC Pub. 1810 at 40-41 (Feb. 1986).

The Commission is required to assess cumulatively "the volume and effects of imports from two or more countries of like products subject to investigation if such imports compete with each other and with like products of the domestic industry in the United States market." ^{50/} The language of the 1984 Act refers to "imports from two or more countries of like products subject to investigation" Cumulating imports from countries that are not currently under investigation would require the statute to read "products that were or are subject to investigation,"—a reading that would torture the plain meaning of the English language. The past tense is not the same as the present tense, and it is the role of Congress, not the Commission, to mandate cumulation of imports subject to previously issued orders if Congress believes it is wise to do so. ^{51/}

My view on the cumulation of imports subject to previously issued orders is supported by the legislative history of recent proposals in Congress to amend the cumulation provisions of the Trade Act in several significant respects. Section 154 of the Trade and International Policy Reform Act of 1987 (H.R. 3) proposes to amend Section 771(7) of the Tariff Act to require

^{50/} 19 U.S.C. § 1677(7)(C)(iv).

^{51/} In support of their position Petitioner places heavy reliance on the recent decision of the Court of Appeals for the Federal Circuit in *Bingham & Taylor Division, Virginia Industries, Inc. v. United States*, 815 F.2d 1482 (CAFC 1987). In that case the Court affirmed a decision of the Court of International Trade returning a preliminary determination to the Commission because I had declined to "cross-cumulate" allegedly dumped and subsidized imports. The opinion deals exclusively with the cross-cumulation issue and says nothing which suggests that the Commission is obliged to cumulate imports subject to previously issued orders.

cumulation of imports currently subject to an investigation or subject to an outstanding order entered within 12 months prior to the initiation of the investigation under consideration. This amendment would be unnecessary if Petitioner was correct in asserting that the statute already requires cumulation of imports subject to pre-existing orders. Section 154 would also require cumulation "to the extent practicable" in determining threat of material injury, but only with respect to imports that are then under investigation. Thus, the language used refers to "imports . . . subject to any investigation." This language is essentially identical to the language now appearing in the cumulation provision of the statute. Moreover, according to the Report of the Ways and Means Committee, this language does not suggest that the Commission should cumulate imports that are subject to pre-existing orders entered in earlier investigations:

. . . Cumulation in threat cases, however, would not include imports which are subject to pre-existing orders. 52/

It is thus readily apparent that when Congress uses the present tense, it means the present tense, and "imports subject to investigation" does not mean "imports previously subject to investigation."

I am not the only Commissioner who has declined to cumulate imports subject to previously issued orders. The Commission has previously declined

52/ H.R. Rep. No. 40, 100th Cong., 1st. Sess. 131 (1986).

to cumulate imports subject to outstanding orders on a number of occasions. ^{53/} Commissioner Rohr recently observed:

The unfair trade laws require me, in order to reach an affirmative determination, to find a causal nexus between material injury and currently unfairly traded imports. I believe that the unfair trade laws also require me to assume that imports that are already subject to dumping or countervailing duties are being 'fairly traded' once the duties are in effect. I believe this is a statutory presumption required by the laws. Because imports subject to an outstanding orders [sic] are not unfairly traded, they cannot logically be combined, in a decision made after the date of the order, with currently unfairly traded imports as a cause of injury. ^{54/}

Commissioner Rohr went on to note that an exception to this rule was the Commission's practice of "allowing cumulation with imports subject to recently issued orders." ^{55/} I am in agreement with this exception provided that the "recently issued orders" in question were issued only a short time earlier in connection with investigations commenced at the same time as the

^{53/} See, e.g., Oil Country Tubular Goods from Canada and Taiwan, Invs. Nos. 701-TA-225 (Final) and 731-TA-276 to 277 (Final), USITC Pub. 1865 at 9 (1986); Stainless Steel Sheet and Strip from Spain, Inv. No. 731-TA-164 (Final), USITC Pub. 1593 at 12 (1984).

^{54/} Cold-Rolled Carbon Steel Plates and Sheets from Argentina, Inv. No. 731-TA-175 (Final) (Remand), USITC Pub. 1967 at 60 (1986) (Views of Commissioner Rohr).

^{55/} Id.

investigation at hand. ^{56/} I do not believe that this exception should be applied to a case like this one, where the order in the Singapore investigation was issued roughly eight months ago, and the Singapore and Taiwan investigations were not commenced at the same time. ^{57/}

Moreover, cumulation of the Singapore imports is particularly inappropriate since there was no determination that they were actually causing any material injury. The Commission unanimously determined that dumped imports from Singapore were not causing material injury. The affirmative determination in the Singapore investigation was based solely on a finding by three Commissioners that there was a threat of material injury. Their determination regarding the threat of material injury was expressly based on their finding that Singapore had the capacity and the demonstrated intention to significantly increase its exports to the United States. They did not find that the Singapore imports had caused actual injury to the domestic industry. It is plainly illogical to "cumulate " the threat of injury found by three Commissioners in the Singapore case with the actual impact of Taiwan imports in this case.

^{56/} See, e.g., Butt-Weld Pipe Fittings from Japan, Inv. No. 731-TA-309 (Final), USITC Pub. 1943 at 8-9, nn.25 and 26 (Jan. 1987).

^{57/} It should be noted that where other Commissioners have been willing to cumulate imports subject to orders issued several months previously, they nonetheless have excluded in their actual analysis all of the subject imports which entered the country after the order in question was issued. See Certain Welded Carbon Steel Pipes and Tubes from the Philippines and Singapore, Invs. Nos. 731-TA-293, 294 and 296 (Final), USITC Pub. 1907 at 10-11, n.37 (1986).

As Commissioner Rohr noted in Certain Welded Carbon Steel Pipes and Tubes from Turkey and Thailand, ^{58/} threat of material injury and actual material injury entail different elements that cannot properly be analyzed on a true cumulative basis. In this case, for example, how can the Commission cumulate the volume of imports that might have been imported from Singapore in the absence of an affirmative determination with the volume of imports that actually entered the country from Taiwan? In my view, the correct means of dealing with imports from Singapore in this case is to note that they were present in the market and to recognize that they represent sales that did not go to domestic firms. I do not believe that cumulation is appropriate, and I do not believe that the presence of imports from Singapore should be ignored.

No material injury by reason of LTFV imports of L-WR pipe and tube imports from Taiwan

Our views regarding the issue of causation of material injury are stated separately. ^{59/ 60/}

No threat of material injury to the domestic industry by reason of L-WR pipe and tube imports from Taiwan

In determining whether threat of material injury exists, we are directed to consider, inter alia, any existing unused foreign capacity or increase in

^{58/} Inv. No. 701-TA-253 (Final), USITC Pub. 1810 at 27, n.3 (1986).

^{59/} See Additional Views of Chairman Liebeler on causation, infra.

^{60/} See Additional Views of Vice Chairman Brunsdale on causation, infra.

foreign productive capacity likely to result in a significant increase in exports to the United States, any rapid increase in U.S. market penetration and the likelihood that such penetration will increase to an injurious level, the probability that imports will enter the United States at prices that will have a depressing or suppressing effect on domestic prices, any substantial increase in inventories in the United States, and the potential for product-shifting. ^{61/} A finding of threat of material injury must be based on "evidence that the threat of material injury is real and that actual injury is imminent," and may not be based on "mere conjecture or supposition." ^{62/}

The data submitted by respondent, Yieh Hsing, indicate that its capacity increased substantially in 1984 and remained constant through 1986 and into interim 1987. Capacity utilization dropped in 1985 and again in 1986, but, according to estimates, will rise substantially in 1987. ^{63/}

The record is highly equivocal about the extent to which other Taiwan producers have the capacity to export L-WR pipe to the United States. The petition listed Yieh Hsing, plus Kao Hsing, An Mau and FEMCO, as possible producers of L-WR pipes. The record indicates that the latter three companies did not export L-WR pipe to the United States during the period under

^{61/} 19 U.S.C. § 1677(7)(F)(i).

^{62/} 19 U.S.C. § 1677(7)(F)(ii). See also 1979 Senate Report at 88-89.

^{63/} Report at A-8-A-9.

investigation. ^{64/} The Commission has obtained new information indicating that at least six other Taiwan producers exported L-WR pipe to the United States during 1986 and the first quarter of 1987. ^{65/} The evidence regarding the production and production capacity of the six recently identified companies is sketchy and highly questionable. Based on information gathered through telephone conversations with U.S. government representatives in Taiwan, it appears that these six producers may have substantial L-WR production capability. However, the estimates of the size of that capability and the extent of actual Taiwan exports to the United States are so far out of line with other data gathered in this investigation that they appear to be unreliable.

Even if companies other than Yieh Hsing have the capacity to export L-WR pipe, such capacity is not likely to result in a significant increase in imports of L-WR pipe to the United States. The record discloses that Taiwan has an informal export restraint program covering exports of all steel products. ^{66/} Under this program, which provides for a monthly export limit

^{64/} Cable dated Dec. 16, 1986. See also Amendment to the Report of the Commission (July 14, 1987).

^{65/} See Amendment to Report of the Commission (July 14, 1987).

^{66/} Report at A-6-7. While this informal restraint does not constitute a "voluntary restraint agreement" such as those in effect under the President's Steel Program, the record indicates that Taiwan is adhering to the quotas established in the restraint program. The government of Taiwan has extended the restraint through the end of 1987, and the United States Trade Representative believes the program will continue in 1988. See memorandum to
(Footnote continued on next page)

of 20,000 short tons (ST) of steel products, a "fixed quota" of 18,000 ST is divided up among 109 Taiwan steel producers based on their export record for April 1985-July 1986. The remaining 2,000 ST, designated "free quota," is allocated by price bid according to five broad product categories. One of these categories covers all plate products and all welded pipe products (including L-WR pipe). Thirty-five percent of the free quota may be filled by products in this category. ^{67/} The record discloses the eight companies that have the largest "fixed" quota allocations. ^{68/} Yieh Hsing's monthly quota for all steel products is 928 ST.

We do not find it at all probable that the nine companies listed above will fill their shares of the "fixed" quota with significantly increased amounts of L-WR pipe. ^{69/} Under this informal restraint agreement, in order for Taiwan exports of L-WR to rise to injurious levels, we would have to make several very speculative assumptions. Only if we were willing to assume that all producers with the capacity to produce L-WR pipes and tubes would fill their entire fixed quotas with L-WR pipe, successfully bid for the full 35 percent of the "free quota," and choose to fill their entire "free quota" with L-WR pipe (the likelihood of which I discuss below) might the Taiwan exports

(Footnote continued from previous page)
the file dated June 18, 1987. There is nothing in the record to suggest that the restraint will not be followed through 1987 and in the future.

^{67/} Report at A-7.

^{68/} Cable dated Dec. 8, 1986.

^{69/} See Yieh Hsing's Post-Hearing Brief at 4a.

rise to injurious levels. We are not willing to make such speculative assumptions. It would be speculation to say that merely because producers possess the capacity to produce L-WR, they will shift production into L-WR pipe and will fill their available quotas with only L-WR. In conclusion, we are unable to conclude that the threat is real and injury is imminent.

On this basis, we conclude that any existing or unused L-WR pipe production capacity is unlikely to result in a significant increase in imports of the merchandise to the United States.

Likewise, while market penetration of L-WR pipe imports from Taiwan increased substantially in the first quarter of 1987, there is no reason to believe that the sudden surge in that quarter was anything other than a one time occurrence. Based on the actual history of Taiwan imports, it is unlikely that market penetration will reach injurious levels. Imports of the merchandise accounted for just 3.3 percent of total U.S. consumption (by quantity) in 1984, dropped to 0.1 percent in 1985 and rose only to 3.4 percent in 1986. No investigations were pending against Taiwan in 1984 and 1986, yet Taiwan imports remained at very low levels.

We note that domestic prices (average unit values) have remained stable throughout the period of investigation. ^{70/} Further, given the relatively healthy condition of the U.S. market, we do not believe that any price effects attributable to L-WR pipe from Taiwan will increase to injurious levels.

We also find no evidence of any increase in inventories of L-WR pipe in the United States. Rather, the record indicates that inventories declined

^{70/} Report at A-15, Table 4.

during the period of investigation. ^{71/}

Finally, we find no potential for product-shifting by Taiwan producers of L-WR pipe. Petitioner has alleged that because standard pipe products from Taiwan are subject to an antidumping order, ^{72/} and because Yieh Hsing produces standard as well as L-WR pipe, Yieh Hsing will use its facilities to produce L-WR pipe in increased amounts if the Commission makes a negative determination in this case. ^{73/} Since the order on standard pipe from Taiwan was implemented in 1984, any product shifting should have occurred at that time or shortly thereafter. The record contains no convincing evidence that product shifting actually occurred and even if it had occurred, we have not found imports of L-WR from Taiwan to be a cause of material injury to the domestic industry.

Accordingly, we conclude that the domestic L-WR pipe industry is not threatened with material injury by reason of L-WR pipe imports from Taiwan which have been found to be sold at less than fair value.

^{71/} U.S. producers' yearend inventories of L-WR pipe decreased by 4.1 percent during 1984-86. Ratios of inventories to shipments declined during the period of investigation throughout the United States. *Id.* at A-20.

^{72/} 49 Fed. Reg. 19369 (1984).

^{73/} Petitioner's Pre-Hearing Brief at 18.

ADDITIONAL VIEWS OF CHAIRMAN LIEBELER

Certain Welded Carbon Steel Pipes and Tubes
from Taiwan

Inv. No. 731-TA-349 (Final)

July 14, 1987

I determine that an industry in the United States is not materially injured or threatened with material injury by reason of imports of certain welded carbon steel pipes and tubes from Taiwan which are allegedly being sold at less than fair value.^{1/}

Because my views on causation and cumulation differ from those of other members of the majority, I offer these additional views.

Cumulation

The instant investigation concerns light-walled rectangular pipes and tubes from Taiwan. Petitioners urge

^{1/} Since there is an established domestic industry producing pipes and tubes, material retardation was not an issue in these investigations and will not be discussed further.

the Commission to cumulate imports from Taiwan with imports from Singapore.

The statute requires the Commission to assess cumulatively "the volume and effects of imports from two or more countries of like products subject to investigation if such imports compete with each other and with like products of the domestic industry in the United States market."^{2/} Imports of light-walled rectangular pipes and tubes from Singapore are subject to an outstanding order.^{3/} Thus, the plain meaning of the statute precludes cumulation with imports from Singapore. Moreover, it would be contrary to the injury requirement in title VII to cumulate products from countries subject to a final antidumping order with imports from countries that are currently subject to investigation.^{4/} The

^{2/} 19 U.S.C. Section 1677(c)(iv) (1980 & cum. supp. 1985).

^{3/} The antidumping order on imports of light-walled rectangular pipes and tubes from Singapore was issued November 18, 1986. Report at A-3.

^{4/} However, I have cumulated imports which were subject to final order provided that the orders were issued in connection with investigations
(Footnote continued on next page)

purpose of the investigation undertaken by the Commission is to determine whether the dumped or subsidized imports from the countries under investigation are causing or threatening to cause material injury to the domestic industry. Because of the final antidumping order, the imports from Singapore are equivalent to fairly-traded goods. Thus, it makes no sense to cumulate imports subject to a final order with those from countries under investigation.^{5/}

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

(Footnote continued from previous page)
commenced at the same time as the investigation at hand. See, e.g. Butt-Weld Pipe Fittings from Japan, Inv. No. 731-TA-309 (Final) USITC Pub. 1943, at 21-22, (Jan. 1987)

^{5/} Moreover, other Commissioners have followed the practice of not cumulating imports subject to outstanding orders. See Views of Vice Chairman Brunsdale contained in "Views of Chairman Liebeler and Vice Chairman Brunsdale", infra at n. 57 and accompanying text.

the like product. Only if the Commission finds both injury and causation, will it make an affirmative determination in the investigation.

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 import relief law. In general, 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.^{6/}

The statutory language on causation, "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 section of Title VII. Therefore, the legislative history becomes helpful in interpreting Title VII.

^{6/} C. Sands, Sutherland Statutory Construction § 45.02 (4th ed., 1985.).

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.^{7/}

^{7/} Report on the Trade Agreements Act of 1979, S. Rep. No. 249, 96th Cong. 1st Sess. 75 (1979).

The 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."^{8/}

The Senate 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."^{9/} 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:

^{8/} Id.

^{9/} 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 ^{10/} industry.

Thus, the focus of the causation 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 ^{11/} price.

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 to maximize profits. ^{12/} Congress was obviously familiar

^{10/} Trade Reform Act of 1974, S. Rep. 1298, 93rd Cong. 2d Sess. 179.

^{11/} Id.

^{12/} See, e.g., P. Samuelson & W. Nordhaus,
(Footnote continued on next page)

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."^{13/}

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 one's product. In certain circumstances, a firm may try

(Footnote continued from previous page)
Economics 42-45 (12th ed. 1985); W. Nicholson,
Intermediate Microeconomics and Its Application
7 (3d ed. 1983).

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

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."^{14/}

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 legislative history discussed above.^{15/}

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 to entry to other foreign producers (low elasticity of supply of other imports).^{16/}

^{14/} Trade Reform Act of 1974, S. Rep. 1298, 93rd Cong. 2d Sess. 179.

^{15/} Inv. No. 731-TA-196 (Final), USITC Pub. 1680, at 11-19 (1985) (Additional Views of Vice Chairman Liebel).

^{16/} Id. at 16.

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.^{17/} 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. Each of these factors is evaluated in turn, after a discussion of causation.

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 subject to investigation decreased from 3.3 percent in 1984 to 0.1 percent in 1985, and rose to 3.4 percent in 1986. Penetration in the first three months of 1987 jumped to 7.2 percent, compared to less

^{17/} 19 U.S.C. § 1677(7)(B)-(C) (1980 & cum. supp. 1985).

than 0.5 percent in the same period of 1986.^{18/} Imports of LW-R pipes and tubes from Taiwan represent a very small market share. This factor is consistent with a negative determination.

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^{19/} and the more likely it is that the domestic producers will be adversely affected. In these investigations, the Department of Commerce has found a dumping margin of 17.29 percent.^{20/} This margin is not large and is consistent with a negative determination.

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. Evidence presented in the staff report

^{18/} Id. The import penetrations presented are quantity-based. I note that the trends in penetration are the same for value-based penetration. Report at A-36 (Table 16).

^{19/} See text accompanying note 8, supra.

^{20/} Report at A-3.

indicates that purchasers find the physical characteristics of the domestic and imported products to be similar.^{21/} However, the lead time between orders and receipt of the product is from one to 30 days for purchase from U.S. producers, and from 120 to 150 days for purchases from Taiwan producers if the importer does not have the material in stock. I find that the domestic and imported products are imperfect substitutes.

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. The Commission obtained weighted average f.o.b. prices to distributors and end-users for three products.^{22/} Prices for some of the products have

^{21/} Two distributors stated that the domestic producers provided a better quality product than the imported product and four distributors stated there were no quality differences. However, see Views of Vice Chairman Brunsdale at 61-77, infra for a discussion of her concerns about the representativeness and usefulness of the Commission's sample in which I concur.

^{22/} The products are: ASTM A-513 (mechanical) or A-500 grade A (ornamental) tubing, carbon welded, black, 0.065-inch wall thickness,
(Footnote continued on next page)

declined over the period of investigation,^{23/} but generally prices have remained stable throughout the period of investigation. This factor is inconclusive with respect to an affirmative determination.

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. Pipes and tubes from countries other than Taiwan accounted for 90.4 percent of U.S. imports in 1984, 99.5 percent in 1985 and 85.7 percent in 1986.^{24/} Such imports accounted for 32.1

(Footnote continued from previous page)

20-foot to 40 foot mill lengths for product (1): 1/2 inch square product 2: 1 inch square and product 3: 1-1/2 inch square. Report at A-37.

^{23/} Six domestic producers, representing 45 percent of reported 1986 domestic shipments provided usable price data. However, I have some concerns about the representativeness of the price data collected in this investigation. For a discussion of concerns about the representativeness and usefulness of the pricing data obtained in this investigation, see Views of Vice Chairman Brunsdale *infra*, at 61-77. I concur with her concerns regarding price evidence in this investigation.

^{24/} Report at A-32 Table 12. Those not subject to (Footnote continued on next page)

percent of apparent U.S. consumption by quantity in 1984, 29.3 percent in 1985 and 20.0 percent in 1986.^{25/} Based on this information, one might normally conclude that barriers to entry to other countries are low. However, in light of the voluntary restraint agreements (VRA's) negotiated with respect to steel pipe and tube imports, this conclusion might be premature. Several countries have signed voluntary restraint agreements which include the steel pipes and tubes under investigation.^{26/} Although Taiwan has not yet signed a VRA, in September 1986 Taiwan informally agreed to limit exports of all steel products to the United States to a level of 20 thousand short tons per month for the remainder of 1986 and 1987.^{27/} The effect of this informal restraint on exports of light-walled rectangular pipes and tubes from

(Footnote continued from previous page)
 investigation and not subject to Voluntary Restraint Agreements (VRA's) accounted for 38.1% of U.S. imports for consumption in 1986.
Id.

25/ Report at A-35 Table 15.

26/ Report at A-6. As of May 1, 1987, eighteen countries had signed VRA's which cover the steel pipes and tubes under investigation. Also, see n. 22 supra.

27/ For a more complete discussion of the Taiwan export agreement, see Report at A-6-7.

Taiwan is unclear because no export limits for specific products are specified. In addition, in December 1985 the European Community (EC) agreed to limit export of pipes and tubes. This agreement is intended to limit the market share of the EC in the U.S. pipe and tube market to 7.6 percent through September 1989. Thus, the elasticity of supply of foreign imports facing the U.S. could be limited by these agreements which potentially inhibit countries from exporting to the U.S. market. However, imports not subject to investigation, not subject to VRA's and not party to the EC restraint agreement accounted for 22.5 percent of total imports in 1986.

Exports to the U.S. accounted for a negligible to small portion of Taiwanese exports of light-walled rectangular pipes and tubes in 1983 and 1985, but accounted for a substantial portion in 1984 and 1986, indicating that Taiwan might be able to divert some exports of LW-R pipe and tube from other countries to the U.S. in the event of a U.S. market price increase.^{28/}

^{28/} I note, however, that had respondent diverted all of its exports to the United States in 1986, such imports would still have accounted
(Footnote continued on next page)

Capacity utilization for Yieh Hsing, the only Taiwanese firm currently exporting light-walled rectangular pipes and tubes to the United States for which the Commission has capacity data, is moderate, falling from a high level in 1983 and 1984 to much lower levels in 1985 and 1986, indicating that there could be a moderate supply response by Taiwan to changes in U.S. prices.^{29/}

When these data are examined together, the foreign elasticity of supply is uncertain. Therefore, this factor is inconclusive.

These factors must be considered in each case. Domestic prices and foreign supply elasticity are inconclusive. However, the domestic and imported products are imperfect substitutes. Moreover, market share is very small and the dumping margin is not large. These factors favor a negative determination.

(Footnote continued from previous page)
for only 4% of apparent U.S. consumption in 1986. Report at A-9 and A-36.

^{29/} Report at A-9. 1987 interim capacity utilization is up to moderately high levels.

Conclusion

Therefore, I determine that an industry in the United States is not materially injured or threatened with material injury by reason of imports of certain welded carbon steel pipes and tubes from Taiwan which the Department of Commerce has determined are being sold at less than fair value.

ADDITIONAL VIEWS OF VICE CHAIRMAN ANNE E. BRUNSDALE

Certain Welded Carbon Steel Pipes and Tubes from Taiwan
Investigation No. 731-TA-349 (Final)

July 14, 1987

Causation Analysis: Material Injury by Reason of LTFV Imports

To secure an affirmative determination from the Commission in a dumping case, it is not enough to show that the Department of Commerce has computed a not de minimis dumping margin and that the condition of the domestic industry is less than glowing. There is no doubt under the statutory scheme that a sufficiently strong causal link must be established between the the fact of dumping and "material" adverse effects on the domestic

industry.¹ We must find that the domestic industry has been "materially injured...by reason of"² dumped imports.

¹ See, e.g., Trade Agreements Act of 1979, Report of the Committee on Ways and Means to Accompany H.R. 4537, H.R. Rep. No. 317, 96th Cong., 1st Sess. (1979) [hereinafter cited as 1979 House Report]. The 1979 House Report stated that "the bill contains the same causation element as present law, i.e., material injury must be 'by reason of' the subsidized or less than fair value imports." Id. at 46-47. See also Trade Agreements Act of 1979, Report of the Committee on Finance on H.R. 4537, S. Rep. No. 249, 96th Cong., 1st Sess. (1979) at 38, 87 [hereinafter cited as 1979 Senate Report].

² 19 U.S.C. 1673, 1673b(a), 1673d(b).

The controlling statutes are clear on the need for the causal link, but they do not tell us how the Commission is supposed to decide whether the two required elements, material injury and causation, exist. To be sure, the statutes give us a long list of factors that we should "consider" and "evaluate" in assessing both the condition of the domestic industry and the causal relationship between that condition and the presence of dumped imports.³ Section 771(7) of the Trade Agreements Act of 1979 identifies seventeen specific factors to be "considered" or "evaluated" by the Commission in each dumping investigation.⁴ Fifteen of them relate specifically to the domestic industry and its products, and two relate explicitly to the dumped imports. The statutes repeatedly advise us to "consider" and "evaluate"

3

See 19 U.S.C. 1671, 1671b, 1671d, 1673, 1673b, 1673d (the Commission is to "determine" whether material injury, the threat of material injury, or material retardation has occurred). See also 19 U.S.C. 1677(7) (the Commission shall "consider" certain factors and "evaluate" them when "determining" whether material injury, the threat of material injury, or material retardation has occurred). The statute offers no methodology for examining the factors the Commission must analyze in its "consideration" and "evaluation."

4

These factors are: domestic prices, output, sales, profits, productivity, return on investment, market share, capacity utilization, cash flow, inventories, employment, wages, growth, ability to raise capital, investment in the business, and import volume and prices. 19 U.S.C. 1677(7)(B), (C).

any other factors that we find appropriate for analyzing
 causation in any particular case.⁵ But they do not tell us how
 these factors are to be "considered" or "evaluated."⁶

As used in the statutes, many of the enumerated factors appear to be simply criteria for measuring the impact on the domestic industry. Thirteen of them are generally seen in Commission decisions simply as elements of the condition of the domestic industry. The factors of output, sales, profits, productivity, return on investment, capacity utilization, cash flow, inventories, employment, wages, growth, ability to raise capital, and investment in the business are almost always used by the Commission solely for determining the existence of material injury and rarely are central to the Commission's causation analysis.⁷ The Commission generally "considers" or

5

The introductory language of Section 1677(7)(B) indicates that the listed factors are to be considered "among other factors." Section 1677(7)(C)(iii) more broadly mandates that the Commission "evaluate all relevant economic factors which have a bearing on the state of the industry, including but not limited to [the listed factors]." And subsection (II) of that same section broadly tells us that the Commission should evaluate the "factors affecting domestic prices."

6

See infra note 14.

7

Petitioners claim that declining capital spending is evidence of the pessimism surrounding the domestic L-WR
 (Footnote continued on next page)

"evaluates" these factors by treating them as historical facts caused by other factors, potentially including dumped imports.⁸ In most cases I do not disagree with this general approach.

Two other factors -- market share and domestic prices -- play a mixed role in the Commission's analysis. As I discuss below, these two factors are inextricably involved in the Commission's analysis of causation. But basic business sense suggests that they must also be considered in assessing the condition of the domestic industry. While their movements certainly do not tell the whole story, increasing domestic market share and rising domestic prices are generally seen as beneficial developments, and decreasing domestic market share and falling prices are generally seen as harmful. When "considered" or

(Footnote continued from previous page)
industry and the reluctance of domestic manufacturers to invest in an industry battered by imports. See Petitioner's Prehearing Brief at 10-11. In the final investigation, the staff questioned domestic producers about the effect of Taiwan L-WR imports. None of the surveyed firms stated that Taiwan L-WR imports had any negative effect on their ability to raise capital or invest in their business. See Staff Report at A-30.

8

Some of these factors (e.g., wages and productivity) obviously could play an important causative role in determining the condition of the industry in any given case. For example, an industry may be doing poorly not because of dumped imports but because wage rates have risen and productivity has declined.

"evaluated" in this way, market share and domestic prices, like the factors discussed above, are treated essentially as historical facts caused by other factors, potentially including dumped imports.

Three factors identified in Section 771(7) play a central role in the Commission's determination of whether the requisite link exists between material injury and dumped imports -- import volume (in both absolute and relative terms (e.g., market share)), import prices, and domestic prices. I am certainly not the only Commissioner who focuses most heavily on these three factors when analyzing causation.

Although the statute clearly sanctions (indeed it mandates) that we analyze these factors, it says nothing about what method

9

See, e.g., 1979 House Report, supra note 1, at 46 (referring to analysis of volume and price); see also 1979 Senate Report, supra note 1, at 86-87 (referring to volume and price of imports and the price of domestic products).

10

See, e.g., Certain Line Pipes & Tubes from Canada, Inv. No. 731-TA-375 (Preliminary), USITC Pub. 1965, at 13-23 (March 1987) (Views of Commissioners Seeley Lodwick and David Rohr); Certain Fresh Cut Flowers from Canada, Chile, Colombia, Costa Rica, Ecuador, Israel, and the Netherlands, Inv. Nos. 701-TA-275 Through 278, 731-TA-327 Through 331 (Final), USITC Pub. 1956 (March 1987) (Views of Commissioners Eckes, Lodwick, and Rohr); Stainless Steel Pipes and Tubes from Sweden, Inv. No. 701-TA-281 (Final), USITC Pub. 1966, at 33-34 (Additional Views of Commissioner David B. Rohr); Certain Stainless Steel Butt-Weld Pipe Fittings from Japan, Inv. No. 731-TA-376 (Preliminary), USITC Pub. 1978, at 12 (May 1987).

should be used in doing so. With respect to import volume, Section 771(7)(B) of the 1979 Act tells us that when we "evaluat[e]" import volume in our analysis we must "consider" whether the absolute or relative volume, or increases in volume, are "significant."¹¹ With respect to prices, Section 771(7)(C) tells us that when we analyze the effects on domestic prices we should "consider" whether there has been price undercutting by the dumped imports, and whether "the effect of...[dumped imports]" has been to depress prices or prevent price increases to a "significant degree."¹² We are also told that we should "evaluate" generally the "factors affecting domestic prices."¹³ But, to repeat, nowhere in the statutes or in the legislative history are we told how we are supposed to "evaluate," or "consider," or determine the "significance" or "the effects" of, import and domestic product volumes and prices.¹⁴

11

19 U.S.C. 1677(7)(B), (C)(i). See also 1979 Senate Report, supra note 1, at 86-87.

12

19 U.S.C. 1677(7)(B), (C)(ii). See also 1979 Senate Report, supra note 1, at 87.

13

19 U.S.C. 1677(7)(C)(iii)(II).

14

The broadest congressional consideration of the analysis
(Footnote continued on next page)

From my reading of the statutes and the legislative history, it is clear that Congress intended for the Commissioners to select methods of analysis that would most likely lead to accurate results, given the standards of proof in the statute and the facts at issue in the case under consideration. While the statutes identify factors the Commission should consider,

(Footnote continued from previous page)
of "material injury" is found in the legislative history of the 1979 Trade Agreements Act. See 1979 Senate Report, supra note 1, at 86-88. When explaining the factors the Commission is to examine, the Report states: "With respect to volume of imports, the ITC would consider whether the volume of imports is significant, or whether there is any significant increase in that volume, absolutely or relative to production or consumption in the United States. With respect to prices in the United States of the like product, the ITC would consider whether there has been significant price undercutting by the imported merchandise, and whether such imports have depressed or suppressed such prices to a significant degree." Id. at 86-87. The report continues by requiring the Commission to consider "all relevant economic factors which have a bearing on the state of that industry and certain factors are specified [in the statute]." Id. at 87. No particular methodology is suggested.

The 1979 House Report offers even less guidance. See 1979 House Report, supra note 1, at 46-47 ("the significance of the various factors affecting an industry will depend upon the facts of each particular case."). The report states that, depending on the facts of the case, only a small volume of imports may be necessary to cause material injury, but that the same volume may not be significant in another case. Id. at 46. The report draws a similar conclusion about prices, stating that a small price differential may have a determinative effect on sales elasticity in some cases, but not in others. Id. This section of the report does seem to indicate a preference for economic analysis of the factors present in each case.

they do not presume to suggest that those factors must be analyzed in every case through a particular method.

As I have noted above, like my colleagues I have generally assessed the condition of the industry by looking at the reported trends in the factors which measure the industry's condition. Indeed, I have found that such trend analysis is an acceptable and practical method for deciding whether the industry is suffering from "injury." One can look at the behavior of a particular factor over time and tell at a glance whether the industry is doing better or worse with respect to that factor than it did in previous periods. Like my colleagues, I have used trend analysis in this case to evaluate whether the domestic L-WR industry is suffering any material injury.

I have not, however, used trend analysis to resolve the issue of causation. As counsel for petitioners candidly acknowledged, many factors besides dumped imports from Taiwan have affected the prices received by domestic producers of L-WR.¹⁵ The operating and financial performance of this industry depends on a great many factors within the broad areas of costs of

15

Petitioner's Posthearing Brief, Answers to Questions by Commissioners and Staff, at 8-9; see also Petitioner's Prehearing Brief at 5 ("many factors other than imports from Taiwan obviously have an impact on prices.").

production, the level and characteristics of domestic demand, the level and characteristics of domestic supply, and the volume and prices of both fairly traded and unfairly traded imports from many different countries. We can never determine with total certainty the exact impact of any one of the many factors within these broad areas. Nevertheless, our responsibility in a dumping case is to isolate the relevant impact of dumped imports and then to assess whether that impact is "material."¹⁶ This task does not require complete precision; rather, it requires a reasonable effort to focus our inquiry and to obtain a reasonable indication of the size of the relevant impact of dumped imports from Taiwan.

In my view, trend analysis is not a sufficiently rigorous analytical tool to allow us to identify the effects of dumped imports and to separate them from the effects of other factors

16

That does not mean that we should weigh the impact of dumped imports against the impact of other factors. It simply means that we should satisfy ourselves that the relevant adverse impact of dumped imports is itself sufficiently large to be "material" within the bounds of Section 771(7)(A) of the Tariff Act of 1930. Petitioner's counsel appears to suggest that if we focus our inquiry on the effects of dumped imports, as opposed to other potential causes of injury, we are somehow weighing causes of injury. See Petitioner's Posthearing Brief, Answers to Questions by Commissioners and Staff, at 10-11. Any such suggestion is simply wrong.

operating in the marketplace.¹⁷ I find it extremely difficult to evaluate the extent to which movements in one factor have caused movements in other factors simply by observing the size of those movements and whether they occurred at about the same time.¹⁸ Accordingly, I generally resolve the issue of causation by using both the facts gathered in the investigation¹⁹ and the time-tested tools of elementary economics. However,

17

Apparently, counsel for the petitioner agrees: "The Commission must often look beyond broad pricing trends." Petitioner's Prehearing Brief at 5.

18

Long ago scholars recognized the difficulty of such an approach and labelled it a fallacy: post hoc, ergo propter hoc (literally, "after this, therefore because of this"). See K. Guinagh, Dictionary of Foreign Phrases and Abbreviations, 3rd ed. (1983). The phrase refers to the fallacy of arguing that two events are linked simply because of their relationship in time, with one occurring after the other. We cannot automatically label a subsequent event as the effect of an earlier event simply because it occurred later. There must be a connection, or causal link, between the two events before we can label the later event as an "effect."

19

The use of standard tools of economics has the added advantage of increasing the predictability of the results of our investigation. It is true that the facts differ in every case, and necessarily must be considered on a case-by-case basis. But it is nonetheless possible to make our decisions more predictable by placing heavy and explicit reliance on the tools provided by economics and statistics. It seems obvious to me that if the ITC administers the dumping and countervailing duty provisions in such a way that the results of cases are difficult to predict and
(Footnote continued on next page)

in cases like this one, I can resolve that issue without resorting to a full economic analysis by simply considering the "outside" likely impact of dumped imports.²⁰ In this case the facts show that even the maximum possible impact of imports from Taiwan would not be sufficient to be "material."

Of Causation Analysis and Elasticities

Nine pages of Petitioner's prehearing brief are devoted to a "critique" of my causation analysis in three recent cases.²¹

(Footnote continued from previous page)
 equally difficult to understand, it will lead to a belief on the part of both U.S. producers and importers that our decisions are arbitrary and irrational. In my view, sound economic and statistical analysis, and less reliance on isolated snippets of anecdotal evidence, will lead to more predictable application of our trade laws, which in turn will lead to greater confidence in the integrity of our proceedings.

20

See Tapered Roller Bearings and Parts Thereof, and Certain Housings Incorporating Tapered Roller Bearings from Hungary, the People's Republic of China, and Romania, Inv. Nos. 731-TA-341, 344, and 345 (Final), USITC Pub. 1983 (June 1987) at 54-61 (Dissenting Views of Vice Chairman Anne E. Brunsdale).

21

Petitioner's Prehearing Brief at 18-27. The cases are Erasable Programmable Read Only Memories From Japan, Inv. No. 731-TA-288 (Final), USITC Pub. 1927 (Dec. 1986), Certain Line Pipes & Tubes from Canada, supra note 10, and
 (Footnote continued on next page)

In general, Counsel argues that my analysis substitutes theory for a "hard look at the actual data."²² Chief among Counsel's complaints is that I sometimes use elasticity estimates to evaluate the effect of dumped imports on domestic prices.

While they may be troubling to some, elasticities are just simple tools of standard economics. As I noted at the outset of this opinion, there is nothing in the statutes or the legislative history that tells us how we must analyze the factors pertaining to the issue of causation in a case. I use standard tools of economics because they help me focus my analysis on the effects of dumped imports. Domestic output, prices, and revenues are always determined by a host of factors besides the imports under investigation. The concept of elasticity is particularly useful for evaluating whether the reported facts relating to the volume and prices of imports have a material causal relationship with the facts relating to domestic prices, production, and financial performance.

(Footnote continued from previous page)
Cold-Rolled Carbon Steel Plates and Sheets from Argentina,
Inv. No. 731-TA-175 (Final) (Remand), USITC Pub. 1967 (March
1987). Many of Counsel's comments reflect a basic
misunderstanding of my analysis in those cases.

"Elasticity" is nothing more than a fancy term used in economics to refer to the extent to which one particular factor responds to a second factor; and an "elasticity estimate" is nothing more than a quantitative evaluation of the degree of that responsiveness. Whether or not we ever expressly use the terms in our analysis, three elasticity estimates are lurking not far beneath the surface of every Commission Title VII investigation.

(1) The Elasticity of Domestic Demand

The revenue received by domestic producers obviously depends on both the price and the volume of the goods that they sell. It is axiomatic for most goods that, as prices rise, the quantity demanded in the market falls, other things being equal -- customers do not have infinite resources and they will seek out substitutes as prices increase. It is equally true that the opposite also generally occurs. As prices fall, the quantity demanded generally increases -- the product becomes more attractive in light of the prices of available alternatives. The "elasticity of domestic demand"²³ simply refers to the

23

To be precise, it is the ratio of the percent change in quantity demanded to percent change in price.

relationship between changes in the price of domestic products and changes in the amount of those products that will be purchased. If we ask a witness "How sensitive is demand to changes in price?", we might equally ask "How elastic is domestic demand?" Both questions mean the same thing.

In this case the evidence suggests that demand for L-WR is relatively unresponsive to changes in price (that is, domestic demand is relatively "inelastic").²⁴

(2) The Elasticity of Domestic Supply

As Petitioner's counsel correctly observed, the elasticity of domestic supply measures how domestic producers collectively respond to rising or falling prices. As prices rise, producers are generally willing to produce more of the product, and, as prices fall, they generally produce less of the product, other things being equal.²⁵ The degree to which producers are able and willing to expand or contract production varies from industry to industry. If we ask "How responsive is domestic output of a

²⁴ Petitioner's Posthearing Brief, Answers to Questions by Commissioners and Staff, at 15.

²⁵ Id. at 18.

product to changes in the price of that product?", we are asking the same question as "What is the elasticity of domestic²⁶ supply?"

In light of the unused capacity of the domestic producers in this case and the flexibility that they have to switch easily between production of round and rectangular pipe and tube, it appears that in the short run at least domestic supply of L-WR pipe is fairly responsive to changes in price (that is, domestic²⁷ supply is fairly elastic).

(3) The Cross Elasticity of Demand between the Domestic Product and the Price of the Imported Product

In nearly every dumping case the parties debate the extent to which the domestic and imported products are "fungible" or "close substitutes." This debate is an essential element of the analysis of whether lower import prices will actually result in lower sales and prices for domestic products. Unless customer tastes change, if the imported and domestic products are not

26

To be precise, the elasticity of domestic supply is simply the ratio of the percent change in quantity supplied divided by the percent change in price.

27

See, e.g., Memorandum from the Office of Economics, EC-K-269 (July 6, 1987) at 4 [hereinafter cited as Memorandum EC-K-269]; Petitioner's Posthearing Brief, Answers to Questions by the Commissioners and Staff, at 15-16.

close substitutes, when the price of imports falls, it will not persuade many customers to buy the imports in lieu of the domestic alternative. The higher the degree of substitutability, the greater the likelihood that a given decline in the price of imports will directly translate into lost domestic sales. The degree of substitutability or "fungibility" between the domestic product and the imported product under investigation is called the "cross-elasticity of demand." The term refers to the relationship between the price of the import product and the demand for the domestic product.²⁸ If we ask "How fungible are the imported and domestic products?", it is the same as asking "How high is the cross-elasticity of demand?"

In this case it appears that for each type of L-WR the domestic and imported products are highly substitutable (there is a high cross-elasticity of demand): "The physical characteristics of U.S. and Taiwan produced light-walled rectangular pipes and tubes are considered very similar, making the products fungible in actual use."²⁹

It is plain to me that the vigorous use of these three concepts is not only allowed by the statutes and legislative

28

To be precise, it is the percentage change in the quantity demanded of the domestic product divided by the percentage change in the price of the imported product.

29

Memorandum EC-K-269, supra note 27, at 1.

³⁰ history but is essential in many cases. Indeed, unless the
 issue of causation can be resolved, as in this case through a
 short-cut "worst case" analysis,³¹ we necessarily must
 rigorously "consider" the relationship of movements in prices and
 volumes of domestic and imported products in order to evaluate
 the magnitude of the effect that one has on the other. The
 strength of the relationship between these factors is not a
 "theory"; it is, rather, a conclusion of fact that necessarily
 lies at the heart of every Title VII case.

As I noted above, if we ask a witness "How sensitive is
 demand to changes in price?", we might equally ask "How elastic

30

The Senate Report on the 1979 Trade Agreements Act
 notes: "Similarly, for one type of product, price may be
 the key factor in making a decision as to which product to
 purchase, and a small price differential resulting from the
 amount of the subsidy or the margin of dumping can be
 decisive; for others, the size of the differential may be of
 lesser significance." 1979 Senate Report, supra note 1, at
 88.

The House Report, in discussing the various factors
 affecting the domestic industry, 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 size of the margin
 may be of lesser significance." 1979 House Report, supra
 note 1, at 46.

31

See the discussion of causation in this investigation,
infra.

is domestic demand?" While the questions are essentially the same, in some cases the answer to the question posed in terms of elasticity will provide far more helpful and reliable evidence. "Elasticity" is a much more precise concept than "sensitivity". An elasticity estimate computed for two factors literally reflects the observed quantitative relationship between the percent change in one factor and the percent change in the other factor. The higher the computed elasticity, the more responsive one factor is to the other. We can thus compare elasticities from investigation to investigation, using them to evaluate the relative importance of the factors under consideration. This use of elasticities is like asking in our cases: "On a scale of one to 100 (or compared to some other known industry), how sensitive is domestic demand to changes in price?"

In most investigations we do not have the benefit of actual computed elasticity estimates. When we consider relevant elasticities, we often must do so simply on the basis of whether they are "high" or "low" or "moderate." When we do this, we have not advanced much further than to inquire about the relevant "sensitivities." In other cases, however, we have the benefit of elasticity estimates prepared by the staff, or a noted authority, or one of the parties. Sometimes these estimates are simply "ball park" figures, not much more precise than statements such

as "high" or "low." Other times they have been prepared from actual industry data gathered over a long period of time. If properly prepared, these estimates are firmly grounded in fact, not theory. They are nothing more than a summary of the history of movements of prices and volumes for the studied products. The summary is reported as a range of numerical values.

Elasticity estimates are like other large statistical surveys. While their precision will obviously depend on the reliability and the sample size from which they are computed, they are no more "theoretical" than estimates of reject rates on a production line. The reliability and relevance of these surveys can be questioned on the same basis that lawyers and other scholars question other statistical evidence. But just like other statistical evidence, elasticity estimates are not theories, they are summaries of facts.

Before I explain my reasoning on the causation issue in this investigation, I feel constrained to comment on the price evidence in the Staff Report.

The Price Evidence Gathered in This Investigation

It is obvious that the conclusions of fact appearing in Commission opinions and staff reports are no more reliable than the data on which they are based. The degree of reliability of

the evidence gathered in Commission investigations can vary greatly from case to case. In some cases our staff is able to gather sufficient data from a sufficient number of appropriately selected sources so that we can have great confidence that the data are accurate and truly representative of the industry as a whole.³² In other cases our confidence cannot be so high.

Two types of price information were gathered by the staff and presented in the Staff Report for this investigation. The first type is reflected in the shipment information presented in Tables 4, 13, 15, and 16.³³ These tables provide data on both a quantity and value basis for all domestic shipments of L-WR and all imports into the United States from Taiwan and other countries. The data for both domestic and import producers include all types of L-WR. The data for domestic producers, while somewhat understated, were supplied by 23 of the 24 known domestic producers of L-WR which together account for over 95 percent of U.S. producers' domestic shipments. The data for imported L-WR were compiled directly from official Department

32

It is essential that our data be representative of the industry as a whole because our focus must be on the "industry" producing the product under investigation, not on individual producers.

33

Staff Report at A-15, A-33, A-35, and A-36.

of Commerce statistics and should thus reflect virtually 100 percent of such imports. In other words, we have a high degree of coverage of the universe that might be reasonably surveyed in this investigation. Thus there is no significant reason why the representativeness of this data should be doubted. As I discuss below, the average unit values computed from this data can be used reasonably to approximate relative domestic and import prices for the purpose of evaluating causation in this investigation.

The second type of price information is presented in the Staff Report under the heading of "Prices." Like many reports before this one, the "Prices" section contains tables of reported domestic and imported product prices and computed "margins of underselling."³⁴ The data in these tables are based on questionnaire responses by several domestic producers and importers who reported the unit prices of their largest sales transactions for each of three specific types of L-WR. The staff collected data for each of the most recent nine quarters. The tables contain the weighted averages of the reported prices and the "margin of underselling" -- which is simply the percentage difference between the computed average domestic price and the import price.

34

Id. at A-39 - A-40 (Tables 17, 18, and 19).

stated my concerns that these underselling
 us why imports are priced lower than their
 parts and therefore give me little information
 to my analysis of causation. As I have noted on
 ons, differences between prices of two products
 y reflect differences in their real or perceived
 utes. Rarely will all of the characteristics of an
 orted product exactly match those of its domestic
 counterpart. Even when products appear to be identical, a
 correct price comparison would have to take into account factors
 such as inventory costs, reliability of the producing firm,
 timely delivery, transportation costs, warranties, and other
 service elements, factors which all enter into a buyer's decision
 regarding the price to pay.

For example, in this investigation the staff learned that
 "[t]he lead time between orders and receipt of the product is
 from 1 to 30 days for purchases from U.S. producers" and as long
 as "from 120 to 150 days for purchases from Taiwan
 producers."³⁵ It appears that this long lead time is the rule,
 rather than the exception, for purchasers of L-WR from Taiwan.
 The report indicates that the long lead time occurs in instances

35

Id. at A-37.

when the importer does not have the material in stock; it also notes that, except for one importer that inventoried some L-WR from Taiwan in 1984, "importers of light-walled rectangular pipes and tubes from Taiwan reported that they do not keep inventories of the subject products."³⁶ This sizable difference in lead time undoubtedly explains a significant part of any difference between the price of otherwise comparable domestic and Taiwan L-WR products. Petitioners essentially conceded this fact at the hearing: According to Mr. Finn's testimony for the Petitioners, "depending upon the customer we [a domestic producer] need to come within 5 to 10 percent of the [Taiwan product] price,"³⁷ and customers are willing to pay that differential between imported and domestic L-WR products because of "quicker delivery,³⁸ [and] better service."

The price data and computed margins of underselling in this case, as in many cases before it, are not adjusted for differences in product attributes such as delivery and service. For this reason -- that is, because the Staff Report does not adequately take into account the many factors that admittedly

³⁶ Id. at A-30.

³⁷ Transcript at 24.

³⁸ Id. at 30, 31.

explain price differences between the domestic and imported products being compared -- it is not very helpful on this point.

Wholly apart from the problems just discussed, I have grave concerns that we do not have sufficient evidence to conclude that the information presented in the tables in the "Prices" section of the report is reasonably reliable and representative of the L-WR industry as a whole. Price data were gathered from only a handful of producers and importers, pertaining to only a small number of transactions, involving very few products. These constraints alone might not cast doubt on the reliability of the data if we had enough evidence to conclude that they were otherwise reliable. But that evidence is not present either. The information in the price tables in this report is highly suspect for the following three general reasons.

(1) We have insufficient evidence to conclude that the three surveyed products are representative of L-WR products generally.

As I noted above, the data in Tables 17 through 19 were gathered from questionnaire responses of several domestic producers and importers who disclosed for each of nine quarters the unit prices in their largest sales transactions involving only three specific types of L-WR. There were many, perhaps dozens of, different types of L-WR produced by domestic producers

during the period of the investigation. Apparently there were a variety of possible survey targets suggested by producers and importers, but the staff selected only three products that both the producers and importers agreed were "popular."³⁹

Of 24 known U.S. L-WR producers, only six domestic producers provided any useable price data on the three chosen products.⁴⁰ Eleven domestic producers provided no price information because they do not make the three products for which data were requested. Four other domestic producers did not sell the surveyed products at all during the 27 month period of the price survey.⁴¹

Of the 15 importers of L-WR from Taiwan who responded to Commission questionnaires, only seven provided any useable price data.⁴² Seven other importers provided no price information

39

The three products chosen for survey in this investigation were selected on the basis of information gathered in the course of telephone discussions between the Commission's staff and several domestic producers and importers of L-WR. See Memorandum from the Office of Economics, EC-K-278 (July 7, 1987) and attachment [hereinafter cited as Memorandum EC-K-278].

40

See id.

41

See Memorandum from the Office of Economics EC-K-270 (July 2, 1987) [hereinafter cited as Memorandum EC-K-270].

42

See Memorandum EC-K-278, supra note 39.

because they had not imported any of the three representative products during the 27 months surveyed. Of the 13 distributors who provided responses to Commission questionnaires, five indicated that they made no purchases of the three surveyed products during the 27 months covered by the survey.⁴³

These facts raise serious questions in my mind about whether the three surveyed products are truly representative of L-WR products as a whole. My concern is heightened by information provided by Petitioners' counsel at the hearing and in their Posthearing Brief. We have learned from Petitioner's counsel that L-WR produced by domestic producers is of two general types: (i) "ornamental iron" and (ii) tubing used for purposes where appearance is more important.⁴⁴ The three surveyed products are all "ornamental iron." Petitioner's counsel told us that ornamental iron is less expensive than the other type of L-WR, and that each producer's product mix between ornamental iron and other L-WR products is a significant factor affecting producer profitability. We do not know and cannot determine from

43

See id.

44

See Petitioners' Posthearing Brief, Answers to Questions By Commissioners and Staff, at 1.

questionnaire responses the percentages of each type of L-WR that comprise domestic production and shipments. We also do not know and cannot determine from questionnaire responses how the prices of the two types of L-WR have actually compared over the period of the investigation.

While the products surveyed in this investigation may be "popular," it appears that many, if not most, producers and importers did not even ship these products during a period of over two years. Although the staff was told that these products were "popular," we have no data that would allow us to gauge, even roughly, how important these three products actually are to the L-WR industry in terms of industry production and revenues.

45

45

We do not have any of the following information that would be useful in evaluating whether the surveyed products are actually representative of L-WR products as a whole:

- o the total number of all L-WR sales transactions by all domestic producers;
 - o the total number of all sales transactions by all domestic producers involving the surveyed products;
 - o the total quantity (in tons or other volume) of all surveyed products sold by all domestic producers;
 - o the total value of all sales of the surveyed products by all domestic producers;
 - o the total number of all L-WR sales transactions by all importers of Taiwan L-WR;
 - o the total number of all sales transactions by all
- (Footnote continued on next page)

(2) We have insufficient evidence to conclude that the responding producers and importers are representative of the industry as a whole.

The seven importers who provided useable price data accounted for 66 percent of the total L-WR imports reported in Commission questionnaire responses -- potentially a reasonably good sample of Taiwan importers.⁴⁶ But on the surface at least, it does not appear that the domestic producers providing price information represent a broad cross-section of the domestic L-WR industry as a whole. Of the six domestic producers who provided at least some useable price data, four are located in, and reportedly sell all of their output in, the western region of the United States.⁴⁷ Tables 18 and 19 were prepared entirely

-
- (Footnote continued from previous page)
 importers of Taiwan L-WR involving the surveyed products;
- o the total quantity (in tons or other volume) of all surveyed products sold by all importers of Taiwan L-WR; and
 - o the total value of all sales of the surveyed products by all importers of Taiwan L-WR.

See Memorandum EC-K-278, supra note 39.

46

See id.

47

Id. The western region includes Washington, Oregon, California, Nevada, Arizona, and Utah.

from price information supplied by these four producers. Three of these four producers are members of the Petitioner, the Committee on Pipe and Tube Imports.⁴⁸

The potential problems posed by this small number of not-randomly selected data sources are exacerbated by the fact that many of the weighted average prices reported in Tables 17 through 19 are based on responses from far fewer than the six domestic producers and seven importers who provided some useable price information.⁴⁹ Of the 27 quarterly domestic producers' prices reported in Table 19, not one was based on data from more than three domestic producers.⁵⁰ While the data in Table 18 were provided from a somewhat greater number of sources, of the 27 reported domestic producers' prices, only eight were actually based on responses from all six domestic producers who provided some useable price data.⁵¹

48

Id.

49

The information in this paragraph was gleaned from statistical tables prepared in this case, as in other cases, by Commission staff as they compiled the data reported in the price tables in the Staff Report.

50

Fourteen of the reported prices came from just one producer, eleven came from two producers, and only two came from data supplied by three producers.

51

Nine of the reported prices came from data supplied by only five producers, six came from data supplied by four producers, and four came from sales reported by three producers.

The actual sources of data about import prices in these tables were even more limited. Every one of the 15 quarterly prices of L-WR from Taiwan in Table 19 is based on data received from a single importer. Of the 11 import prices reported in Table 18, almost half (five) are based on only one response, one is based on two responses, three are based on three responses, one is based on five responses, and one is based on six responses. Thus while six domestic producers and seven importers provided some useable price information, they never all provided price information about the same products for the same quarter.

To compound these problems, we have no way to determine that the responding domestic producers and importers are representative of the industry from the standpoint of the number and volume of their total L-WR sales transactions and the mix of L-WR products that they sell. While we know the aggregate L-WR sales accounted for by these firms, we do not have the data that would allow us to gauge, even roughly, whether their sales are typical in number and volume and whether their sales of the three surveyed products are representative of the industry.

52

In addition to the data discussed in note 45, supra,
(Footnote continued on next page)

(3) We have insufficient evidence to conclude that the weighted average prices reported in Tables 17 through 19 are representative of transaction prices in the L-WR market generally.

In this case, like many others, the Commission gathered price data about a particular product by asking questionnaire

(Footnote continued from previous page)
 we do not have any of the following data which would be useful in evaluating whether the importers' and domestic producers' number and volume of sales transactions in general, and sales of the three surveyed products in particular, are typical of the industry as a whole:

- o the total number of all L-WR sales transactions by the six responding domestic producers;
- o the total number of all sales transactions by the six responding domestic producers involving the surveyed products;
- o the total quantity (in tons or other volume) of the surveyed products sold by the six responding domestic producers;
- o the total value of all sales of the surveyed products by the six responding domestic producers;
- o the total number of all L-WR sales transactions by the seven responding importers of Taiwan L-WR;
- o the total number of all sales transactions by the seven responding importers of Taiwan L-WR involving the surveyed products;
- o the total quantity (in tons or other volume) of the surveyed products sold by the seven responding importers of Taiwan L-WR; and
- o the total value of all sales of the surveyed products by the seven responding importers of Taiwan L-WR.

See Memorandum EC-K-278, supra note 39.

recipients to report for each quarter the price involved in their largest sale of that product that quarter. The reported prices were then summed to create a single weighted average price for the quarter by weighting each reported price based upon the quantity involved in that sale. While this approach is certainly a convenient way to limit the burden on responding producers and importers, it does not carry with it a high degree of confidence⁵³ that we are gathering truly representative prices. There are many potential problems with the weighted-average, largest-quarterly sale approach used in this case.

First, many purchases of many different sizes may be made over a quarter. In this case, of six distributors who commented on the matter, only two purchased L-WR products quarterly, one purchased monthly, two purchased weekly, and one purchased⁵⁴ daily. It is reasonable to expect that prices will vary within a quarter, yet reported prices are summed and compared without regard to the point during that quarter when the reported transactions took place.

Second, prices are weighted by the volumes involved in the reported transactions, but they are not weighted to account for

53

A rough estimate suggests that the reported transactions represent only 6 percent of the value of domestic producers' shipments in 1986. See Memorandum EC-K-270, supra note 41, at 1.

54

Staff Report at A-38.

other factors that bear on the potential significance of any particular sale. Among other possible adjustments, the reported prices are not weighted based upon the total volume of that product, the volume of all surveyed products, or the volume of all L-WR sold by the various questionnaire respondents during the period of the investigation.⁵⁵

The use of weighted average prices also tends to obscure the fact that actual transaction prices reported by domestic producers and importers for any particular quarter consistently varied widely. For example, five transaction prices were reported by domestic producers for sales of "Product 1" to distributors in the fourth quarter of 1986. The minimum reported transaction price was 23 percent below the maximum transaction price reported for that quarter.⁵⁶ In that same quarter, the data gathered from importers of Taiwan L-WR reveal that the lowest of six reported sales prices for "Product 2" was 28 percent below the highest price reported for that quarter. When

55

Since some producers sell a great deal more ornamental iron than others, see supra note 44 and accompanying text, the failure to weight reported prices accordingly may seriously distort the reported results.

56

This is not an isolated example. For that same quarter, the maximum and minimum reported prices for "Products 2" and "3" varied by 15 and 14 percent, respectively. See generally Staff Report at A-39 - A-40 (Tables 17, 18, and 19).

a single weighted average price is compared to another weighted average price, one loses sight of the fact that actual transaction prices may have been considerably higher or lower than the reported averages. Unfortunately, as with the other problems with the pricing data discussed above, we do not have much of the information which would be useful to evaluate the extent to which the prices reported in the price tables are actually representative of transactions in the L-WR marketplace generally.

57

57

We do not know any of the following information that would be useful to evaluate whether the reported transaction prices and their weighted averages are in fact representative of transaction prices in the L-WR marketplace as a whole:

- o how the quantities involved in the reported sales transactions by the six responding domestic producers compare to the quantities involved in their other sales transactions involving the surveyed products (e.g., compared to the arithmetic average, median, high or low);
- o how the values of the reported sales transactions by the six responding domestic producers compare to the values of their other sales transactions involving the surveyed products (e.g., compared to the arithmetic average, median, high or low);
- o how the quantities involved in the reported sales transactions by the seven responding importers of Taiwan L-WR compare to the quantities involved in their other sales transactions involving the surveyed products (e.g., compared to the arithmetic average, median, high or low); and

(Footnote continued on next page)

The foregoing facts lead me to conclude that we should place no substantial reliance on the price data reported in the "Prices" section of the Staff Report.

Causation Analysis in This Investigation

The issue of causation is resolved in this case by calculating the likely impact of dumped Taiwan imports.⁵⁸ Considering the size of the dumping margin at issue in this case, the relative prices and volumes of L-WR produced by domestic producers and imported from Taiwan and other countries, and the levels of

(Footnote continued from previous page)

- o how the values of the reported sales transactions by the seven responding importers of Taiwan L-WR compare to the values of their other sales transactions involving the surveyed products (e.g., compared to the arithmetic average, median, high or low).

See Memorandum EC-K-278, supra note 39.

58

I have used this approach in two recent cases: Tapered Roller Bearings and Parts Thereof, and Certain Housings Incorporating Tapered Roller Bearings from Hungary, the People's Republic of China, and Romania, supra note 20, at 54-61 (Dissenting Views of Vice Chairman Anne E. Brunsdale), and Cold-Rolled Carbon Steel Plates and Sheets From Argentina, supra note 21, at 25-31 (Views of Vice Chairman Anne E. Brunsdale).

production and sales by the domestic L-WR industry as a whole, I conclude that even the likely "outside" impact of dumped imports from Taiwan is not material to this industry.

My analysis starts by considering the absolute and relative volumes of domestic shipments and imports from Taiwan and other countries. Imports from Taiwan were a relatively tiny part of domestic L-WR consumption throughout the period of the investigation. On the basis of quantity the share of imports from Taiwan was only 3.3 percent in 1984, 0.1 percent in 1985, and 3.4 percent in 1986.⁵⁹ On the basis of value, the share of imports from Taiwan was only 2.4 percent in 1984, 0.1 percent in 1985, and 2.8 percent in 1986.⁶⁰ A much higher share of the U.S. market was held by imports from other countries. On a quantity basis, imports from the rest of the world accounted for 32.1 percent of domestic consumption in 1984, 29.3 percent in

59

Staff Report at A-35 (Table 15). For purposes of my analysis of causation, I do not rely on data showing the volumes and values of shipments during the first quarter of 1987. Because the data can be skewed by isolated, non-recurring events, a single quarter is too short a period to generate meaningful data on import penetration and pricing. For example, the large upswing of shipments in the first quarter of 1987 may well have been caused simply by the timing of events in this case. See Prehearing Brief on Behalf of Respondent Yieh Hsing Enterprises Co., Ltd. at 11.

60

Staff Report at A-36 (Table 16).

1985, and 20 percent in 1986.⁶¹ On a value basis, the market share of imports from other countries ranged from 26.3 percent in 1984 to 18 percent in 1986. In 1986, the year of principal focus in this case,⁶² Taiwan L-WR imports totaled 9,975 tons, while imports from other countries totaled 59,629 tons.⁶³

I next consider the dumping margin reported by the Department of Commerce.⁶⁴ In this case the Department of Commerce found a final dumping margin of 17.29 percent. The Department of Commerce calculated this margin by comparing U.S. sales prices to the foreign market value during the May 1 through October 31, 1986 period, with foreign market value estimated on

61

Id. at A-35 (Table 15).

62

For purposes of my causation analysis here, I focus on whether material injury has been caused by dumped Taiwan imports since January 1, 1986. I do not focus on the previous years because the Commission has considered and rejected Petitioners' earlier claim that the domestic L-WR industry was materially injured by reason of dumped Taiwan imports prior to 1986. See Certain Welded Carbon Steel Pipes and Tubes from Taiwan, Inv. No. 731-TA-211 (Final), USITC Pub. 1799 (January 1986).

63

Staff Report at A-32 (Table 12).

64

For one discussion of the role of the dumping margin in assessing harm to a domestic industry, see Memorandum from the Office of Economics, EC-J-010 (January 7, 1986), at 29-31. For a discussion of the propriety of the Commission's consideration of this factor, see Hyundai Pipe Co., Ltd., et. al. v. U.S. International Trade Commission, et. al., slip op. 87-18 (CIT February 23, 1987).

the basis of constructed value.⁶⁵ Thus, the dumping margin is essentially an estimate of the extent to which Taiwan producers were selling L-WR in the United States below their cost of production. For purposes of my causation analysis here, I use this margin as a rough approximation of the unfair price advantage held by Taiwan producers as a result of their pricing at less than fair value.⁶⁶

For purposes of my analysis, I will assume that the entire dumping margin was passed through to reduce the price of Taiwan L-WR imports. Thus, I will assume that if importers had to pay a "fair" price for L-WR from Taiwan, they would have had to pay in the aggregate 17.29 percent more for the product than they in fact paid. While the actual reported average price for imports from Taiwan in 1986 was \$422 a ton, I will assume that a "fair"

65

See Certain Light-Walled Rectangular Welded Carbon Steel Pipes and Tubes From Taiwan: Final Determination of Sales at Less Than Fair Value, 52 Fed. Reg. 20,440 (1987).

66

Obviously using the dumping margin in this manner is not precise. The margin computed by the Department of Commerce is only an approximation, and the Commerce Department's investigation covers only six months. Nonetheless, whatever its weaknesses, the margin is generally the best evidence we have on the outside potential price advantage that the import producer enjoys as a result of dumping.

price would have been 17.29 percent higher, or \$495 a ton. ⁶⁷

It is obviously impossible to quantify exactly the volume, price, and revenue impacts of the dumped Taiwan imports with this price advantage, but we can make a reasonable estimate through the following approach. ⁶⁸

As noted above, imports of Taiwan L-WR amounted to 9,975 tons in 1986. If those imports had been priced 17.29 percent higher, the volume of their sales would have depended on their

67

Staff Report at A-33 (Table 13). For purposes of this analysis, unit prices were determined from aggregate shipment data by dividing total reported values by total reported quantities. In this case, the resulting "prices" are understated for both domestic and import products. Domestic "prices" are understated because all domestic producers did not supply shipment data on a value basis. See *id.* at A-15, n.1. Import "prices" are understated because the reported values, gathered from data collected by the Department of Commerce, show aggregate transaction prices between Taiwan producers and their U.S. importers and do not reflect the importers' mark-ups on their subsequent sales to distributors and end users.

68

In my analysis I make the following two assumptions, both of which are supported by the facts in this case: (i) within the range of prices discussed in this opinion, total domestic demand for L-WR would have remained substantially constant (See Petitioners' Posthearing Brief, Answers to Questions by Commissioners and Staff, at 8; Memorandum EC-K-269, *supra* note 27, at 5); and (ii) for the same types of L-WR, the Taiwan and domestically produced products are highly substitutable in use from a customer's perspective (See Memorandum EC-K-269, *supra*, at 1, Transcript at 30-31).

attractiveness to customers in light of the available alternatives. In 1986 those alternatives were domestic and imported L-WR. At most, Taiwan imports would have amounted to 9,975 tons, sold at an average price of \$495 a ton -- the number of tons actually sold in 1986 at the 1986 price (\$422 a ton) plus 17.29 percent. At the least, sales of Taiwan imports would have been zero -- a circumstance that would have occurred if all L-WR customers switched to the available alternatives.

The alternatives available to L-WR customers were, of course, the L-WR sold by domestic producers and by importers from countries other than Taiwan. Let me first consider the maximum sales that would have gone to the U.S. producers. To compute this outside limit, I assume the domestic companies were the only producers in the market other than importers from Taiwan that were able to expand shipments. I thus eliminate the possibility that some sales would have gone to the producers from other countries, a likelihood that I discuss below. Under this assumption, domestic sales would have increased by 9,975 tons in 1986 if not a single customer purchased any Taiwan L-WR.

To determine the revenue impact on the domestic industry if Taiwan imports had been priced entirely out of the market, I must consider the average per-unit price at which domestic L-WR would have been sold. Fair pricing on its own would not have

eliminated the presence of Taiwan L-WR imports from the U.S. market; it simply would have meant that these imports would have been priced 17.29 percent higher -- that is, at \$495 a ton instead of \$422 a ton. Leaving aside the domestic producers' lead-time advantage (which I discuss below), the domestic product would have had to be priced no higher than the same \$495 a ton to supplant all of the Taiwan imports. At a higher price for domestic L-WR, some consumers would still have bought some Taiwan products.

At a per-unit price of \$495 a ton, domestic producers would have received additional revenues of only \$4,937,625 if they had gained all of the sales that actually went to Taiwan imports. That amount is only 4.1 percent of the value of the domestic industry's actual 1986 L-WR shipments,⁶⁹ and only 1.3 percent of the reported net sales of the domestic establishments in which L-WR is produced.⁷⁰

I do not believe that a maximum gross revenue loss of less than 1.3 percent is material injury within the meaning of the

⁶⁹ Staff Report at A-19 (Table 6).

⁷⁰ Id. at A-24 (Table 8).

controlling statutes.⁷¹ Moreover, it is likely that this percentage revenue loss is substantially overstated because it is based on net sales figures from firms accounting for only 74 percent of reported domestic L-WR shipments in 1986.⁷² In fact, the domestic industry's revenue loss caused by dumped Taiwan imports would have been significantly greater than this estimate of less than 1.3 percent only if domestic sales could have supplanted Taiwan imports at prices materially higher than \$495 a ton. Given the facts in this case, that possibility is virtually non-existent.

It is true that domestic producers have a product advantage that may allow them to charge a somewhat higher price. As already noted, Petitioners claim that because of their lead-time and service advantage, they can generally charge 5 to 10 percent more for their L-WR products. Assuming this advantage could be maintained in sales to customers that otherwise would purchase Taiwan imports, domestic producers' "lost revenue" under the scenario discussed above would have ranged from \$5,187,000 to

71

The comparison to industry net sales is particularly useful because subtractions or additions to net sales directly affect most other indicators of an industry's financial performance.

72

Staff Report at A-23.

\$5,431,388. Even at these higher prices (\$520 to \$544 a ton), reported net sales for domestic establishments producing L-WR would have been only 1.4 to 1.5 percent higher. Moreover, there is no reason to believe that higher prices necessarily could have been passed on to all customers that otherwise would buy the Taiwan product. After all, the fact that these customers purchased Taiwan L-WR in 1986 suggests that many of them do not place much value on shorter lead time or better service.

Let me now consider the possibility that the above analysis overstates the impact of dumped Taiwan imports because it omits consideration of the price suppressing effects of imports from other countries. Taiwan is just one of many countries that export L-WR to the United States. Of all the L-WR sold in the United States in 1986 by firms other than Taiwan producers, 79 percent was sold by domestic producers and 21 percent by producers from other countries.⁷³ The average unit price of imports from these other countries was \$457 a ton -- well under the prices (\$495, \$520, and \$545 a ton) on which the estimates above were based.⁷⁴ As a consequence, it is likely that a material portion of the sales secured by Taiwan through unfair

73

Id. at A-35 (Table 15).

74

Id. at A-33 (Table 13).

pricing were sales that otherwise would have gone to other importers, and not to domestic producers of L-WR. The effects that L-WR imports from other countries have on domestic prices and revenues are not the responsibility of Taiwan producers. Unless other foreign producers could not increase their U.S. sales at all, their presence in the market can only mean that the estimates above further overstate the actual impact of dumped Taiwan imports on domestic producers.⁷⁵

Based on the foregoing analysis, it is apparent that the adverse effect on the domestic industry of dumped imports from Taiwan was trivial. Accordingly, I conclude that dumped imports from Taiwan were not a cause of material injury.

75

It appears that many of the other nations exporting L-WR to the United States are subject to outstanding restraint agreements. Compare Staff Report at A-6 and A-7 with A-32. But there is no evidence in the record suggesting that these countries are exporting L-WR to the maximum levels allowed by those agreements.

Views of Commissioner Lodwick

I find that a domestic industry is not materially injured or threatened with material injury by reason of less than fair value imports of light walled rectangular pipes and tubes (LWR pipe) from Taiwan. My analysis focuses on developments since re-entry of Taiwan imports into the U.S. market in the second quarter of 1986. During the preceding nine months, covering the second half of 1985 and the first quarter of 1986, virtually no Taiwan imports entered the U.S. Prior to that, in an antidumping investigation covering imports from Taiwan through mid 1985, the Commission found no material injury or threat of material injury. The Commission thus has essentially one year of relevant import data covering the second quarter of 1986 through the first quarter of 1987. (I will refer to this twelve month period as the current period).

LIKE PRODUCT AND DOMESTIC INDUSTRY

I adopt the definitions of like product and domestic industry used by the Commission in prior investigations covering LWR pipe and in this preliminary investigation.

Regional industry. Petitioner has presented a regional as well as a national industry case. I conclude that the criteria for a regional industry analysis are met as (1) virtually all Western region domestic production is shipped within the region, (2) less than one percent of the regional apparent consumption is supplied by U.S. producers outside the region and (3) approximately 75% of Taiwan imports in the current period entered through West Coast ports. I therefore discuss the condition of both the national and regional industries.

CONDITION OF THE NATIONAL DOMESTIC INDUSTRY

Information on the performance of the domestic industry shows solid positive trends for both operating and employment factors from 1984 to the current period, despite flat apparent consumption. In particular, domestic shipments rose approximately 20% from 1984 to the current period. Domestic producer market share rose from under 65% to over 78%. Production rose by a smaller but still noteworthy amount, and since capacity was level, utilization rose as well. On the employment side, hours worked and total compensation increased briskly from 1984 to the current period, but the expansion eroded earlier gains in productivity and unit labor costs.

Financial results have displayed no apparent trend. Financial data pertaining specifically to domestic LWR pipe operations were difficult to obtain. For the current period, the Commission received specific LWR operation data from producers accounting for less than 5% of domestic production, and establishment data where LWR pipe accounted for over 35% of operations from producers accounting for less than half of domestic production. Thus I find a product line analysis which relies on overall establishment information (Staff Report Table 8) most appropriate, even though LWR production is only a relatively minor component.

This overall financial information revealed flat sales revenue but fractional declines in operating income, cash flow, and operating margins in the current period. Any weight given to these results is limited by the following information:

(1) The value of domestic LWR pipe shipments grew over 9% from

1985 to the current period, indicating that sales from other operations dragged down overall sales results. (2) Though no direct data on price versus cost trends for LWR pipe exists, domestic prices have risen since Taiwan imports have re-entered the market, and price increases are consistent with LWR raw material cost index increases.

CONDITION OF THE WESTERN REGIONAL INDUSTRY

Given the higher standard of injury for a regional industry, I find that a regional industry analysis provides no advantage to petitioner. In general, performance levels and trends are not widely divergent between the regional and national industries.

Specifically, information on the performance of the domestic industry in the Western region shows that:

(1) Producer operating levels are rising strongly (domestic shipments rose from 69 thousand tons in 1984 to 85 thousand tons in the current period) and domestic producer market share has grown substantially, despite flat domestic apparent consumption since 1984. (2) Employment factors including hours worked and total compensation have risen. (3) Financial data for establishments producing LWR pipe are mixed. Sales are up despite flat demand, operating income is up, and operating margins are down slightly from 1985 to the current period. Further, financial performance has improved for three of the five firms operating in the West for which the Commission has a consistent series of financial data from 1985 to the current period.

CAUSATION OF MATERIAL INJURY AND THREAT OF MATERIAL INJURY

The domestic industry's performance indicators, both on a national basis and for the Western region, show no current material injury by reason of unfair imports from Taiwan. However, during this period of improving operating and employment factors and apparently stable financial factors for the domestic LWR pipe industry, import volumes from Taiwan increased. The highest import level, reached over the current period, was 15,395 tons. That corresponds to a market penetration of the subject imports of 5.3%. Roughly 75% of those imports, totalling 11,635 tons, entered through West Coast ports, resulting in a market penetration of 10.2% in the Western region.^{1/}

This recent market penetration raises the question of possible nascent or threatened injury. The primary criteria for assessing causation of current material injury are the volume and market penetration of imports (with stocks an implicit consideration), the effect of imports on U.S. prices, and the impact of imports on the domestic industry. The primary criteria for assessing threat of material injury are similarly trends in the volume and market penetration of imports (with stocks an explicit consideration) and the

^{1/} I do not find cumulation with imports from Singapore which were found to threaten material injury to the domestic industry in November, 1986 to be appropriate. The Singapore imports were not found to cause material injury at that time, and the threat has been obviated by the duty order. The question of any sequential weakening of the domestic industry by successive imports is necessarily implicit in the examination of the current condition of the domestic industry.

probable effect of imports on U.S. prices, with the additional consideration of the foreign industry, including such things as capacity, capacity increases, markets other than the U.S. and product shifting.

I find no nascent material injury, or developments which indicate a real and imminent threat of material injury, based on conditions in the U.S. market. In particular, (1) despite increased market penetration of Taiwan imports and flat domestic apparent consumption, domestic producer operating levels rose strongly in the current period (and domestic producer market share grew much more than the market penetration of Taiwan imports), (2) the U.S. market absorbed this increased domestic industry activity as stocks declined both absolutely and relative to shipments, and (3) domestic prices did not appear to deteriorate either in absolute level or relative to costs. These factors hold for the Western region as well as for the national industry.

Further, the limited available data on the industry in Taiwan provide no indication of real and imminent substantial increases in shipments to the U.S. market. The information gathered by the Commission indicates that approximately six Taiwan producers of LWR pipe made at least token exports to the U.S. during the current period. For the two primary exporters, who account for the vast majority of such exports, the Commission has some information on capacity and production. Much of the information is either uncertain or seemingly contradictory, but in any event provides no solid basis for a real and imminent threat determination.

Where information is more clearly established and where annual data have been provided since 1984, there has been no increase in reported Taiwan industry capacity during 1984-1987. Though there was a drop in non-U.S. shipments in 1986 and thus an increase in capacity available for generating exports to the U.S., a recovery in non-U.S. markets is forecast for 1987. I do not put much weight on such forecasts, but to the extent that some of the drop in 1986 was in shipments to Middle East oil states and a recovery in such markets is projected, I find the forecast at least plausible. Stocks in Taiwan have declined and are quite low relative to shipments, indicating no immediate pressure to dump material.

Finally, though I also place little weight on Taiwan's unilateral restraint policy, Taiwan producers do need export licenses, and the volume of material licensed in recent months (September 1986 to April 1987) is below recent shipment sizes to the U.S. In summary, the available data on the Taiwan industry show no indication of a real and imminent sustainable increase in the position of Taiwan imports in the U.S. market which would lead to material injury to the domestic industry.^{2/}

Based on this reasoning, I find that a domestic industry is not materially injured or threatened with material injury by reason of less than fair value imports of light walled rectangular pipes and tubes from Taiwan.

^{2/} I do not find product shifting to be a germane issue in this investigation. The outstanding order against standard pipe from Taiwan was implemented in 1984. Any product shifting relative to that order would have occurred well before the most relevant time period for this investigation.

DISSENTING VIEWS OF COMMISSIONERS ALFRED ECKES AND DAVID ROHR

In the preliminary phase of this investigation, a majority of the Commission determined there was a reasonable indication that the domestic industry producing light-walled rectangular (L-WR) pipes and tubes was threatened with material injury by allegedly dumped imports from Taiwan. In our view, the data collected by the Commission in this final investigation strongly confirm that earlier indication. However, the majority of our colleagues determined that there is no material injury or threat of injury to the domestic industry from Taiwanese imports. We respectfully disagree.

Certain industry performance indicators did improve during the period of investigation. Despite signs of eroding profit margins, the positive trends in other indicators preclude our finding current material injury to the domestic L-WR pipe industry. Nonetheless, the data in this final investigation, particularly for the last half of 1986 and first quarter of 1987, indicate a weakening of performance that makes the industry vulnerable to injury from increasing volumes of unfairly traded imports.

The Commission was unable to obtain precise data on the productive capacity or capacity utilization of the L-WR industry in Taiwan. Indeed there is some uncertainty as to which producers are responsible for imports in the most recent

period. However, it is apparent that the Taiwan producers are able to direct substantial volumes of low-priced L-WR pipe to the U.S. market and that such imports are likely to have a price suppressing or depressing effect. Taiwan has not signed a VRA with the United States, but is limiting steel exports under an informal agreement that seems sufficiently flexible to permit substantial L-WR exports. Therefore, we determine that the domestic L-WR pipe industry is threatened with material injury by reason of LTFV imports from Taiwan. 1/

Like product/domestic industry

To assess material injury or threat to the domestic industry, the Commission first determines the product "like" the imports subject to investigation and then defines the industry as the "domestic producers as a whole of a like product, or those producers whose collective output of the like product constitutes a major proportion of that product." 2/ 3/

In prior investigations of similar imports, the Commission defined the like product as light-walled welded carbon steel pipes of rectangular cross-section, having a wall thickness of less than 0.156 inch. The domestic industry, then, was found to consist of the domestic producers of L-WR pipe. As none of the parties to this investigation questioned these definitions

1/ Having concluded that the national domestic industry is threatened with material injury, we do not address the issue of threat to a West Coast regional industry.

2/ 19 U.S.C. 1677(4)(A)

3/ "Like product" is "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation...." 19 U.S.C. 1677 (10)

and no additional information was obtained suggesting that they be changed, we again adopt the like product and domestic industry definitions made in the earlier investigations.

Condition of the industry

The Commission has examined the condition of the domestic L-WR industry in numerous investigations conducted over the past few years. For each investigation, we analysed data on economic indicators such as domestic consumption, production, productive capacity, capacity utilization, shipments, inventories, employment, and financial performance. As construction activity in the United States increased after the recession in the early 1980's, and steel import restraints were effected limiting foreign competition from traditional suppliers, we noted that many of the economic indicators for the domestic L-WR industry trended upward from low levels in 1982.

In the current investigation, we find that there is still an upward trend in many of these indicators. Although apparent domestic consumption dipped almost 9 percent in the first quarter of 1987 (interim 1987) as compared to the same period of 1986, consumption remained substantially above levels in the early 1980's. The domestic industry captured an increasing share of the U.S. market over the period of investigation as overall import levels decreased.

Total U.S. production increased 6.7 percent from 1984 to 1986, and 1.1 percent in the interim comparison. Domestic capacity increased slightly during the three years covered by this investigation and also in the interim comparison. Capacity utilization rose 3.7 percentage points from 1984 to 1986, and continued to rise in the interim, reaching 61.5 percent during first-quarter 1987.

Domestic shipments increased almost 20 percent from 1984 to 1986 and remained stable in the interim comparison. Producer inventories decreased slightly over the period of investigation, both in absolute terms and as a percent of shipments. The number of workers employed rose 11 percent from 1984 to 1986, and 8 percent in interim 1987 compared to the same period in 1986.

The financial performance of the domestic industry, however, did not follow the upward trend of the other indicators during the investigation period. Sales were fairly flat from 1984 through interim 1987. Gross profits declined steadily. Both net income and operating income trended downward, particularly in interim 1987. Operating margins followed a slight downward trend until first-quarter 1987, when the drop was more pronounced.

Unfortunately, most domestic producers were unable to supply separate profit-and-loss data for production of the like product, so our financial analysis was limited to P&L data for overall operations in which L-WR pipe was produced. 4/ This

limited the emphasis we placed on financial data in this investigation.

We did observe, however, that producers for whom L-WR pipe constituted more than 35 percent of sales demonstrated lower profit levels and more severe erosion of profitability on their overall operations than was found in the aggregate industry data, indicating possible problems with the L-WR pipe portion of their business. 5/ For those producers, profits decreased sharply to a loss in the 1987-1986 interim comparison. 6/

Despite the financial downturn, other indicators which could be measured separately for the L-WR pipe industry still exhibit positive trends for the aggregate industry. These generally positive statistics, however, mask negative results for many individual producers. During the period of investigation, several producers filed for bankruptcy or closed plants, several sold their operations to other producers, and a general consolidation and restructuring took place. Although this restructuring may well strengthen the domestic industry over the long term, the process may also have negative effects on operations in the short term.

Therefore, although we do not find current material injury to the domestic industry, we conclude that the data in this investigation indicate that the industry is vulnerable to injury from increased competition from unfairly traded imports.

4/ Table 8, Report at A-24.

5/ Table 9, Report at A-26.

6/ The interim 1987 financial data reflect corporate changes and certain nonrecurring events..

Applicability of regional industry analysis

Alternatively to finding material injury to the national L-WR industry, petitioners urge the Commission to find that imports from Taiwan have materially injured a regional domestic industry. This region would encompass the market served by Taiwan imports entering into West Coast ports and be composed of the States of Washington, Oregon, California, Nevada, Utah, and Arizona.

We note that there is some question as to whether the statutory criteria are met for considering this a regional industry. More importantly, we find that the material injury standard for regional industries -- that producers of all or almost all of the production within the region are experiencing material injury -- has not been satisfied.

The first requirement of Section 771(4)(C) for considering the producers in a particular market as a regional industry is that such producers must "sell all or almost all of their production of the like product in question in the market." ^{7/} The Commission's investigation revealed that there were no shipments by reporting West Coast producers outside the region during the investigation period. Therefore the first criterion for a regional industry analysis is met.

The second criterion is that demand in the regional market "is not supplied, to any significant degree, by producers of the product located elsewhere in the United States." ^{8/} There

^{7/19} USC 1677(4)(C)(i).

^{8/} 19 USC 1677(4)(C)(ii).

were no reported shipments into the West Coast region by producers outside the region until a small tonnage entered in 1986. That year total apparent consumption in the region was 116,378 tons, and the amount supplied by outside producers was relatively insignificant. Again during the first quarter of 1987, there was a small amount shipped into the region in a period when the total demand was 20,906 tons. Thus the producers in the West Coast region meet the second regional industry criterion.

The statute refers to a market which meets the two criteria outlined above as an "isolated market." However, it provides that the producers in such an isolated market may be considered a regional industry only "if there is a concentration of subsidized or dumped imports into such an isolated market." Neither the statute nor the legislative history provide much guidance to the Commission as to what constitutes "a concentration" of imports.

Certainly more Taiwan imports were shipped to the West Coast than to anywhere else in the United States. As a percentage of total Taiwan imports, West Coast imports constituted 79 percent in 1984, 66 percent in 1985, 72 percent in 1986, and 82 percent in interim 1987. We note, however, that the absolute tonnages going outside the region increased in the most recent periods. ^{9/} Therefore, it is unclear whether the degree of concentration is sufficient to require consideration of the West Coast as a distinct region.

^{9/} Table 15, Report at A-35.

There is a special standard applicable to the consideration of injury to a regional industry. The law requires that "producers of all, or almost all, of the production within that market are being materially injured or threatened with material injury." 10/ We find that this standard is not met in this investigation and therefore, injury to a West Coast regional industry would not be found even if the regional analysis were deemed appropriate.

The economic indicators for the regional industry followed similar trends as those for the national L-WR pipe industry. For example, regional production and shipments increased throughout most of the period of investigation. However, they turned down slightly in interim 1987. Capacity utilization dipped slightly in 1985, and then increased in both 1986 and interim 1987. Employment rose in the regional industry during the investigation period as it did in the national industry. The picture of the regional industry to be derived from the financial data, like that of the national industry, is mixed. Net sales declined in 1985, but rose in 1986 to a level 6.5 percent above 1984 levels. The interim comparison shows an increase of 7 percent in 1987. Operating income margins dropped substantially in 1985, then rose in 1986 to a level below that of 1984. The interim data show a steeper decline in operating margins for 1987.

10/ 19 USC 1677(4)(C) See also *Atlantic Sugar v. United States*, 744 F2d 1556 (CAFC 1984).

It should be noted that the financial data are based on overall operations of the producers and not specifically L-WR pipe production. 11/ Therefore the emphasis placed on such data is limited. However, as the data on other factors are not indicative of injury in this investigation, we look to the financial data to consider the special requirement for finding injury to a regional industry. We do not find that producers of all or almost all of the regional production are experiencing material injury, even on the basis of financial performance.

True, several producers have operated at a loss during one or more periods of the investigation. One producer ceased production of L-WR pipe. However, other producers in the region, accounting for substantial shares of production, are operating profitably. We conclude, therefore, that even if we were to find that the West Coast producers constituted a regional industry, we would not find material injury to that industry.

Threat of material injury

In assessing threat of material injury to the domestic industry, the law requires that we examine certain factors to help us gauge the probable impact of the LTFV imports on the

11/ Footnote 6 also applies to the regional financial data.

industry in the near future. 12/ 13/ Primarily, we are concerned with the trends in import volume and penetration, the capability and intent of the foreign producers to increase volume and penetration levels, and the probable price effects of future imports on the domestic industry.

The volume and market penetration for the L-WR pipe imports from Taiwan traced a roller-coaster pattern during the period of investigation, decreasing from 9,754 tons in 1984 to only 406 tons in 1985 (a year when the earlier antidumping investigation was pending) and then climbing to 9,975 tons in

12/ 19 U.S.C. sec. 1677(7)(F)(i) provides:

(i) In general. 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 economic factors--

(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 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,

(Footnote continued on next page.)

1986. 14/ 15/ Most of the tonnage in 1986 entered the United States in the second half of the year. 16/ The upward trend continued in the first quarter of 1987: 5,422 tons entered before the Commerce Department made its preliminary determination in this investigation, compared to virtually no tonnage in the corresponding 1986 period.

The import market penetration pattern mirrored the import volume pattern. Market penetration by imports from Taiwan stood at 3.3 percent in 1984, fell to 0.1 percent in 1985, and then rose to 3.4 percent in 1986. In the first quarter of 1987, penetration reached 7.2 percent, compared to less than 0.05 percent in the 1986 interim. This penetration was more than double the level in 1984. 17/

12/ (Footnote continued)

(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

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

13/ Because this is an antidumping investigation, the nature of any subsidy (I) is not relevant. Further, the facts of this investigation indicate that inventories (V) also are not significant to the industry.

14/ Table 15, Report at A-35.

15/ The petitioner maintained that we should cumulate imports of L-WR pipe from Taiwan with imports from Singapore covered by an outstanding order dated November 18, 1986. As the Singapore imports are no longer unfairly traded, we did not cumulate them in assessing prospective threat.

16/ Table 14, Report at A-34. Recent information on the record indicates that reported 1986-87 volumes may be understated.

17/ 19 USC 1677(7)(F)(i)(III).

To estimate whether the upward trends of import volume and penetration occurring in late 1986-early 1987 are likely to continue absent antidumping duties, the Commission attempted to gather information on the capacity, capacity utilization, production, and export shipments of L-WR pipe producers in Taiwan. The producer investigated by the Commerce Department, Yieh Hsing, supplied such data; however, the Commission was unable to collect reliable data for other exporting producers. We do know that there are at least six producers exporting L-WR pipe to the United States. The data that we were able to obtain show that Taiwan's L-WR pipe capacity has grown substantially during the period of investigation, and that although Taiwan's producers ship to a number of countries, the United States is an important market for exports from Taiwan.^{18/}

We received capacity utilization data for only a limited number of Taiwan producers. In each case, production of L-WR pipe was significantly below reported capacity. We believe that a fair reading of the evidence leads to the conclusion that Taiwan producers have the capacity to increase production for export to the United States. ^{19/}

Generally the Taiwan producers manufacture other steel pipe in addition to L-WR pipe in their facilities. Respondents admitted there can be shifting of productive resources to L-WR

^{18/} 19 USC 1677(7)(F)(i)(II)&(VI).

^{19/} 19 USC 1677(7)(F)(i)(II)&(VI).

pipe. 20/ This will undoubtedly occur if there is an economic advantage to making such a shift. 21/

The respondent's posthearing brief maintains that Yieh Hsing would prefer to fill its quota under the current informal export agreement with items of higher value than L-WR pipe. The fact remains, however, that in the final months of 1986 and the first quarter of 1987, exports of L-WR pipe from a Taiwan producer (or producers) were entering at increasing levels, although an informal restraint agreement with the United States Trade Representative was reached in September 1986. As this agreement is informal and self-imposed by Taiwan, it is questionable that it will have any enduring effect on the level of L-WR imports. The terms are also sufficiently flexible to allow substantial exports of L-WR pipe. There is good reason to believe that Taiwan producers will continue to find the United States an attractive export market. 22/

There also is every reason to assume that future imports from Taiwan will have a depressing or suppressing effect on domestic prices. 23/ In this investigation, the Commission made price comparisons for domestic and importer sales of three representative types of L-WR pipe to distributors and end users over nine quarters from January-March 1985 to January-March

20/ Transcript of hearing, p.99.

21/ 19 USC 1677(7)(F)(i)(VIII) We note that imports of standard pipe from Taiwan, often produced in the same mills as L-WR pipe, has been subject to an antidumping order for two years.

22/ 19 USC 1677(7)(F)(i)(VII)

23/ 19 USC 1677(7)(F)(i)(IV)

1987. 24/ In sales to distributors, the imports undersold the domestic pipe in all comparisons by percentages ranging from 6.3 percent to 31.6 percent. In sales to end users, underselling by the imports was found in all but one comparison by margins of from 4.7 percent to 13 percent.

Domestic prices for the three products sold to distributors throughout the United States generally declined throughout the period, while prices to distributors in the Western United States were essentially flat. For sales to end users in the West, domestic prices trended downward.

The petitioners reported that the cost of steel, constituting about two-thirds of their production cost, rose about 20 percent between the beginning of 1986 and the present time. Yet this increase in the cost of goods sold was not reflected in the prices they obtained for their product.

If the domestic industry must continue to compete with substantial volumes of LTFV imports from Taiwan, it is unlikely that domestic producers will be able to raise their prices to compensate for increased costs. This may be one reason for the erosion of financial performance that apparently already has occurred. As the Taiwan producers appear to have the capability and the intent to ship increasing volumes of L-WR pipe, we conclude that the domestic industry is threatened with material injury by reason of LTFV imports from Taiwan.

24/ Tables 17, 18, and 19. Report at A-39, A-40, and A-41. Note that all price comparisons were made in the Western United States as that is where the bulk of the imports were sold.

INFORMATION OBTAINED IN THE INVESTIGATION

Introduction

On October 2, 1986, counsel for the Committee on Pipe & Tube Imports (CPTI) filed an antidumping petition with the U.S. International Trade Commission and the U.S. Department of Commerce, alleging that an industry in the United States is materially injured or is threatened with material injury by reason of imports of light-walled rectangular pipes and tubes 1/ from Taiwan that are being sold at less than fair value (LTFV). The petition alleges, in the alternative, that producers of the subject products in the West Coast region 2/ of the United States have been materially injured or threatened with material injury by reason of imports of light-walled rectangular pipes and tubes from Taiwan. Accordingly, effective October 2, 1986, the Commission instituted investigation No. 731-TA-349 (Preliminary) under section 733(a) of the Tariff Act of 1930 (19 U.S.C. § 1673(a)) to determine whether there was a reasonable indication that an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports of the subject merchandise.

As a result of its preliminary investigation, 3/ the Commission on November 17, 1986, notified Commerce that there was a reasonable indication that an industry in the United States was threatened with material injury by reason of alleged LTFV imports from Taiwan of light-walled rectangular pipes and tubes. 4/

On March 17, 1987, Commerce published a notice in the Federal Register of its preliminary determination that imports of certain light-walled rectangular welded carbon steel pipes and tubes from Taiwan are being, or are likely to be, sold in the United States at LTFV. As a result of Commerce's affirmative preliminary determination of LTFV sales from Taiwan, the Commission instituted investigation No. 731-TA-349 (Final), effective March 17, 1987, under section 735(b) of the Act (19 U.S.C. § 1673d(b)), to determine whether an industry in the United States is materially injured or threatened with material injury, or whether the establishment of an industry in the United States is materially retarded, by reason of imports from Taiwan of light-walled rectangular pipes and tubes.

1/ For purposes of this investigation, the term "light-walled rectangular pipes and tubes" covers welded carbon steel pipes and tubes of rectangular (including square) cross section, having a wall thickness less than 0.156 inch, provided for in item 610.4928 of the Tariff Schedules of the United States Annotated (TSUSA). The petition was filed on behalf of the mechanical tubing subcommittee of the CPTI. The 5 member producers of the subcommittee in support of the petition are: Bull Moose Tube Co.; Hughes Steel & Tube; Hannibal Industries, Inc.; Maruichi American Corp.; and Western Tube & Conduit.

2/ This region, as defined by petitioners, is composed of the States of Washington, Oregon, California, Nevada, Utah, and Arizona.

3/ Certain Welded Carbon Steel Pipes and Tubes from Taiwan: Determination of the Commission in Investigation No. 731-TA-349 (Preliminary). . . , USITC Publication 1906, November 1986.

4/ Chairman Liebeler made a negative determination.

Notice of the institution of the Commission's final 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 April 2, 1987 (52 F.R. 10642). 1/

On June 1, 1987, Commerce published its affirmative final determination in the Federal Register (52 F.R. 20440) that imports of certain light-walled rectangular welded carbon steel pipes and tubes from Taiwan are being sold in the United States at LTFV. 2/

A public hearing was held in connection with the investigation on June 10, 1987, in Washington, DC. 3/ The briefing and vote was held on July 8, 1987.

Previous Commission Investigations

On December 18, 1984, counsel for the CPTI filed an antidumping petition with the Commission and Commerce alleging that an industry in the United States was materially injured or was threatened with material injury by reason of imports of light-walled rectangular pipes and tubes from Taiwan. On January 17, 1986, the Commission determined that an industry in the United States was not materially injured or threatened with material injury, and the establishment of an industry in the United States was not materially retarded, by reason of such imports that Commerce found to be sold at LTFV. Selected data from pending and recent title VII investigations are presented in table 1.

On November 13, 1985, counsel for the CPTI and the individual members of the mechanical tubing subcommittee filed an antidumping petition with the Commission and the U.S. Department of Commerce alleging that an industry in the United States is materially injured or is threatened with material injury by reason of imports of light-walled rectangular pipes and tubes from Singapore. 4/ On October 23, 1986, the Commission determined 5/ that an industry in the United States was threatened with material injury by reason of imports of light-walled rectangular pipes and tubes from Singapore that Commerce found to be sold in the United States at LTFV.

The Products

Description and uses

For the most part, the terms "pipes," "tubes," and "tubular products" can be used interchangeably. In some industry publications, however, a distinction

1/ A copy of the Commission's notice is presented in app. A.

2/ A copy of Commerce's notice is presented in app. B.

3/ A list of witnesses appearing at the hearing is presented in app. C.

4/ On Nov. 13, 1985, the CPTI also filed antidumping petitions concerning imports of standard pipes and tubes from the People's Republic of China (China), the Philippines, and Singapore, and heavy-walled rectangular pipes and tubes from Singapore.

5/ Chairman Liebler, Vice Chairman Brunsdale, and Commissioner Lodwick made negative determinations.

Table 1.--Light-walled rectangular pipes and tubes: Current and recent title VII investigations since January 1984, most recent dumping and subsidy margins, and import-to-consumption ratios, by countries, 1984-86, January-March 1986, and January-March 1987

Item	Weighted-average margin	Date of bond or order 2/	Ratio of imports to apparent U.S. consumption 1/					
			1984	1985	1986	January-March-- 1986	1987	
Antidumping investigations:								
Pending:								
Taiwan								
(instant investigation)...	3/ 17.29	Mar. 17, 1987	3.3	0.1	3.4	4/	7.2	
Outstanding orders:								
Singapore.....	12.60	Nov. 18, 1986	0.2	1.0	1.8	3.5	0.6	
Terminated:								
Spain.....	5/ 49.69	Dec. 31, 1984	8.0	1.0	2.5	6.5	0.1	
Order revoked:								
Republic of Korea.....	6/ 1.47	May 11, 1984	0.8	0.6	0.5	0.9	0	
Negative final injury finding:								
Taiwan.....	7.09	7/	3.3	0.1	3.4	4/	7.2	
Countervailing duty investigation:								
Terminated:								
Spain.....	5/ 1.14	Oct. 17, 1984	8.0	1.0	2.5	6.5	0.1	

1/ Apparent consumption is slightly understated for all periods because of less than full coverage of producers of light-walled rectangular pipes and tubes. Data were provided by 23 producers accounting for an estimated 95 percent of U.S. producers' domestic shipments. Market penetration, therefore, is slightly overstated for the period of the investigation.

2/ Date the antidumping or countervailing duty order was issued. If there is no order, and if a preliminary finding of less-than-fair-value sales or subsidy has been found, the date of the posting of the bond is reported here.

3/ The final weighted-average margin calculated by Commerce was published in the Federal Register on June 1, 1987.

4/ Less than 0.05 percent.

5/ Following withdrawal of the petition, this investigation was terminated effective Feb. 4, 1985, prior to Commerce's final determination. The margin shown is from Commerce's preliminary determination.

6/ This antidumping duty order was revoked on Oct. 21, 1985, following negotiation of a voluntary restraint agreement with the Republic of Korea.

7/ The Commission issued a negative final determination on Jan. 17, 1986.

Source: Margins and date of bond or order, obtained from the U.S. Department of Commerce; ratio of imports to consumption, compiled from official statistics of the U.S. Department of Commerce and data submitted in response to questionnaires of the U.S. International Trade Commission.

is made between pipes and tubes. According to these publications, pipes are produced in large quantities in a few standard sizes, whereas tubes are made to customers' specifications regarding dimension, finish, chemical composition, and mechanical properties. Pipes are normally used as conduits for liquids or gases, whereas tubes are generally used for load-bearing or mechanical purposes. Nevertheless, there is apparently no clear line of demarcation in many cases between pipes and tubes.

Steel pipes and tubes can be divided into two general categories according to the method of manufacture--welded or seamless. Each category can be further subdivided by grades of steel: carbon, heat-resisting, stainless, or other alloy. This method of distinguishing between steel pipe and tube product lines is one of several methods used by the industry. Pipes and tubes typically come in circular, square, or rectangular cross section.

The American Iron & Steel Institute (AISI) distinguishes among the various types of pipes and tubes according to six end uses: standard pipe, line pipe, structural pipe and tubing, mechanical tubing, pressure tubing, and oil country tubular goods. 1/

The light-walled rectangular pipes and tubes that are the subject of this investigation are rectangular (including square) welded carbon steel pipes and tubes having a wall thickness of less than 0.156 inch. These articles are supplied with rectangular cross sections ranging from 0.375 x 0.625 inch to 4 x 8 inches or with square cross sections from 0.375 to 6 inches. They are employed in a variety of end uses not involving the conveyance of liquids or gases. Principal uses include fencing, window guards, and railings for the construction industry and more decorative (but also functional) items such as furniture parts, athletic equipment, store shelving, towel racks, and similar items. 2/ The product is generally produced to ASTM specification A-513 or specification A-500, Grade A, and is commonly referred to in the industry as mechanical or ornamental tubing.

Steel pipes and tubes are generally produced according to standards and specifications published by a number of organizations, including the American Society for Testing & Materials (ASTM), the American Society of Mechanical Engineers (ASME), and the American Petroleum Institute (API). Comparable organizations in other countries have also developed standard specifications for steel pipes and tubes.

1/ For a full description of these products, see Certain Welded Carbon Steel Pipes and Tubes from the Republic of Korea: Determination of the Commission in Investigation No. 701-TA-168 (Final) . . . , USITC Publication 1345, February 1983.

2/ Petitioners state that the tubing used for construction purposes, referred to as "ornamental iron," is supplied by both U.S. and Taiwan producers. The tubing used for purposes for which appearance is more important is generally chrome-plated by customers and consequently requires a better surface quality available only with higher grade steel. There is allegedly no competition from Taiwan in this area. Petitioners' posthearing brief, p. 1 of answers to questions.

Manufacturing process

The manufacture of light-walled rectangular pipes and tubes begins with coils of flat-rolled steel, known as skelp, 1/ which are cut by a slitting machine into strips of the precise width needed to produce a desired diameter of tubing. The slit coils are fed into the tube mills which cold-form the flat ribbon of steel into a tubular cylinder by a series of tapered forming rolls. The product is then welded along the joint axis.

There are various ways to weld pipes and tubes. The electric resistance weld (ERW) and the more efficient high frequency weld are used in the manufacture of the subject products. In both welding processes, the joining edges are heated to approximately 2,600° F. Pressure exerted by rolls squeezes the heated edges together to form the weld. The high frequency welding process is more costly than the ERW process, but it creates a stronger weld and can operate at twice the speed. High frequency welding is preferred by the light-walled rectangular pipes and tubes industry.

Immediately after welding, sizing rolls shape the tube to accurate diameter tolerances. It is at this point that the round tube is formed into a rectangle, square, or other desired shape by using forming rolls. 2/ This process requires little additional expense. The product is cooled and then cut at the end of the tube mill by a flying shear or saw. The standard lengths of the product are 20 and 24 feet. Some producers have special "offline" cutters that are capable of cutting the product into a number of different lengths without leaving the imperfection of a "dimple" on the ends as is produced by the flying shear. This special cutting is done to customer specifications.

U.S. tariff treatment

Imports of light-walled rectangular pipes and tubes are classified in TSUSA item 610.4928, which includes welded nonalloy steel pipes and tubes of cross sections other than circular, having a wall thickness less than 0.156 inch. 3/ As a result of tariff concessions granted in the Tokyo Round of the Multilateral Trade Negotiations, the most-favored-nation (MFN) (col. 1) rate of duty, applicable to imports from Taiwan under TSUS item 610.49, was reduced to its final negotiated rate of 8 percent ad valorem as of January 1, 1987.

1/ Skelp is a flat-rolled, intermediate product used as the raw material in the manufacture of pipes and tubes. It is typically an untrimmed band of hot- or cold-rolled sheet.

2/ Other products of circular cross-section, such as standard and mechanical pipes and tubes, are frequently produced on the same pipe mills as light-walled rectangular pipes and tubes; the principal difference in the manufacturing processes is the use of additional forming rolls in the production of noncircular pipes and tubes.

3/ Prior to Apr. 1, 1984, subject products were classified in TSUSA item 610.4975.

Nature and Extent of the LTFV Sales

On June 1, 1987, the Department of Commerce published in the Federal Register its final determination that imports of certain light-walled rectangular welded carbon steel pipes and tubes from Taiwan are being, or are likely to be, sold in the United States at LTFV. Commerce investigated sales of light-walled rectangular pipes and tubes to the United States during the period May 1 through October 31, 1986, and limited the investigation to Yieh Hsing Enterprise Co., Ltd. (Yieh Hsing), since the company accounted for all sales of the product from Taiwan during the period of the investigation.

For the purposes of its final determination, Commerce used purchase price and constructed value. Commerce used the purchase price to represent the U.S. price since the merchandise was purchased by unrelated U.S. customers directly from the foreign manufacturer prior to importation. The purchase price was based on the packed, c. & f., c.i.f., or f.o.b. prices to unrelated purchasers in the United States. Yieh Hsing reported sales to Saudi Arabia, its largest third-country market since it had no viable home market. However, Commerce used constructed value as the basis for calculating the foreign-market value since there were insufficient sales to Saudi Arabia above the cost of production. The final weighted-average margin, as calculated by Commerce, is 17.29 percent ad valorem. The quantity and value of Yieh Hsing's exports examined by Commerce were * * * metric tons valued at * * *. Commerce found * * * sales during the period of investigation to be at LTFV.

Commerce directed the U.S. Customs Service to continue to suspend liquidation of all entries of light-walled rectangular pipes and tubes from Taiwan that are entered, or withdrawn from warehouse, for consumption, on or after March 17, 1987, and to require a cash deposit or bond for each entry in an amount equal to the estimated dumping margin.

The President's Program on Voluntary Restraints of Exports to the United States

In September 1984, the President outlined a nine-point program designed to assist the U.S. steel industry in a number of areas, including trade. Under this program, the U.S. Government would negotiate surge-control arrangements (and self-initiate proceedings under the trade laws, if necessary) with understandings, or suspension agreements, with countries "whose exports to the United States have increased significantly in recent years due to an unfair surge in imports." Unfair surges were described in the President's decision as dumping, subsidization, or diversion from other importing countries that have restricted access to their markets. The countries that have signed voluntary restraint agreements (VRAs), which cover the steel pipes and tubes under investigation, as of May 1, 1987, are as follows:

Australia	People's Republic of China
Austria	Poland
Brazil	Portugal
Czechoslovakia	Republic of Korea
East Germany	Romania
Finland	South Africa
Hungary	Spain
Japan	Venezuela
Mexico	Yugoslavia

Petitioners and respondents in the preliminary investigation asserted that one reason countries that did not export to the United States previously are able to do so now is a void in the marketplace previously filled by imports from countries that have signed VRAs with the United States. Petitioners also argued in the preliminary investigation that the impetus for increased imports from new entrants in the U.S. market comes from U.S. importers that are turning to these suppliers in an attempt to retain their share of the market.

Although Taiwan has not signed a VRA, it informally agreed, in discussions with the United States Trade Representative in September 1986, to limit exports of all steel products to the United States to a level of 20,000 short tons per month for the remainder of 1986 and 1987. ^{1/} Taiwan's export quota is administered by the Taiwan Steel & Iron Industry Association (TSIIA) under the direction of the government of the Republic of China. The quota is subdivided into a "fixed" quota, equal to 90 percent of the total, or 18,000 short tons per month, and a "free" quota, equal to 10 percent of the total, or 2,000 short tons per month. Any part of the fixed quota that is unused after one quarter is added to the free quota in the following quarter; in addition, the free quota may be expanded to include "special volumes" approved by Taiwan's Board of Foreign Trade (BOFT). The fixed quota is distributed to Taiwan exporters on the basis of their exports to the United States between April 1985 and July 1986. Yieh Hsing's share of the fixed quota is * * * short tons per month. A firm cannot export more than 25 percent of its basic yearly quota in any one quarter. However, depending upon the size of its basic quota, a firm may transfer up to 50 percent or up to 100 percent of its allocation to another firm.

The free quota is allocated on the basis of price bids within five product categories, the proceeds going to TSIIA to fund industry development and trade diversification efforts. The five categories and their shares of the free quota are as follows: (1) billets, coils, wire rod, bars and rods, angles, shapes, and sections, 25 percent; (2) flat rolled products and welded pipe, 35 percent; (3) stainless steel and seamless pipe, 15 percent; (4) wire products and nails, 20 percent; and (5) structurals, 5 percent. No single firm may account for more than 30 percent of the volume in any one category. ^{2/}

The European Community Pipe and Tube Agreement

On December 11, 1985, the European Community (EC) agreed through an exchange of letters to limit EC exports of pipes and tubes. The agreement, which extends a January 1, 1985, U.S.-EC pipe and tube accord through September 30, 1989, is intended to limit the EC share of the U.S. pipe and tube market to 7.6 percent. This agreement coincides with the duration of the VRAs.

^{1/} Transcript of the hearing, p. 87.

^{2/} Reports from the American Institute in Taiwan (AIT), December 1986 and January 1987; transcript of the hearing, pp. 87-88, respondent's posthearing brief, p. 3, and respondent's submission of June 23, 1987.

The Producers in Taiwan

Petitioners stated that they believe there are four manufacturers and/or exporters of light-walled rectangular pipes and tubes in Taiwan: Yieh Hsing Enterprise Co., Ltd., Kao Hsing Chang Iron & Steel Corp., Far East Machinery Co., Ltd., and An Mau Steel Company, Ltd. 1/ Commerce determined that Yieh Hsing was the only exporter of the product from Taiwan during the period of its investigation. 2/ Yieh Hsing was established in July 1978, as a pipe and tube manufacturer. Yieh Hsing also produces cold-rolled steel sheet and strip for the domestic market. Light-walled rectangular pipes and tubes represent a relatively small part of its total production. 3/ Mr. Lee, manager of the export-import department of Yieh Hsing, testified at the hearing that exports from Taiwan were above average in November and December 1986 because exporters rushed certificate approvals to beat Commerce's preliminary determination of sales at LTFV. Counsel for respondent stated at the hearing that there were two additional Taiwan producers that began exporting light-walled rectangular pipes and tubes to the United States late in 1986. 4/ Volumes represented by export certificates issued by TSIIA to Yieh Hsing and other exporters of the subject product are shown in the following tabulation, compiled from TSIIA data as reported in respondent's posthearing brief, p. 4a (in short tons, converted from metric tons):

	<u>Yieh Hsing</u>	<u>Other exporters</u>	<u>Total</u>
1986:			
September.....	***	***	***
October.....	***	***	***
November.....	***	***	***
December.....	***	***	***
1987:			
January.....	***	***	***
February.....	***	***	***
March.....	***	***	***
April.....	***	***	***

Information supplied on May 7, 1987, by counsel for Yieh Hsing indicated that the company's annual capacity to produce light-walled rectangular pipes and tubes was * * * metric tons for the period 1984-87 (the figures for 1987 are projections). Data on Yieh Hsing's production, domestic shipments, exports, and yearend inventories are presented in table 2.

1/ Petition for investigation No. 731-TA-349, p. 9. Kao Hsing Chang Iron & Steel Corp., Far East Machinery Co., Ltd., An Mau Steel Company, Ltd., and * * * have not participated as parties in this investigation.

2/ The Special Summary Steel Invoice (SSSI) file maintained by Commerce indicates that for the period from January 1986 through March 1987, light-walled rectangular pipes and tubes were exported by seven firms in the following quantities (in metric tons): * * *.

3/ Transcript of the hearing, p. 86.

4/ Transcript of the hearing, pp. 88-89 and p. 97, and respondent's posthearing brief, pp. 2-5. Respondent's posthearing brief states that Yieh Hsing prefers to fill its quota by exporting higher profit * * *, p. 5.

Table 2.--Light-walled rectangular pipes and tubes: Yieh Hsing's capacity, production, domestic shipments, exports, and yearend inventories, 1983-86, and estimated 1987

Item	1983	1984	1985	1986	1987 estimate
Production--metric tons..	***	***	***	***	***
Capacity.....do....	***	***	***	***	***
Capacity utilization percent..	***	***	***	***	***
Domestic shipments metric tons..	***	***	***	***	***
Exports to--					
United States....do....	***	***	***	***	<u>1/</u> ***
* * *.....do....	***	***	***	***	***
* * *.....do....	***	***	***	***	***
* * *.....do....	***	***	***	***	***
All other countries metric tons..	***	***	***	***	***
Total.....do....	***	***	***	***	***
Yearend inventory..do....	***	***	***	***	***

1/ In its submission of May 7, 1987, Yieh Hsing projected exports to the United States to total * * * metric tons in 1987. This figure was revised to * * * in its June 18, 1987, submission because of the 17.29 percent dumping margin found by Commerce on May 26, 1987. (* * *) Counsel for Yieh Hsing stated, however, that should the Commission make a negative final determination in the subject investigation, Yieh Hsing would resume exports to the United States at a level of about * * * metric tons per month.

Source: Counsel for Yieh Hsing Enterprise Co., Ltd.

Yieh Hsing's production of light-walled rectangular pipes and tubes 1/ totaled * * * metric tons in 1984, * * * percent from * * * metric tons reported in 1983. Yieh Hsing's production of the subject product then * * * to * * * metric tons in 1985, or by * * * percent. Production * * * in 1986 to * * * metric tons, with estimated 1987 production * * * metric tons. Capacity utilization * * * from nearly * * * percent in 1983 and 1984 to * * * percent in 1985 and * * * percent in 1986. Total export shipments * * * from * * * metric tons in 1983 to * * * metric tons in 1984. In 1985, total exports * * * percent to * * * metric tons before * * * to * * * metric tons in 1986. Projected exports for 1987 amount to * * * metric tons. The share of Yieh Hsing's total exports bound for the United States * * * from * * * percent in 1983 to * * * percent in 1984. * * *. In 1986 this share * * * again to * * * percent.

The following information on the capacity of certain Taiwan producers, other than Yieh Hsing, to produce light-walled rectangular pipes and tubes in 1986 was provided by * * * of the AIT (in metric tons):

* * * * * * *

1/ Yieh Hsing can produce circular pipes and tubes on the same production lines, posthearing brief, p. 8, and appendix, p. 5.

U.S. Producers

Light-walled rectangular pipes and tubes are made primarily by small, nonintegrated or partially integrated producers. A nonintegrated producer buys sheet steel to produce the subject product, whereas a partially integrated producer buys slabs, heats them, and then rolls the slabs into sheet. An integrated producer melts steel to make the slabs. * * *

There were approximately 24 U.S. producers of light-walled rectangular pipes and tubes during the period covered by the investigation. The names of the producers, the locations of their production facilities, their shares of 1986 domestic shipments, by quantity, and positions with regard to the petition, as compiled from questionnaire responses, are shown in table 3. Twenty-three producers, accounting for approximately 95 percent of U.S. producers' domestic shipments, provided data in response to the Commission's questionnaire and to telephone requests for data by Commission staff. 1/

Hughes Steel & Tube, which began production of light-walled rectangular pipes and tubes in 1983, filed for reorganization under Chapter 11 on January 23, 1987, and stopped production of the product on March 17, 1987, when it converted to a Chapter 7 (complete bankruptcy and liquidation). 2/ On July 17, 1986, LTV Corp. and most of its active subsidiaries filed separate petitions for reorganization under Chapter 11. LTV Tubular Products in Cleveland, OH, is still producing light-walled rectangular pipes and tubes. * * *. In September 1985, Hannibal Industries, Inc., purchased the assets of Kaiser Steel Tubing, Inc., of Los Angeles, CA. California Steel & Tube Co. became a wholly owned subsidiary of Ferro Union, Inc., on December 31, 1985. * * *.

One U.S. producer of light-walled rectangular pipes and tubes is a wholly owned subsidiary of a Japanese company. In February 1987, Kawascho Corp., which is controlled by Kawasaki Steel Corp., announced its ownership of Bernard Epps & Co., Los Angeles, CA. 3/ Two U.S. producers of the product are owned in part by Japanese companies. * * *. 4/

U.S. producers were asked in the questionnaire if they were aware of any firms that have ceased domestic production of light-walled rectangular pipes and tubes in the last 5 years. Commission staff subsequently contacted these producers by telephone to discern if they had any knowledge of the dispersal of the facilities of the firms that had ceased production. * * * noted that Hughes Steel was in Chapter 11. * * *.

* * * * *
* * * * *

1/ Commission staff became aware late in the investigation of 4 firms that produce light-walled rectangular pipes and tubes.

2/ * * *.

3/ Tsukasa Furukawa, "Kawascho Spends \$1.7M for Rest of Bernard Epps," American Metal Market, Apr. 10, 1987, p. 4.

4/ * * *.

Table 3.—Light-walled rectangular pipes and tubes: U.S. producers, plant locations, their shares of domestic shipments, and positions on the petition, by firms, 1986

Firm	Location 1/	Share of ship-	Comments	Position on the
		ments—quantity 1986 —Percent—		
CPTI member firms:				
Bull Moose Tube Co.	St. Louis, MO	***	***	***
Hannibal Industries, Inc.	Los Angeles, CA	***	***	***
Hughes Steel & Tube	City of Commerce, CA	***	***	***
Maruichi American Corp.	Santa Fe Springs, CA	***	***	***
Western Tube & Conduit	Long Beach, CA	***	***	***
Non-CPTI firms:				
American Tube	Phoenix, AZ	***	***	***
Armco Inc.	Middletown, OH	***	***	***
Bayamon Steel Processors, Inc.	Bayamon, PR	***	***	***
Berger Industries	Maspeth, NY	***	***	***
Bernard Epps & Co.	Los Angeles, CA	***	***	***
California Steel & Tube Co.	City of Industry, CA	***	***	***
Cyclops Corp., Textube Division	Houston, TX	***	***	***
Hanna Steel Corp.	Fairfield, AL	***	***	***
Harris Tube	Los Angeles, CA	***	***	***
J. M. Tull Ind., Inc.	Norcross, GA	***	***	***
Lock Joint Tube Co., Inc.	South Bend, IN	***	***	***
LTV Steel Corp.—LTV Tubular Products	Cleveland, OH	***	***	***
Miami Industries	Piqua, OH	***	***	***
Parthenon Metal Works	Lavergne, TN	***	***	***
Pittsburgh International	Fairbury, IL	***	***	***
Searing Industries	Los Angeles, CA	***	***	***
Southwestern Pipe, Inc.	Houston, TX	***	***	***
Valmont Industries	Valley, NB	***	***	***

1/ Corporate headquarters.

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

* * * * *

* * * * *

* * * * *

* * * * *

* * * * *

* * * * *

* * * * *

The domestic producers were contacted by telephone and asked if they knew of any companies that were currently not producing light-walled rectangular pipes and tubes but had the ability to do so within 2 weeks. They were also asked what changes would be necessary to switch production from standard pipe to light-walled rectangular pipes and tubes.

With the exception of companies that had previously produced light-walled rectangular pipes and tubes, such as the Tex-Tube division of Cyclops Corp. and Vanex Tube, no company that did not have the proper equipment on hand could begin production of light-walled rectangular pipes and tubes within 2 weeks. There are several reasons for this. First, switching production from any round pipes and tubes to rectangular pipes and tubes requires an additional set of sizing rolls (see manufacturing process section of the report). Depending on the size, these rolls, which can cost between \$20,000 and \$40,000, are custom made to order and can take from 6 to 18 weeks to be made and delivered to a pipe producer. 1/ Another problem that would preclude switching production to light-walled rectangular pipes and tubes within 2 weeks is obtaining new steel. Although there is some overlap in the type of sheet steel used to produce standard pipe and light-walled rectangular pipes and tubes, the production of light-walled rectangular pipes and tubes generally requires thinner gauge steel. A new order for this type of steel could take as long as 90 days to fill. 2/ If the sheet steel is of a low quality, commodity-grade type that is commonly stocked by distributors, however, an order can be filled in a few days. 3/ Finally, a pipe and tube producer must conduct an in-depth market analysis prior to switching production to light-walled rectangular pipes and tubes, which could take several months. This market analysis is necessary to determine which sizes of light-walled rectangular pipes and tubes exhibit the greatest demand so that the proper sizing rolls can be ordered. 4/

1/ On the basis of telephone conversations with * * *.

2/ On the basis of a telephone conversation with * * *.

3/ On the basis of a telephone conversation with * * *.

4/ On the basis of telephone conversations with * * *.

A U.S. producer stated that there is a tightness of supply for sheet steel on the west coast because of VRA restrictions and because there are only three domestic producers of sheet steel located in the area: U.S. Steel-Pohang, CSI, and Pinole Point. At the hearing, petitioners were asked to comment on the effect of the steel VRAs on raw material costs and supplies. Petitioners responded that prices of raw steel coil have risen approximately 20 percent since 1985, in part because of the VRAs and a strike at U.S. Steel. U.S. Steel is one of three domestic suppliers of steel coil to the west coast. Petitioners stated that there was no shortage in supply of steel slab although they admitted they are now purchasing more U.S.-produced slab. ^{1/} In an article in American Metal Market (May 29, 1987), it was reported that "California Steel Industries, stymied in its attempt to acquire additional foreign slab, has purchased over 350,000 tons of domestic slab for delivery this year." California Steel also decided to discontinue plate output in response to tight slab conditions.

U.S. Importers

Questionnaires were sent to 16 U.S. firms, which, according to the U.S. Customs Service's net import file, imported virtually all of the light-walled rectangular pipes and tubes from Taiwan during the period covered by the investigation. Fifteen of these firms, accounting for 80 percent (by quantity) of 1986 imports of light-walled rectangular pipes and tubes from Taiwan, as reported in official import statistics, responded to the Commission's questionnaire. Reported imports into the West Coast region accounted for 89 percent of imports of light-walled rectangular pipes and tubes from Taiwan in 1984 and 1986 and 78 percent of imports in January-March 1987. There were no reported imports from Taiwan into the West Coast region in 1985. An additional firm responded, indicating that it does not import the subject product from Taiwan.

All firms, except * * *, reported imports from Taiwan into the West Coast region of the United States and all firms reported that such imports were shipped within the West Coast region. One firm, * * *, reported imports from Taiwan into both the West Coast and non-West Coast regions. The majority of imports from other countries reported by U.S. importers were from * * *, with some reporting imports of the product from * * *. * * * of the importers are owned by, or affiliated with, foreign manufacturers and/or exporters; * * * of the * * * are owned by * * * firms.

U.S. importers that responded to the questionnaire and their shares of reported imports from Taiwan in 1986, are presented in the following tabulation:

^{1/} Transcript of the hearing, pp. 69-72, 75-76, and 81-82.

Table 4.—Light-walled rectangular pipes and tubes: Apparent U.S. consumption, by regions, 1984-86, January-March 1986, and January-March 1987

Item	1984	1985	1986	January-March—	
				1986	1987
Quantity (tons)					
Total apparent U.S. consumption ^{1/}	294,663	283,664	297,311	82,979	75,684
Apparent consumption in the West Coast region ^{1/}	119,100	124,361	116,378	31,609	29,195
Domestic shipments—					
Produced in the West Coast region.....	69,136	69,792	***	***	***
Produced outside the West Coast region.....	0	0	***	***	***
Imports—					
From Taiwan.....	7,730	268	7,180	2	4,457
From all other sources....	42,234	54,301	22,528	9,433	3,737
Total imports.....	49,964	54,569	29,708	9,435	8,194
Apparent consumption outside the West Coast region ^{1/} ...	175,563	159,303	180,933	51,370	46,489
Domestic shipments—					
Produced in the West Coast region.....	0	0	0	0	0
Produced outside the West Coast region.....	121,100	130,396	***	***	***
Imports—					
From Taiwan.....	2,024	137	2,795	0	965
From all other sources....	52,439	28,770	37,102	12,710	6,001
Total imports.....	54,463	28,907	39,897	12,710	6,966
Value (1,000 dollars)					
Total apparent U.S. consumption ^{1/}	164,407	150,119	151,566	41,903	40,413
Apparent consumption in the West Coast region ^{1/}	62,652	61,910	52,393	14,297	14,686
Domestic shipments—					
Produced in the West Coast region.....	40,337	37,625	***	***	***
Produced outside the West Coast region.....	0	0	***	***	***
Imports— ^{2/}					
From Taiwan.....	3,040	149	3,078	4	1,812
From all other sources....	19,275	24,136	10,563	4,184	1,769
Total imports.....	22,315	24,285	13,641	4,188	3,581
Apparent consumption outside the West Coast region ^{1/} ...	101,755	88,209	99,173	27,606	25,727
Domestic shipments—					
Produced in the West Coast region.....	0	0	0	0	0
Produced outside the West Coast region.....	76,812	73,920	***	***	***
Imports— ^{2/}					
From Taiwan.....	917	66	1,130	0	396
From all other sources....	24,036	14,223	16,702	5,718	2,663
Total imports.....	24,943	14,289	17,832	5,718	3,059

^{1/} Apparent consumption is slightly understated for all periods because of less than full coverage on domestic shipments of light-walled rectangular pipes and tubes. Data for the period of investigation were provided by 23 producers accounting for approximately 95 percent of U.S. producers' domestic shipments.

^{2/} C.i.f., duty-paid basis.

Source: U.S. producers' shipments, compiled from data submitted in response to questionnaires of the U.S. International Trade Commission; imports, compiled from official statistics of the U.S. Department of Commerce.

Apparent consumption in the West Coast region increased by 4.4 percent from 1984 to 1985 and decreased by 6.4 percent in 1986. Consumption of light-walled rectangular pipes and tubes in the West Coast region was 7.6 percent lower in January-March 1987 than such consumption during the corresponding period of 1986. Such consumption was supplied entirely by producers within the region and by imports until * * *. ^{1/}

Outside the West Coast region, apparent consumption of light-walled rectangular pipes and tubes decreased by 9.3 percent from 1984 to 1985 and then increased by 13.6 percent from 1985 to 1986. Such consumption outside the West Coast region was 9.5 percent lower in January-March 1987 than such consumption during the corresponding period of 1986.

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

U.S. production, capacity, and capacity utilization

As shown in table 5, production of light-walled rectangular pipes and tubes in the West Coast region increased by 6.6 percent during 1984-86. Such production was 5.5 percent higher in January-March 1987 than production in January-March 1986. Capacity in the West Coast region increased by 2.3 percent from 1984 to 1985 and then decreased by 9.6 percent from 1985 to 1986. Capacity decreased by 5.6 percent in January-March 1987 compared with capacity in the corresponding period of 1986. Capacity utilization in the West Coast region decreased from 49.6 percent in 1984 to 44.5 percent in 1985 and then increased to 51.6 percent in 1986. Capacity utilization increased to 57.3 percent in January-March 1987. Appendix D provides trade data for the West Coast region. Production, capacity, and capacity utilization for individual producers in the West Coast region are shown in table D-1.

Production outside the West Coast region increased by 0.9 percent from 1984 to 1985, and increased again by 5.9 percent from 1985 to 1986. Production decreased by 1.6 percent in January-March 1987 compared with production in January-March 1986. During 1984-86, capacity outside the West Coast region increased steadily, with capacity utilization increasing from 58.4 percent in 1984 to 62.6 percent in 1986. During January-March 1987, capacity utilization was 64.3 percent compared with 66.8 percent during the corresponding period of 1986.

Total U.S. production of light-walled rectangular pipes and tubes increased from 185,141 tons in 1984 to 197,619 tons in 1986, or by 6.7 percent. U.S. production of the subject merchandise increased by 1.1 percent in January-March 1987 compared with such production in January-March 1986. Reported U.S. capacity to produce light-walled rectangular pipes and tubes increased by 3.8 percent from 1984 to 1985 and then decreased by 3.4 percent from 1985 to 1986. Such capacity was 0.1 percent higher in January-March 1987 than capacity in

^{1/} Unless otherwise noted, the term "ton" refers to a short ton (2,000 pounds).

Table 5.--Light-walled rectangular pipes and tubes: U.S. production, capacity, and capacity utilization, 1/ by regions, 1984-86, January-March 1986, and January-March 1987

Item	1984	1985	1986	January-March--	
				1986	1987
Within West Coast region:					
Production.....tons..	69,842	70,135	74,434	20,184	21,284
Capacity.....do....	140,960	144,250	130,425	34,945	32,985
Capacity utilization					
percent..	49.6	44.5	51.6	52.6	57.3
Outside West Coast region:					
Production.....tons..	115,299	116,287	123,185	33,457	32,933
Capacity.....do....	180,631	189,501	191,931	48,056	50,081
Capacity utilization					
percent..	58.4	58.5	62.6	66.8	64.3
Total U.S.:					
Production.....tons..	185,141	186,422	197,619	53,641	54,217
Capacity.....do....	321,591	333,751	322,356	83,001	83,066
Capacity utilization					
percent..	54.5	52.5	58.2	60.9	61.5

1/ Capacity utilization rates were calculated by using data from firms that provided information on both production and capacity. * * *

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

the corresponding period of 1986. Capacity utilization decreased from 54.5 percent in 1984 to 52.5 percent in 1985 and then increased to 58.2 percent in 1986. Capacity utilization was 61.5 percent in January-March 1987, a slight increase from 60.9 percent in the corresponding period of 1986.

In its questionnaire, the Commission requested the producers to provide detailed information concerning their capacity to produce welded carbon steel pipes and tubes. This information includes the capacity to manufacture products, other than light-walled rectangular pipes and tubes, on their light-walled rectangular pipe mills, and information concerning the duration and nature of equipment that has been idled.

U.S. producers of light-walled rectangular pipes and tubes devoted an average of 35 percent of the total productive capacity of their light-walled rectangular pipe and tube mills to producing light-walled rectangular pipes and tubes in 1984 and 1985, and 34 percent in 1986. Four producers reported having idled production capacity between November 1985 and February 1987.

* * * * *

U.S. producers' domestic shipments

U.S. producers' domestic shipments of light-walled rectangular pipes and tubes rose from 190,236 tons in 1984 to 200,188 tons in 1985, or by 5.2 percent. In 1986, domestic shipments increased an additional 13.9 percent to 227,706 tons. During January-March 1987, shipments of light-walled rectangular pipes and tubes declined by 0.5 percent compared with those in the corresponding period of 1986 (table 6). In 1986 *** percent of total domestic shipments of light-walled rectangular pipes and tubes were produced and shipped to destinations within the West Coast region.

Domestic shipments of light-walled rectangular pipes and tubes produced in the West Coast region increased by *** percent during 1984-86. These shipments were 5.4 percent lower in January-March 1987 than such shipments during the corresponding period of 1986. All of the shipments by West Coast producers remained within the region. Domestic shipments of light-walled rectangular pipes and tubes by individual producers in the West Coast region are shown in table D-2.

Domestic shipments of light-walled rectangular pipes and tubes produced outside the West Coast region increased by *** percent during 1984-86. Such shipments were 2.2 percent higher in January-March 1987 than they were during the corresponding period of 1986. All of the shipments by producers outside the West Coast region remained outside that region in 1984-85, and such producers ***.

Two domestic producers of light-walled rectangular pipes and tubes reported intracompany transfers of their production. The intracompany transfers of *** accounted for *** and *** percent of their companies' 1986 production of light-walled rectangular pipes and tubes, respectively.

U.S. exports

*** was the only U.S. producer of light-walled rectangular pipes and tubes that reported exports during the period covered by the investigation. The firm's exports were to ***, and accounted for less than *** percent of U.S. producers' total shipments in each reporting period, as shown in the following tabulation:

<u>Period</u>	<u>Quantity (tons)</u>	<u>Value (1,000 dollars)</u>	<u>Unit value (per ton)</u>
1984.....	***	***	***
1985.....	***	***	***
1986.....	***	***	***
January-March--			
1986.....	***	***	***
1987.....	***	***	***

Table 6.--Light-walled rectangular pipes and tubes: U.S. producers' domestic shipments produced within and outside the West Coast region, by destinations, 1984-86, January-March 1986, and January-March 1987

Item	1984	1985	1986	January-March--	
				1986	1987
Quantity (tons)					
Total domestic shipments.....	190,236	200,188	227,706	60,834	60,524
Produced in the West Coast region and shipped to destinations--					
Within the region.....	69,136	69,792	***	***	***
Outside the region.....	0	0	0	0	0
Total.....	69,136	69,792	***	***	***
Produced outside the West Coast region and shipped to destinations--					
Within the region.....	0	0	***	***	***
Outside the region.....	121,100	130,396	***	***	***
Total.....	121,100	130,396	***	***	***
Value (1,000 dollars) 1/					
Total domestic shipments.....	117,149	111,545	120,093	31,997	33,773
Produced in the West Coast region and shipped to destinations--					
Within the region.....	40,337	37,625	***	***	***
Outside the region.....	0	0	0	0	0
Total.....	40,337	37,625	***	***	***
Produced outside the West Coast region and shipped to destinations--					
Within the region.....	0	0	***	***	***
Outside the region.....	76,812	73,920	***	***	***
Total.....	76,812	73,920	***	***	***

1/ The value of domestic shipments is understated for all periods because *** only reported quantities shipped, ***, and the questionnaire did not request the value of intracompany shipments, because of possible differences among firms in the valuation of such shipments.

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

U.S. producers' inventories

U.S. producers' yearend inventories of light-walled rectangular pipes and tubes decreased by 4.1 percent during 1984-86. During the period covered by the investigation, these inventories varied between 5.3 and 6.4 percent of annual shipments, as shown in the following tabulation:

	<u>Inventories</u> (tons)	<u>Ratio of inventories</u> <u>to shipments</u> ^{1/} (percent)
As of Dec. 31--		
1984.....	11,698	6.4
1985.....	11,503	6.4
1986.....	11,219	6.0
As of March 31--		
1986.....	12,626	^{2/} 6.3
1987.....	10,778	^{2/} 5.3

^{1/} Ratios were calculated using data from firms that provided information on both inventories and shipments.

^{2/} Calculated on the basis of annualized shipments.

U.S. producers of light-walled rectangular pipes and tubes in the West Coast region reported the following end-of-period inventory data:

	<u>Inventories</u> (tons)	<u>Ratio of inventories</u> <u>to shipments</u> ^{1/} (percent)
As of Dec. 31--		
1984.....	8,709	12.6
1985.....	7,152	10.9
1986.....	8,058	***
As of March 31--		
1986.....	9,377	^{2/} ***
1987.....	7,781	^{2/} ***

^{1/} Ratios were calculated using data from firms that provided information on both inventories and shipments.

^{2/} Calculated on the basis of annualized shipments.

Inventory data for individual producers in the West Coast region are shown in table D-3.

U.S. producers' imports

Three U.S. producers of light-walled rectangular pipes and tubes reported purchases of imports of the subject merchandise, all from Japan, during the period covered by the investigation. * * *

U.S. employment and wages

The number of workers ^{1/} employed in the production of light-walled rectangular pipes and tubes decreased from 374 in 1984 to 305 in 1985, representing a decrease of 18.5 percent (table 7). The number of workers then increased to 416 in 1986, or by 36.4 percent. Hours worked by such workers decreased by 9.0 percent from 1984 to 1985 and then increased by 26.0 percent from 1985 to 1986. Labor productivity, as measured by tons produced per hour, increased by 20 percent between 1984 and 1985 and then decreased by 15 percent during 1985-86. In January-March 1987, labor productivity decreased by 6 percent compared with productivity in January-March 1986. The hourly wages earned by these workers increased by 3 percent during 1984-85 and then decreased by 7 percent during 1985-86. Hourly wages in January-March 1987 were 6 percent higher than those in the corresponding period of 1986. U.S. producers' unit labor costs fell from \$72 per ton in 1984 to \$57 per ton in 1985, representing a 22-percent decline. Unit labor costs increased by 13 percent in 1986, to \$64 per ton. In January-March 1987, unit labor costs rose to \$69 per ton, a 13-percent increase when compared with the corresponding period in 1986.

Producers of light-walled rectangular pipes and tubes in the West Coast region reported the following employment data:

	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>January-March</u>	
				<u>1986</u>	<u>1987</u>
Number of production and related workers.....	60	64	96	96	114
Hours worked (1,000 hours)..	121	130	213	53	58
Wages paid (1,000 dollars)..	1,601	1,152	1,843	424	507
Total compensation (1,000 dollars)..	2,178	1,481	2,465	574	691

Selected employment data for individual producers in the West Coast region are shown in table D-4.

In its questionnaire, the Commission requested U.S. producers to provide detailed information concerning reductions in the number of production and related workers producing light-walled rectangular pipes and tubes occurring between January 1984 and March 1987. Five domestic producers responded.

* * * * *

^{1/} * * *, accounting for 40 percent of reported domestic shipments in 1986, could not provide employment data for the production of light-walled rectangular pipes and tubes.

Table 7.--Average number of production and related workers producing light-walled rectangular pipes and tubes, hours worked, 1/ wages and total compensation 2/ paid to such employees, and labor productivity, hourly compensation, and unit labor production costs, 1984-86, January-March 1986, and January-March 1987 3/

Item	1984	1985	1986	January-March--	
				1986	1987
Production and related workers:					
Number.....	374	305	416	428	462
Percentage change.....	-	-18	+36	-	+8
Hours worked by production and related workers:					
Number.....1,000 hours..	655	596	751	202	220
Percentage change.....	-	-9	+26	-	+9
Wages paid to production and related workers:					
Value.....1,000 dollars..	7,008	6,574	7,673	1,953	2,253
Percentage change.....	-	-6	+17	-	+15
Total compensation paid to production and related workers:					
Value.....1,000 dollars..	9,731	8,532	10,305	2,684	3,106
Percentage change.....	-	-12	+21	-	+16
Labor productivity: <u>4/</u>					
Quantity...tons per hour..	0.198	0.238	0.204	0.206	0.193
Percentage change.....	-	+20	-15	-	-6
Hourly compensation: <u>5/</u>					
Value.....	\$10.70	\$11.03	\$10.22	\$9.67	\$10.24
Percentage change.....	-	+3	-7	-	+6
Unit labor costs: <u>6/</u>					
Value.....per ton..	\$72	\$57	\$64	\$61	\$69
Percentage change.....	-	-22	+13	-	+13

1/ Includes hours worked plus hours of paid leave time.

2/ Includes wages and contributions to Social Security and other employee benefits.

3/ Firms providing employment data accounted for 60 percent of reported domestic shipments of light-walled rectangular pipes and tubes in 1986.

4/ Calculated using data from firms that provided information on both production and hours worked.

5/ On the basis of wages paid excluding fringe benefits. Calculated using data from firms that provided information on both wages paid and hours worked.

6/ On the basis of total compensation paid. Calculated using data from firms that provided information on both total compensation paid and production.

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

The following tabulation shows the union affiliation of various companies:

<u>Company</u>	<u>Union</u>
Berger Industries.....	United Auto Workers
Bull Moose.....	Gerald, MO, Sheet Metal Workers; Trenton, GA & Chicago Heights, IL, United Steel Workers
LTV Steel Corp.....	United Steel Workers
Pittsburgh International.....	Metal Processors Union, Local 16, AFL-CIO
California Steel & Tube.....	Teamsters Local No. 986
Armco, Inc.....	Armco Employees Independent Federation
Miami Industries.....	United Steelworkers of America
Lock Joint Tube.....	International Electrical Workers Local 911

Financial experience of U.S. producers

Operations on welded carbon steel pipes and tubes. --1/ Fourteen U.S. producers supplied usable income-and-loss data for all welded carbon steel pipe and tube operations of their establishments within which light-walled rectangular pipes and tubes are produced. 2/ Thirteen producers * * * accounted for 74 percent of reported domestic shipments of the subject merchandise in 1986. Several firms, * * *, could not provide the Commission with reliable income-and-loss data on their light-walled rectangular product line. In prior investigations of light-walled rectangular pipes and tubes, the Commission utilized establishment financial data (all welded carbon steel pipes and tubes) in its determination. 3/

Aggregate net sales of the 14 companies were virtually unchanged, from \$369.2 million in 1984 to \$369.0 million in 1985 (table 8). Sales for 1986 were \$370.1 million. 4/ The companies reported operating income of \$23.2 million in 1984, \$22.2 million in 1985, and \$21.3 million in 1986. Operating income margins, as a percent of sales, were 6.3, 6.0, and 5.7 during 1984,

1/ Income-and-loss data were compiled from 13 producers' responses in the current investigation and 1 producer's response in the preliminary investigation.

2/ For purposes of this investigation, "usable data" will be defined as data provided by producers whose sales of light-walled rectangular pipes and tubes averaged 10 percent or more of total establishment sales during 1984-86 (table 8). Additional data for producers whose sales over the 1984-86 period averaged 35 percent or more of total establishment sales are presented in table 9.

3/ Investigation No. 731-TA-211 (Final), USITC Publication 1799, January 1986, and investigation No. 731-TA-349 (Preliminary), USITC Publication 1906, November 1986.

4/ There have been changes in the corporate structure of several companies; thus, year to year comparisons of the aggregate financial data may be distorted.

Table 8.--Income-and-loss experience of 14 U.S. producers ^{1/} on their operations producing all welded carbon steel pipes and tubes in their establishments within which light-walled rectangular pipes and tubes are produced, accounting years 1984-86, and interim periods ended Mar. 31, 1986, and Mar. 31, 1987

Item	1984	1985	1986 2/	Interim period ended Mar. 31--	
				1986	1987
Net sales.....1,000 dollars..	369,156	369,038	370,598	83,260	83,102
Cost of goods sold.....do....	320,778	321,821	324,684	71,152	73,349
Gross profit.....do....	48,378	47,217	45,914	12,108	9,753
General, selling, and administrative expenses 1,000 dollars..	25,182	15,042	24,617	5,836	6,165
Operating income 1,000 dollars..	23,196	22,175	21,297	6,272	3,588
Interest expense.....do....	5,801	4,793	4,293	1,487	1,017
Other income or (expense) 1,000 dollars..	919	267	296	25	133
Net income (loss) before income taxes..1,000 dollars..	18,314	17,649	17,300	4,810	2,704
Depreciation and amortization expense.....1,000 dollars..	6,035	6,678	7,172	1,707	1,565
Cash flow from operations 1,000 dollars..	24,349	24,327	24,472	6,517	4,269
Ratio to net sales of:					
Cost of goods sold..percent..	86.9	87.2	87.6	85.5	88.3
Gross profit.....do....	13.1	12.8	12.4	14.5	11.7
General, selling, and administrative expenses percent..	6.8	6.8	6.6	7.0	7.4
Operating income.....do....	6.3	6.0	5.7	7.5	4.3
Net income before income taxes.....do....	5.0	4.8	4.7	5.8	3.3
Number of firms reporting--					
Operating losses.....	2	2	1	1	2
Net losses.....	4	5	3	2	4
Data.....	14	14	13	12	12

^{1/} These 14 producers' light-walled rectangular pipe and tube sales account for 1 percent or more of their total establishment sales during 1984-86.

^{2/} * * *.

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

1985, and 1986, respectively. Operating losses were sustained by two companies in 1984 and 1985 and by one company in 1986. Sales for interim 1987 were \$83.1 million, a slight decrease of 0.2 percent from 1986 interim sales of \$83.3 million. Operating income dropped from \$6.3 million in interim 1986 to \$3.6 million in interim 1987. Operating income margins, as a percent of sales, were 7.5 and 4.3 in interim 1986 and interim 1987, respectively. Two companies reported operating losses in interim 1987. One of the companies reported losses in interim 1986.

Four firms' sales of light-walled rectangular pipes and tubes averaged at least 35 percent or more of their total welded carbon steel pipe and tube sales. Selected data for these firms are shown in table 9. 1/ * * * was the only firm whose light-walled rectangular pipe and tube sales constituted a major portion (* * *) of its welded carbon steel pipe and tube sales. * * * was also the only company of the four that * * *. 2/ * * *.

Net sales for the four firms increased by 9.2 percent from \$119.7 million in 1984 to \$130.7 million in 1985. Sales for 1986 were \$118.4 million. Operating income was \$2.4 million in 1984, \$4.5 million in 1985, and \$3.2 million in 1986. Operating income margins, as a percent of sales, were 2.0, 3.4, and 2.7 during 1984, 1985, and 1986, respectively. Interim 1987 sales were \$8.2 million compared with \$9.0 million in the 1986 interim period. Operating income was \$319,000 in interim 1986, but a loss of \$740,000 was incurred in interim 1987. Operating income (loss) margins were 3.6 percent in interim 1986 and (9.1) percent in interim 1987.

The operating results of seven West Coast region producers are presented in table 10. 3/ Sales decreased by 4.3 percent, from \$120.2 million in 1984 to \$115.0 million in 1985. Sales were \$128.0 million in 1986. Operating income was \$6.9 million in 1984, \$3.9 million in 1985, and \$5.5 million in 1986. Operating income margins, as a percent of sales, were 5.7, 3.4, and 4.3, during 1984, 1985, and 1986, respectively. Interim 1987 sales were \$34.0 million compared with \$31.6 million in the 1986 interim period. Operating income dropped from \$1.9 million in interim 1986 to \$712,000 in interim 1987. Operating income margins were 5.9 percent in interim 1986 and 2.1 percent in interim 1987.

Operations on light-walled rectangular pipes and tubes.--Only 3 of the 14 firms furnished usable income-and-loss data relative to their operations producing light-walled rectangular pipes and tubes (table 11). 4/ The data show a slight increase in net sales from 1984 to 1985, but losses of \$480,000 were sustained in 1985 compared with a profit of \$487,000 in 1984. Sales in 1986 were \$* * * and operating income was \$* * *. Operating income (loss) margins, as a percent of sales, were 3.5 in 1984, (3.4) in 1985, and * * * in 1986. Interim 1987 sales were \$* * * compared with \$* * * in the 1986 interim period. Operating income was \$* * * in interim 1986 and \$* * * in interim 1987. Operating income margins were * * * percent in interim 1986 and * * *

1/ * * *.

2/ * * *.

3/ * * *.

4/ The remaining firms generally had difficulty making valid allocations of costs to light-walled rectangular pipe and tube operations.

Table 9.--Income-and-loss experience of 4 U.S. producers on their operations producing all welded carbon steel pipes and tubes in establishments within which light-walled rectangular pipes and tubes are produced, accounting years 1984-86, and interim periods ended Mar. 31, 1986, and Mar. 31, 1987 ^{1/}

Item	1984	1985	1986	Interim period ended Mar. 31--	
				1986	1987
Net sales:					
***.....1,000 dollars..	***	***	***	***	***
***.....do.....	***	***	<u>2/</u>	<u>2/</u>	<u>2/</u>
***.....do.....	***	***	***	***	***
Subtotal, West Coast region.....do.....	***	***	***	***	***
***.....do.....	***	***	***	<u>2/</u>	<u>2/</u>
Total.....do.....	119,670	130,672	118,443	8,964	8,152
Operating income (loss):					
***.....1,000 dollars..	***	***	***	***	***
***.....do.....	***	***	<u>2/</u>	<u>2/</u>	<u>2/</u>
***.....do.....	***	***	***	***	***
Subtotal, West Coast region.....do.....	***	***	***	***	***
***.....do.....	***	***	***	<u>2/</u>	<u>2/</u>
Total.....do.....	2,383	4,499	3,172	319	(740)
Ratio of operating income (loss) to net sales:					
***.....percent..	***	***	***	<u>3/</u>	<u>4/</u> ***
***.....do.....	***	***	<u>2/</u>	<u>2/</u>	<u>2/</u>
***.....do.....	***	***	***	***	***
Subtotal, West Coast region.....do.....	***	***	<u>3/</u>	***	***
***.....do.....	***	***	***	<u>2/</u>	<u>2/</u>
Weighted-average.....do.....	2.0	3.4	2.7	3.6	(9.1)

^{1/} Sales of light-walled rectangular pipes and tubes accounted for at least 35 percent of total establishment sales * * *.

^{2/} Not available.

^{3/} Less than 0.05 percent.

^{4/} * * *.

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

Table 10.--Income-and-loss experience of 7 U.S. West Coast region producers on their operations producing all welded carbon steel pipes and tubes in establishments within which light-walled rectangular pipes and tubes are produced, by companies, accounting years 1984-86, and interim periods ended Mar. 31, 1986, and Mar. 31, 1987 ^{1/}

Item	1984	1985	1986	Interim period ended Mar. 31--	
				1986	1987
Net sales:					
***.....1,000 dollars..	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	2/	2/	2/
*** 3/.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
Total.....do.....	120,191	115,036	128,028	31,611	33,970
Operating income (loss):					
***.....1,000 dollars..	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	2/	2/	2/
*** 3/.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
Total.....do.....	6,905	3,903	5,485	1,869	712
Ratio of operating income (loss) to net sales:					
***.....percent..	***	***	***	4/	5/ ***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	2/	2/	2/
*** 3/.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
Weighted-average.....do.....	5.7	3.4	4.3	5.9	2.1

^{1/} Questionnaire responses from prior investigations were used to compile the data for 1984-85.

^{2/} Not available.

^{3/} Data for 1984 and 1985 are from * * *.

^{4/} Less than .005 percent.

^{5/} * * *.

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

Table 11.--Income-and-loss experience of 3 U.S. producers on their operations producing light-walled rectangular pipes and tubes, accounting years 1984-86, and interim periods ended Mar. 31, 1986, and Mar. 31, 1987

Item	1984	1985	1986	Interim period ended Mar. 31--	
				1986	1987
Net sales:					
***.....1,000 dollars..	***	***	***	***	***
***.....do....	***	***	***	***	***
***.....do....	***	***	1/	1/	1/
Total.....do....	13,733	14,063	***	***	***
Operating income (loss):					
***.....1,000 dollars..	***	***	***	***	***
***.....do....	***	***	***	***	***
***.....do....	***	***	1/	1/	1/
Total.....do....	487	(480)	***	***	***
Ratio of operating income (loss) to net sales:					
***.....percent..	***	***	***	***	***
***.....do....	***	***	***	***	***
***.....do....	***	***	1/	1/	1/
Weighted-average....do....	3.5	(3.4)	***	***	***

1/ Not available.

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

percent in interim 1987. Because the three firms capable of providing product-line data represent a small portion of the industry, the financial experience of these firms may not accurately reflect that of the industry as a whole.

Petitioners maintained in their prehearing brief and at the hearing that the cost of steel (which constitutes about two-thirds of the cost of producing the subject product) has risen by about 20 percent since the beginning of 1986. 1/ The petitioners provided sample purchase invoices and sales acknowledgements indicating an increase of * * * percent in the price of steel coil purchased by Hannibal Industries from * * * of * * * from November 1985 to June 1987, and an increase of * * * percent in the price of steel band purchased by Hannibal from * * * from February 1986 to May 1987. 2/ Telephone calls by the staff to some U.S. producers revealed smaller increases, or no change, in the cost of their raw materials. * * * indicated that steel prices were up about 5 percent, and both domestic and foreign sources are used. Major suppliers are * * *. * * * stated that prices were essentially unchanged and that imported steel from * * * is their primary source. * * * could not supply the annual rate of increase but she said they purchase primarily from * * *. * * *. Officials of * * * did not respond to staff inquiries. 3/

1/ Petitioners' prehearing brief, p. 7. At the hearing, Jerry Tippet (Hannibal Industries) and Don Finn (Western Tube and Conduit) testified that their steel costs have risen 20 percent. Transcript, pp. 19 and 23.

2/ Petitioners' posthearing brief, pp. 2-3 of answers to questions, and Exhibit 1.

3/ Telephone conversations with * * *.

Investment in productive facilities.--Eight firms supplied data for 1984-86 concerning their investment in productive facilities employed in the production of all welded carbon steel pipes and tubes in establishments in which light-walled rectangular pipes and tubes were produced. Seven firms provided data for the two interim periods. One firm furnished such data relating to the production of light-walled rectangular pipes and tubes. Reported investment in property, plant, and equipment is shown in the following tabulation (in thousands of dollars):

Period	All welded pipes and tubes		Light-walled rectangular pipes and tubes	
	Original cost	Book value	Original cost	Book value
As of Dec. 31--				
1984.....	74,835	37,259	***	***
1985.....	83,516	41,591	***	***
1986.....	91,360	43,119	***	***
As of Mar. 31--				
1986.....	64,432	26,457	-	-
1987.....	69,522	29,502	-	-

The aggregate investment in productive facilities for all welded carbon steel pipes and tubes, valued at cost, increased from \$74.8 million in 1984 to \$91.4 million in 1986. The investment as of March 31, 1987, was \$69.5 million, compared with \$64.4 million as of March 31, 1986. The book value as of March 31, 1987, was \$29.5 million. The investment for light-walled rectangular pipes and tubes, valued at cost, decreased from \$* * * in 1984 to \$* * * in 1986. The book value was \$* * * as of December 31, 1986.

Capital expenditures and research and development expenses.--Six firms furnished data relative to their capital expenditures for land, buildings, and machinery and equipment used in the manufacture of all welded carbon steel pipes and tubes in establishments in which light-walled rectangular pipes and tubes were produced. Four firms supplied interim period data. None of the firms furnished such data for light-walled rectangular pipes and tubes. Two firms reported research and development expenses relating to the operations of light-walled rectangular pipes and tubes. The reported data are presented in the following tabulation (in thousands of dollars):

Period	Capital expenditures for all welded pipes and tubes	Research and development expenses related to light-walled rectangular pipes and tubes
1984.....	5,318	***
1985.....	6,072	***
1986.....	7,055	***
January-March:		
1986.....	169	***
1987.....	134	***

Capital expenditures relating to all welded carbon steel pipes and tubes increased from \$5.3 million in 1984 to \$7.1 million in 1986. Such expenditures were \$134,000 in January-March 1987, compared with \$169,000 in January-March 1986. Research and development expenses related to light-walled rectangular pipes and tubes were \$* * * in 1984, increased to \$* * * in 1985, and then fell to \$* * * in 1986. Such expenses were \$* * * for each of the interim periods.

Capital and investment.--The Commission requested U.S. producers to describe any actual or potential negative effects of imports of light-walled rectangular pipes and tubes from Taiwan on their firms' growth, investment, and ability to raise capital. None of the firms issued statements specific to imports of light-walled rectangular pipes and tubes from Taiwan.

The Question of Alleged Threat of Material Injury

Consideration factors

In its examination of the question of threat of material injury to an industry in the United States the Commission may take into consideration such factors as the rate of increase of the subject imports, the rate of increase in U.S. market penetration by such imports, the rate of increase of imports held in inventory in the United States, the capacity of producers in the exporting country to generate exports (including the existence of underutilized capacity and the availability of export markets other than the United States), the foreign producers' potential for product-shifting, and the price depressing or suppressing effect of the subject imports on domestic prices.

Discussions of rates of increase in imports and their U.S. market penetration, as well as available information on their prices, are presented in the section of the report entitled "Consideration of the causal relationship between the alleged material injury and the LTFV imports." Available information on the ability of the foreign producers to generate exports and on product-shifting is presented in the portion of the report entitled "The producers in Taiwan." Information on inventories of the subject imports in the United States follows.

U.S. importers' inventories

* * * importers of light-walled rectangular pipes and tubes from Taiwan reported that they do not keep inventories of the subject products. * * *

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

U.S. imports

Total U.S. imports of light-walled rectangular pipes and tubes decreased 33 percent, from 104,428 tons in 1984 to 69,604 tons in 1986. During January-March 1987, total imports of light-walled rectangular pipes and tubes decreased 32 percent compared with imports in the corresponding period of 1986 (table 12). Japan was the largest exporter of these pipes and tubes to the United States in 1986, accounting for 33 percent of total imports.

Imports from Taiwan of light-walled rectangular pipes and tubes decreased from 9,754 tons in 1984 to 406 tons in 1985, a 96-percent decrease. Imports from Taiwan then increased to 9,975 tons in 1986. During January-March 1987, imports from Taiwan increased dramatically to 5,422 tons compared with 2 tons in the corresponding period of 1986. Taiwan's share of total imports fell from 9.3 percent in 1984 to 0.5 percent in 1985 and then rose to 14.3 percent in 1986. During January-March 1987, imports from Taiwan accounted for 35.8 percent of total imports, up from less than 0.05 percent during the corresponding period of 1986.

As shown in table 13, nearly 80 percent of imports (by quantity) from Taiwan entered through west coast ports in 1984. In 1985 this amount fell to 66 percent. In 1986, 72 percent of imports from Taiwan entered through west coast ports. At the hearing (transcript, pp. 72-74) and in their posthearing brief, petitioners argued that the Commission should cumulate imports of light-walled rectangular pipes and tubes from Taiwan with those from Singapore. ^{1/} Should the Commission cumulate, the combined U.S. imports from Taiwan and Singapore are shown in appendix E (table E-1).

Monthly imports from Taiwan in 1986 and January-March 1987 are presented in table 14. Imports from Taiwan were minimal during January-March 1986. Imports then increased from 114 tons in April to 911 tons in June. Imports continued to increase to 1,260 tons in July and to 1,987 tons in August before decreasing somewhat to 925 tons in September. Imports increased substantially in October to 2,010 tons and remained at a high level in November before decreasing to 591 tons in December. Imports in January-February 1987 showed large increases over 1986, increasing from 2,151 tons in January to 2,953 tons in February. Imports from Taiwan then fell to 318 tons in March and 42 tons in April.

Market penetration

Imports of light-walled rectangular pipes and tubes from Taiwan accounted for 3.3 percent of consumption (by quantity) in 1984 and 0.1 percent in 1985 (table 15). In 1986 market penetration by imports from Taiwan rose to 3.4 percent. During January-March 1987, imports from Taiwan accounted for 7.2 percent of consumption, up from less than 0.05 percent during the corresponding period of 1986. Imports from all countries decreased their market share

^{1/} For a further discussion of petitioners' arguments for cumulation, see answers to Commission questions, posthearing brief, pp. 3-5.

Table 12.—Light-walled rectangular pipes and tubes: 1/ U.S. imports for consumption, by principal sources, 1984-86, January-March 1986, and January-March 1987

Source	1984	1985	January-March—		
			1986 2/	1986	1987
Quantity (tons)					
Taiwan.....	9,754	406	9,975	2	5,422
Japan.....	47,897	62,737	23,169	9,204	3,445
Spain.....	23,693	2,808	7,419	5,373	57
Canada.....	8,260	5,004	7,447	1,299	2,930
Singapore.....	572	2,737	5,408	2,914	417
Italy.....	3,077	2,042	124	41	-
Mexico.....	2,825	1,285	1,234	654	371
Republic of Korea.....	2,427	1,604	1,344	725	-
West Germany.....	1,545	852	385	179	5
All other.....	4,378	4,004	13,098	1,755	2,514
Total.....	104,428	83,478	69,604	22,145	15,161
C.i.f., duty-paid value (1,000 dollars)					
Taiwan.....	3,956	216	4,208	4	2,208
Japan.....	21,775	28,065	11,494	4,263	1,662
Spain.....	10,179	1,112	2,879	2,213	23
Canada.....	3,042	3,330	3,764	657	1,366
Singapore.....	562	1,120	2,268	1,207	190
Italy.....	1,182	891	57	22	-
Mexico.....	2,115	470	427	226	129
Republic of Korea.....	1,015	692	586	325	-
West Germany.....	1,166	860	294	106	15
All other.....	2,262	1,819	5,496	882	1,048
Total.....	47,257	38,575	31,474	9,906	6,640
Percent of total quantity					
Taiwan.....	9.3	.5	14.3	3/	35.8
Japan.....	45.9	75.2	33.3	41.6	22.7
Spain.....	22.7	3.4	10.7	24.3	.4
Canada.....	7.9	6.0	10.7	5.9	19.3
Singapore.....	.5	3.3	7.8	13.2	2.8
Italy.....	2.9	2.4	.2	.2	-
Mexico.....	2.7	1.5	1.8	3.0	2.5
Republic of Korea.....	2.3	1.9	1.9	3.3	-
West Germany.....	1.5	1.0	.6	.8	3/
All other.....	4.2	4.8	18.8	7.9	16.6
Total.....	100.0	100.0	100.0	100.0	100.0

1/ Includes imports in TSUSA item 610.4975 prior to April 1984 and 610.4920 thereafter. Data for 1984 may be slightly overstated to the extent they contain small quantities of pipes and tubes not under investigation.

2/ Because of a lag in reporting, official import statistics include some "carry-over" data for merchandise imported, but not reported, in prior periods (usually the previous month). Beginning in 1987, Commerce extended its monthly data compilation cutoff date by about 2 weeks in order to significantly reduce the amount of carry-over. Therefore, official statistics for January 1987 include data that would previously have been carried over to February 1987. However, in order to avoid an apparent overstatement of the January 1987 data, the carry-over data from 1986 that would have been included in January 1987 official statistics as of the previous cutoff date have been excluded. Commerce isolated these 1986 carry-over data and has not included them in official statistics for 1986 or January 1987, since their inclusion in either period would result in an apparent overstatement. With respect to imports from Taiwan, this carry-over amounted to 865 tons, with a value (c.i.f. plus calculated duties) of \$346,000, all of which entered through west coast ports.

3/ Less than 0.05 percent.

Table 13.--Light-walled rectangular pipes and tubes: U.S. imports for consumption, from selected sources, by regions, 1984-86, January-March 1986, and January-March 1987

Item	1984	1985	1986	January-March--	
				1986	1987
Quantity (tons)					
From Taiwan:					
Into West Coast region.....	7,730	268	7,180	2	4,457
Into all other regions.....	2,025	137	2,795	0	965
Total.....	9,754	406	9,975	2	5,422
From all other sources:					
Into West Coast region.....	42,234	54,301	22,528	9,433	3,737
Into all other regions.....	52,439	28,770	37,102	12,710	6,001
Total.....	94,674	83,072	59,629	22,143	9,738
Percent					
From Taiwan:					
Into West Coast region.....	79.2	66.3	72.0	100.0	82.2
Into all other regions.....	20.8	33.7	28.0	0	17.8
Total.....	100.0	100.0	100.0	100.0	100.0
From all other sources:					
Into West Coast region.....	44.6	65.4	37.8	42.6	38.5
Into all other regions.....	55.4	34.6	62.2	57.4	61.6
Total.....	100.0	100.0	100.0	100.0	100.0
Value (1,000 dollars) 1/					
From Taiwan:					
Into West Coast region.....	3,040	149	3,078	4	1,812
Into all other regions.....	917	66	1,130	0	396
Total.....	3,956	216	4,208	4	2,208
From all other sources:					
Into West Coast region.....	19,275	24,136	10,563	4,184	1,769
Into all other regions.....	24,026	14,223	16,702	5,718	2,663
Total.....	43,301	38,359	27,266	9,901	4,433
Percent					
From Taiwan:					
Into West Coast region.....	76.8	69.3	73.2	100.0	82.0
Into all other regions.....	23.2	30.7	26.8	0	18.0
Total.....	100.0	100.0	100.0	100.0	100.0
From all other sources:					
Into West Coast region.....	44.5	62.9	38.7	42.4	39.9
Into all other regions.....	55.5	37.1	61.3	57.6	60.1
Total.....	100.0	100.0	100.0	100.0	100.0

1/ C.i.f., duty-paid basis.

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

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

Table 14.--Light-walled rectangular pipes and tubes from Taiwan:
U.S. imports for consumption, by month, January 1986-April 1987

Period	Quantity	Value 1/
	Tons	1,000 dollars
1986:		
January.....	1	2
February.....	-	-
March.....	1	2
April.....	114	47
May.....	271	110
June.....	911	407
July.....	1,260	500
August.....	1,987	839
September.....	925	481
October.....	2,010	828
November.....	1,904	766
December.....	591	226
1987:		
January.....	2,151	874
February.....	2,953	1,209
March.....	318	124
April.....	42	16

1/ C.i.f., duty-paid basis.

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

from 35.4 percent in 1984 to 23.4 percent in 1986. The share of consumption held by imports from all countries was 20.0 percent in January-March 1987, down from 26.7 percent in January-March 1986. Table 16 presents market penetration ratios based on values. U.S. imports and market penetration ratios of light-walled rectangular pipes and tubes from Taiwan and Singapore are presented in tables E-2 and E-3.

In the West Coast region, imports of light-walled rectangular pipes and tubes from Taiwan accounted for 6.5 percent of consumption in 1984 and 0.2 percent in 1985. In 1986 market penetration by imports from Taiwan in the West Coast region rose to 6.2 percent. During January-March 1987 imports from Taiwan accounted for 15.3 percent of consumption in the West Coast region, up from less than 0.05 percent during the corresponding period of 1986. Imports from all countries increased their West Coast market share from 42.0 percent in 1984 to 43.9 percent in 1985 and then decreased to 25.5 percent in 1986. The share of West Coast consumption held by imports from all countries fell to 28.1 percent in January-March 1987 from 29.9 percent in the corresponding period of 1986.

Table 15.--Light-walled rectangular pipes and tubes: Apparent U.S. consumption, imports, and market penetration, 1/ by regions, 1984-86, January-March 1986, and January-March 1987

Item	1984	1985	1986	January-March--	
				1986	1987
Total apparent U.S. consumption... tons..	294,663	283,664	297,311	82,979	75,684
Imports from Taiwan.....do....	9,754	406	9,975	2	5,422
Imports from all sources.....do....	104,428	83,478	69,604	22,145	15,161
Market penetration by imports from Taiwan.....percent..	3.3	0.1	3.4	<u>2/</u>	7.2
Market penetration by imports from all sources.....percent..	35.4	29.4	23.4	26.7	20.0
Within the West Coast region:					
Apparent U.S. consumption..... tons..	119,100	124,361	116,378	31,609	29,195
Imports from Taiwan.....do....	7,730	268	7,180	2	4,457
Imports from all sources.....do....	49,964	54,569	29,708	9,435	8,194
Market penetration by imports from Taiwan.....percent..	6.5	0.2	6.2	<u>2/</u>	15.3
Market penetration by imports from all sources.....percent..	42.0	43.9	25.5	29.9	28.1
Outside the West Coast region:					
Apparent U.S. consumption..... tons..	175,563	159,303	180,933	51,370	46,489
Imports from Taiwan.....do....	2,024	137	2,795	0	965
Imports from all sources.....do....	54,463	28,907	39,897	12,710	6,966
Market penetration by imports from Taiwan.....percent..	1.2	0.1	1.5	0	2.1
Market penetration by imports from all sources.....percent..	31.0	18.1	22.1	24.7	15.0

1/ Apparent consumption is slightly understated for all periods because of less than full coverage on domestic shipments of light-walled rectangular pipes and tubes. As noted earlier, data were provided by 23 producers accounting for approximately 95 percent of U.S. producers' domestic shipments. Market penetration, therefore, is slightly overstated for the period of the investigation.

2/ Less than 0.05 percent.

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

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

Table 16.--Light-walled rectangular pipes and tubes: Value-based apparent U.S. consumption, imports, and market penetration, 1/ by regions, 1984-86, January-March 1986, and January-March 1987 2/

Item	1984	1985	1986	January-March--	
				1986	1987
Total apparent U.S. consumption					
1,000 dollars..	164,407	150,119	151,566	41,903	40,413
Imports from Taiwan.....do....	3,956	216	4,208	4	2,208
Imports from all sources.....do....	47,257	38,575	31,474	9,906	6,640
Market penetration by imports from					
Taiwan.....percent..	2.4	0.1	2.8	<u>3/</u>	5.5
all sources.....percent..	28.7	25.7	20.8	23.6	16.4
Within the West Coast region:					
Apparent U.S. consumption					
1,000 dollars..	62,652	61,910	52,393	14,297	14,686
Imports from Taiwan.....do....	3,040	149	3,078	4	1,812
Imports from all sources.....do....	22,315	24,285	13,641	4,188	3,581
Market penetration by imports from					
Taiwan.....percent..	4.9	0.2	5.9	<u>3/</u>	12.3
all sources.....percent..	35.6	39.2	26.0	29.3	24.4
Outside the West Coast region:					
Apparent U.S. consumption					
1,000 dollars..	101,755	88,209	99,173	27,606	25,727
Imports from Taiwan.....do....	917	66	1,130	0	396
Imports from all sources.....do....	24,943	14,289	17,832	5,718	3,059
Market penetration by imports from					
Taiwan.....percent..	0.9	0.1	1.1	0	1.5
all sources.....percent..	24.53	16.2	18.0	20.7	11.9

1/ Apparent consumption is slightly understated for all periods because of less than full coverage on domestic shipments of light-walled rectangular pipes and tubes. Value data were provided by 23 producers accounting for approximately 95 percent of U.S. producers' domestic shipments. Market penetration, therefore, is slightly overstated for the period of the investigation, to the extent that some producers did not provide shipment data. On the other hand, market penetration is understated to the extent that the value of imports does not reflect importers' markups.

2/ Values are c.i.f., duty-paid.

3/ Less than 0.05 percent.

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

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

Outside the West Coast region, imports of light-walled rectangular pipes and tubes from Taiwan accounted for 1.2 percent of consumption in 1984 and 0.1 percent in 1985. In 1986 market penetration by imports from Taiwan outside the West Coast region rose to 1.5 percent. During January-March 1987 imports from Taiwan accounted for 2.1 percent of consumption outside the West Coast region, up from zero during the corresponding period of 1986. Imports from all countries decreased their non-West Coast market share from 31.0 percent in 1984 to 18.1 percent in 1985. In 1986 the non-West Coast market share held by imports from all countries rose to 22.1 percent. The share of consumption outside the West Coast region held by imports from all countries fell to 15.0 percent in January-March 1987 from 24.7 percent in the corresponding period of 1986.

Prices

Most domestic producers sell the majority of their light-walled rectangular tubing to distributors, although some producers do sell directly to end users. ^{1/} Importers of the Taiwan tubing sell mostly to distributors. Purchasers may choose from a variety of tubing products at the distributor level.

The Commission requested U.S. producers and importers of light-walled rectangular pipes and tubes from Taiwan to provide information concerning f.o.b. prices on their largest quarterly sales of the following light-walled rectangular pipe and tube products:

- PRODUCT 1: ASTM A-513 (mechanical) or A-500 grade A (ornamental) tubing, carbon welded, black, 1/2-inch square, 0.065-inch wall thickness, 20-foot to 40-foot mill lengths.
- PRODUCT 2: ASTM A-513 (mechanical) or A-500 grade A (ornamental) tubing, carbon welded, black, 1-inch square, 0.065-inch wall thickness, 20-foot to 40-foot mill lengths.
- PRODUCT 3: ASTM A-513 (mechanical) or A-500 grade A (ornamental) tubing, carbon welded, black, 1-1/2-inch square, 0.065-inch wall thickness, 20-foot to 40-foot mill lengths.

Six domestic producers, representing 45 percent of reported 1986 domestic shipments of light-walled rectangular pipes and tubes, provided usable price data. ^{2/} Domestic producers generally quote prices f.o.b. mill. Some producers distribute price lists, with the great majority of their sales discounted from the list price. Most producers provide "net period with cash discounting" schemes similar to the common "2 percent/10 net 30" program that many industries offer. Minimum quantity orders vary from 2,000 to 10,000 feet, with premiums as high as 15 percent for subminimum orders. The average lead time between a customer's order and the shipment date is from 7 to 42 days depending on whether the order can be filled from stock or a production run is necessary. Absorption of freight charges by producers varies from 0 to 5 percent of the total freight charges: none of the reporting firms practice

^{1/} Some sell as much as 90 percent to distributors.

^{2/} * * *.

freight equalization. Most producers' shipments are concentrated in the geographic areas near production and shipping points. Only one producer, * * *, reported serving the continental U.S. market. The remaining producers reported serving exclusively or primarily the regions near their plants. Four California producers reported serving some or all of the following areas: California, Oregon, Washington, Utah, and Arizona. A * * * manufacturer serves the Southeast.

Seven importers provided usable price data. Such data were limited, primarily because there were few imports of the subject product from Taiwan from January 1985 to March 1986. Importers generally quote prices c.i.f. dock. Two importers are known to distribute price lists; however, prices are usually negotiated. The reporting importers provide no forms of discounts. The average lead time between a customer's order and the shipment date is about 90 days unless the product is in stock. None of the reporting firms practice freight equalization.

Six distributors provided usable responses to the purchaser's questionnaire. All six purchase the domestic product, and three have purchased from Taiwan. Each distributor also said that it competes with producers for sales of light-walled rectangular tubes. According to distributors, light-walled rectangular pipes and tubes are used mostly for the construction of computer frames, furniture manufacturing, and ornamental fencing. Although all of the distributors were aware of the country of origin for the imported product, only half knew who the manufacturer was. When asked if their customers were interested in the country of origin, the distributors were evenly divided. However, one distributor stated that customers, such as computer frame builders, desiring a high quality product, specified domestic material, and that customers who used the product for ornamental fences were not concerned about quality. 1/ Two distributors stated that the domestic producers provided a better quality product, and four distributors stated that there were no quality differences. The distributors' purchasing patterns were varied; two purchase quarterly, one purchases monthly, two purchase weekly, and one purchases daily. The lead time between orders and receipt of the product is from 1 to 30 days for purchases from U.S. producers, and from 120 to 150 days for purchases from Taiwan producers if the importer does not have the material in stock. Transportation costs are similar for both sources, and are less than 5 percent of total cost.

Domestic prices. 2/--Domestic weighted-average prices for selected light-walled rectangular products sold to distributors throughout the entire United States (table 17) declined somewhat during the period January 1985 through March 1987. The price of product 1 generally declined, dropping 8 percent, from \$* * * per hundred feet in January-March 1985 to \$* * * per hundred feet in January-March 1987. The price for product 2 was stable during 1985 at approximately \$* * * per hundred feet before falling more than \$1 per hundred feet for all of 1986. The price of product 2 rebounded to \$* * * per hundred feet in January-March 1987. The price for product 3 displayed a trend similar

1/ For further discussion of quality differences see petitioners' posthearing brief (answers to questions by Commissioners and staff), pp. 1 and 16.

2/ Since the information provided by purchasers shows similar price trends for both domestic and foreign light-walled rectangular pipes and tubes, they will not be discussed.

to that of product 2, being stable during 1985 at approximately \$* * * per hundred feet before falling nearly \$2 per hundred feet for all of 1986. The price of product 3 also rebounded during January-March 1987, increasing to \$* * * per hundred feet.

Table 17.--Light-walled rectangular pipes and tubes: Weighted-average f.o.b. sales prices to distributors for U.S.-produced products, by quarters, January 1985-March 1987

* * * * *

Importers that provided price data did so only for sales in the western region of the United States. Domestic prices were also gathered for the western region; thus, price comparisons are limited to this region. Domestic prices for selected light-walled rectangular products sold to distributors in the Western United States (table 18) were lower than prices sold to distributors throughout the country. The price trends for the three products, though fluctuating, are essentially flat.

Domestic prices for selected light-walled rectangular products sold to end users in the Western United States (table 19) generally declined for the three chosen products. The price of product 1 declined 16 percent, from \$* * * per hundred feet in January-March 1985 to \$* * * per hundred feet in July-September 1986. Prices then increased 5 percent to \$* * * per hundred feet in January-March 1987. Product 2 exhibited a price decline of 11 percent through 1985, then jumped 8 percent during the first half of 1986. Prices then fell in the second half of the year by 8 percent before increasing by nearly 4 percent in January-March 1987. The price of product 3 declined 27 percent, from \$* * * per hundred feet in January-March 1985 to \$* * * per hundred feet in January-March 1986. The price of product 3 then increased 11 percent to \$* * * per hundred feet by January-March 1987.

Taiwan prices.--Importers of light-walled rectangular tubing from Taiwan provided price data on sales to distributors covering April-December 1986 and January-March 1987. There were no reported prices to distributors during 1985 and January-March 1986, probably because there were very limited imports of the Taiwan product into the United States at that time. Because all the importers that provided price data sold their products in the western region of the United States, price comparisons are limited to that region.

The price of product 1 from Taiwan (table 18) fluctuated around \$* * * per hundred feet during the three quarters for which there are data, falling from \$* * * per hundred feet in April-June 1986 to \$* * * per hundred feet in October-December 1986 before increasing to \$* * * per hundred feet in January-March 1987. Prices of product 2 from Taiwan decreased from \$* * * per hundred feet in April-June 1986 to \$* * * per hundred feet in July-September 1986 before increasing to \$* * * per hundred feet by January-March 1987. The price of product 3 increased from \$* * * in April-June 1986 to \$* * * in January-March 1987.

Table 18.--Light-walled rectangular pipes and tubes: Weighted-average f.o.b. sales prices to distributors in the Western United States, for U.S.- and Taiwan-produced products, and margins of underselling, by quarters, January 1985-March 1987

* * * * *

Table 19.--Light-walled rectangular pipes and tubes: Weighted-average f.o.b. sales prices to end users in the Western United States, for U.S.- and Taiwan-produced products, and margins of underselling, by quarters, January 1985-March 1987

* * * * *

Taiwan prices on sales to end users covered the period January-March 1986 through January-March 1987 (table 19). As with prices to distributors, there were no reported prices to end users during 1985. Because all the importers that provided price data sold their products in the western region of the United States, price comparisons are limited to that region. The prices for each of the three products fell almost continuously throughout the period for which data were provided. The price of product 1 from Taiwan fell from a high of \$* * * per hundred feet in January-March 1986 to a low of \$* * * per hundred feet in January-March 1987. The price of product 2 from Taiwan decreased from a high of \$* * * per hundred feet in January-March 1986 to a low of \$* * * per hundred feet in January-March 1987. The price of product 3 decreased from \$* * * in January-March 1986 to \$* * * in January-March 1987.

Each of the Taiwan products investigated that was sold to distributors undersold its U.S. counterpart for every period for which comparable data were available (table 18). Taiwan's product 1 undersold the U.S. product 1 by margins ranging from 6.3 to 14.2 percent. Taiwan's product 2 undersold the U.S. product 2 by between 11.5 and 31.6 percent, and product 3 from Taiwan undersold the U.S. product by margins ranging from 8.6 to 12.5 percent.

Each of the specified Taiwan products that was sold to end users (table 19) undersold its U.S. counterpart for every period for which comparable data were available except January-March 1986, when product 3 from Taiwan was priced higher than its U.S. counterpart by * * * percent. Taiwan's product 1 undersold the U.S. product 1 by margins ranging from 8.5 to 19.0 percent. Product 2 from Taiwan undersold the U.S. product 2 by between 7.2 and 13.3 percent, and their product 3 undersold the U.S. product by margins ranging from 4.7 to 13.0 percent.

Lost sales and lost revenues

*** made only one specific lost-sale allegation, involving *** tubing. The staff contacted the purchaser, ***, on this matter. ***.

*** made only two lost-sales allegations, each involving *** tons. Both lost sales allegedly occurred on *** and were to two *** purchasers of light-walled rectangular tubing products. The staff contacted *** and *** about these claims. *** and *** could not recall the specific transactions in question, but reported that their firms, as a rule, would have received bids for U.S. products only from southern California mills.

Exchange rates

Exchange rate indices of the New Taiwan dollar, presented in table 20, indicate that during the interval January 1984 through December 1986 the quarterly nominal value of the Taiwan dollar advanced 10 percent against the U.S. dollar. 1/ After adjustment for inflation in the United States and Taiwan over the 12-quarter period for which data were collected, the real value of Taiwan's currency fluctuated somewhat, appreciating by less than 6 percent relative to the U.S. dollar through December 1986. 2/

1/ Taiwan exchange rate data for Oct.-Dec. 1986, the last period for which data were collected, cover Oct.-Nov. only.

2/ The real Taiwan exchange rate index for Oct.-Dec. 1986, the last period for which data were collected, is derived from Taiwan exchange rates and Producer Price Indices covering Oct.-Nov. only.

Table 20.--Nominal-exchange-rate equivalents of the New Taiwan dollar in U.S. dollars, real-exchange-rate equivalents, and producer price indicators in the United States and Taiwan, 1/ indexed by quarters, January 1984-December 1986

Period	(January-March 1984=100.0)			
	U.S. Producer Price Index	Taiwan Producer Price Index	Nominal- exchange- rate index	Real- exchange- rate index 2/ -----US Dollars/NT\$-----
1984:				
January-March.....	100.0	100.0	100.0	100.0
April-June.....	100.7	100.6	101.0	100.9
July-September.....	100.4	99.9	102.4	101.9
October-December....	100.2	99.3	102.0	101.2
1985:				
January-March.....	100.0	98.4	102.1	100.5
April-June.....	100.1	97.7	100.9	98.4
July-September.....	99.4	97.0	99.6	97.2
October-December....	100.0	96.4	100.4	96.8
1986:				
January-March.....	98.5	95.6	102.3	99.2
April-June.....	96.6	94.5	104.6	102.3
July-September.....	96.2	93.3	107.3	104.1
October-December....	96.5	3/ 93.0	3/ 110.0	4/ 105.9

1/ Producer price indicators--intended to measure final product prices--are based on average quarterly indexes presented in line 63 of the International Financial Statistics.

2/ The indexed real exchange rate represents the nominal exchange rate adjusted for the relative economic movement of each currency as measured here by the Producer Price Index in the United States and Taiwan. Producer prices in the United States decreased 3.5 percent during the period January 1984 through December 1986 compared with a 7.0-percent decrease in Taiwan prices during the period under investigation.

3/ Exchange rate and producer price data for Taiwan are reported for Oct.-Nov. only.

4/ Data for the final quarter presented above is derived from Taiwan exchange rate and Producer Price Indices covering Oct.-Nov. only.

Source: Central Bank of China, Financial Statistics, December 1986; International Monetary Fund, International Financial Statistics, April 1987.

Note.--January-March 1984=100.0.

APPENDIX A

FEDERAL REGISTER NOTICE OF THE COMMISSION

[Investigation No. 731-TA-349 (Final)]

Certain Welded Carbon Steel Pipes and Tubes From Taiwan

AGENCY: International Trade Commission.

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

SUMMARY: The Commission hereby gives notice of the institution of final antidumping investigation No. 731-TA-349 (final) under section 735(b) of the Tariff Act of 1930 (19 U.S.C. 1673d(b)) to determine whether an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports from Taiwan of light-walled rectangular pipes and tubes,¹ provided for in item 610.4928 of the Tariff Schedules of the United States Annotated, that have been found by the Department of Commerce, in a preliminary determination, to be sold in the United States at less than fair value (LTFV). Unless the investigation is extended, Commerce will make its final LTFV determination on or before May 25, 1987, and the Commission will make its final injury determination by July 14, 1987 (see sections 735(a) and 735(b) of the act (19 U.S.C. 1673d(a) and 1673d(b))).

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

EFFECTIVE DATE: March 17, 1987.

FOR FURTHER INFORMATION CONTACT: Valerie Newkirk (202-523-0165), Office of Investigations, U.S. International Trade Commission, 701 E Street NW., Washington, DC 20436. Hearing-impaired individuals are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on 202-724-0002. Persons with mobility impairments who will need

¹ For purposes of this investigation, the term "light-walled rectangular pipes and tubes" covers welded carbon steel pipes and tubes of rectangular (including square) cross section, having a wall thickness less than 0.156 inch.

special assistance in gaining access to the Commission should contact the Office of the Secretary at 202-523-0161.

SUPPLEMENTARY INFORMATION:

Background

This investigation is being instituted as a result of an affirmative preliminary determination by the Department of Commerce that imports of light-walled rectangular pipes and tubes from Taiwan are being sold in the United States at less than fair value within the meaning of section 731 of the act (19 U.S.C. 1673). The investigation was requested in a petition filed on October 2, 1986, by counsel for the Committee on Pipe and Tube Imports. In response to that petition the Commission conducted a preliminary antidumping investigation and, on the basis of information developed during the course of that investigation, determined that there was a reasonable indication that an industry in the United States was threatened with material injury by reason of imports of the subject merchandise (51 FR 42945, November 26, 1986).

Participation in the investigation

Persons wishing to participate in this investigation as parties must file an entry of appearance with the Secretary to the Commission, as provided in § 201.11 of the Commission's rules (19 CFR 201.11), not later than twenty-one (21) days after the publication of this notice in the Federal Register. Any entry of appearance filed after this date will be referred to the Chairman, who will determine whether to accept the late entry for good cause shown by the person desiring to file the entry.

Service list

Pursuant to § 201.11(d) of the Commission's rules (19 CFR 201.11(d)), the Secretary will prepare a service list containing the names and addresses of all persons, or their representatives, who are parties to this investigation upon the expiration of the period for filing entries of appearance. In accordance with §§ 201.16(c) and 207.3 of the rules (19 CFR 201.16(c) and 207.3), each document filed by a party to the investigation must be served on all other parties to the investigation (as identified by the service list), and a certificate of service must accompany the document. The Secretary will not accept a document for filing without a certificate of service.

Staff report

A public version of the prehearing staff report in this investigation will be placed in the public record on May 26,

1987, pursuant to § 207.21 of the Commission's rules (19 CFR 207.21).

Hearing

The Commission will hold a hearing in connection with this investigation beginning at 9:30 a.m. on June 10, 1987, at the U.S. International Trade Commission Building, 701 E Street, NW., Washington, DC. Requests to appear at the hearing should be filed in writing with the Secretary to the Commission not later than the close of business (5:15 p.m.) on May 22, 1987. All persons desiring to appear at the hearing and make oral presentations should file prehearing briefs and attend a prehearing conference to be held at 9:30 a.m. on May 29, 1987, in room 117 of the U.S. International Trade Commission Building. The deadline for filing prehearing briefs is June 5, 1987.

Testimony at the public hearing is governed by § 207.23 of the Commission's rules (19 CFR 207.23). This rule requires that testimony be limited to a nonconfidential summary and analysis of material contained in prehearing briefs and to information not available at the time the prehearing brief was submitted. Any written materials submitted at the hearing must be filed in accordance with the procedures described below and any confidential materials must be submitted at least three (3) working days prior to the hearing (see § 206.6(b)(2) of the Commission's rules (19 CFR 201.6(b)(2))).

Written submissions

All legal arguments, economic analyses, and factual materials relevant to the public hearing should be included in prehearing briefs in accordance with § 207.22 of the Commission's rules (19 CFR 207.22). Posthearing briefs must conform with the provisions of § 207.24 (19 CFR 207.24) and must be submitted not later than the close of business on June 17, 1987. In addition, any person who has not entered an appearance as a party to the investigation may submit a written statement of information pertinent to the subject of the investigation on or before June 17, 1987.

A signed original and fourteen (14) copies of each submission must be filed with the Secretary to the Commission in accordance with § 201.8 of the Commission's rules (19 CFR 201.8). All written submissions except for confidential business data will be available for public inspection during regular business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary to the Commission.

Any business information for which confidential treatment is desired must be submitted separately. The envelope

and all pages of such submissions must be clearly labeled "Confidential Business Information." Confidential submissions and requests for confidential treatment must conform with the requirements of § 201.6 of the Commission's rules (19 CFR 201.6).

Authority: This investigation is being conducted under authority of the Tariff Act of 1930, Title VII. This notice is published pursuant to § 207.20 of the Commission's rules (19 CFR 207.20).

Issued: March 27, 1987.

By order of the Commission.

Kenneth R. Mason,

Secretary.

[FR Doc. 87-7184 Filed 4-1-87; 8:45 am]

BILLING CODE 7020-02-M

APPENDIX B

FEDERAL REGISTER NOTICE OF THE DEPARTMENT OF COMMERCE

from Taiwan are being, or are likely to be, sold in the United States at less than fair value. We have notified the U.S. International Trade Commission (ITC) of our determination and have directed the U.S. Customs Service to continue to suspend the liquidation of all entries of light-walled rectangular pipes and tubes from Taiwan that are entered, or withdrawn from warehouse, for consumption, on or after March 17, 1987 and to require a cash deposit or bond for each entry in an amount equal to the estimated dumping margin as described in the "Suspension of Liquidation" section of this notice.

EFFECTIVE DATE: June 1, 1987.

FOR FURTHER INFORMATION CONTACT: Paul Tambakis or Charles Wilson, Office of Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230; telephone: (202) 377-4136 or 377-5288.

SUPPLEMENTARY INFORMATION:

Final Determination

We have determined that light-walled rectangular pipes and tubes from Taiwan are being, or are likely to be, sold in the United States at less than fair value, as provided in section 735(a) of the Tariff Act of 1930, as amended (the Act) (19 U.S.C. 1673d(a)). We made fair value comparisons on 100 percent of the sales of the class or kind of merchandise to the United States by the sole respondent during the period of investigation, May 1 through October 31, 1986. The weighted-average margin is shown in the "Suspension of Liquidation" section of this notice.

Case History

On March 11, 1987, we made an affirmative preliminary determination (51 FR 8331, March 17, 1987). Since then, as required by the Act, we afforded interested parties an opportunity to submit oral and written comments addressing the issues arising in this investigation. On April 13, 1987, we held a public hearing to allow parties to address the issues.

Scope of Investigation

The products covered by this investigation are certain light-walled welded carbon steel pipes and tubes, of rectangular (including square) cross-section, having a wall thickness of less than 0.156 inch, as provided for in item 610.4928 of the *Tariff Schedules of the United States Annotated (TSUSA)*

(A-563-606)

Certain Light-Walled Rectangular Welded Carbon Steel Pipes and Tubes From Taiwan; Final Determination of Sales at Less Than Fair Value

AGENCY: International Trade Administration, Import Administration, Commerce.

ACTION: Notice.

SUMMARY: We have determined that certain light-walled rectangular welded carbon steel pipes and tubes (light-walled rectangular pipes and tubes)

Fair Value Comparisons

We investigated sales of light-walled rectangular pipes and tubes to the United States during the period May 1 through October 31, 1986. Because Yieh Hsing accounted for all sales of this merchandise from Taiwan, we limited our investigation to this company.

To determine whether sales of the subject merchandise in the United States were made at less than fair value, we compared the United States price with the foreign market value for the company under investigation. We used data provided in the response, as explained in the "Foreign Market Value" section of this notice, except where otherwise noted.

United States Price

As provided in section 772(b) of the Act, we used the purchase price of the subject merchandise to represent United States price since the merchandise was purchased by unrelated U.S. customers directly from the foreign manufacturer prior to importation. We calculated purchase price based on the packed, c. & f., c.i.f. or f.o.b. prices to unrelated purchasers in the United States. We made deductions, where appropriate, for foreign inland freight, brokerage and handling charges, bank charges, ocean freight and marine insurance. We made additions to purchase price for duty drawback (i.e., import duties which were rebated, or not collected, by reason of the exportation of the merchandise to the United States) pursuant to section 772(d)(1)(B) of the Act.

Foreign Market Value

In accordance with section 773(e) of the Act, we calculated foreign market value based on constructed value. Since Yieh Hsing had no viable home market, in accordance with section 773(a)(1)(B) of the Act and § 353.5 of our regulations, respondent reported sales to Saudi Arabia, its largest third country market, as the basis for foreign market value. The petitioners alleged that these third country sales were at prices below the cost of producing the merchandise. We examined production costs which included all appropriate costs for materials, fabrication and general expenses. We found insufficient sales to Saudi Arabia above the cost of production to allow us to use third country prices for foreign market value in accordance with section 773(b) of the Act.

Cost of Production

In determining the cost of production

"best information available" because during verification, major factors (e.g. materials) used in the calculation of the cost of production could not be verified.

Additionally, in its response the company did not present the actual quantities of materials and other components which it used in the manufacturing of the products, but developed a cost for these components based on formulas. Analysis of these formulas revealed major conceptual inaccuracies. Therefore, even if the data used in the formula were verified, the submission could not have been used.

For the cost of production, the Department used certain company data which was verified and adjusted this cost, when necessary, to quantify more appropriately the per unit costs. For information which was not verified, the respondent's cost information was supplemented with information submitted by petitioners. The Department relied upon the petitioners' material usage information and the prices for the materials paid by the respondent. For labor and factory overhead, the respondent's costs were used, but reallocated to restate the per unit costs more appropriately. General expenses were also reallocated, as a percentage of cost of goods, since the theoretical basis for developing the per unit expense used by the respondent was not acceptable.

Constructed Value

Since we found there were insufficient sales above the cost of production, as defined in section 773(b) of the Act, we used constructed value as the basis for calculating foreign market value.

In accordance with section 773(e) of the Act, the constructed value included the material and fabrication expenses incurred to produce the product sold in the U.S. market. Since general expenses were greater than 10 percent, we used actual general expenses of the company. Actual profit could not be determined because the actual costs could not be verified. Therefore, the statutory minimum profit of eight percent was added. We also added the cost of U.S. packing. We made an adjustment to constructed value for differences between unrelated commissions paid in the two markets in accordance with § 353.15(b) of our regulations.

Currency Conversion

We made currency conversions from new Taiwan dollars to U.S. dollars in accordance with § 353.56(a) of our regulations, using the certified daily exchange rates furnished by the Federal

Verification

We verified the information used in making our final determination in accordance with section 776(a) of the Act. We used standard verification procedures, including examination of relevant sales and financial records of the company under investigation. However, there was a lack of sufficient supporting documentation for certain portions of the respondent's cost of production. Therefore, we determined that portions of the cost of production data submitted by the respondent could not be verified.

Petitioners' Comments

Petitioners' comment 1: The petitioners argue that neither the response nor the verification accurately reflects rerolling costs. Petitioners assert that thinner gauge pipe would require more extensive rerolling processing. The petitioners also suggest that since the rerolling processing would not be less expensive than cold-rerolling costs, the amount of the average price difference between hot-rolled steel and cold-rolled steel should be used for rerolling costs.

DOC position: Since the exact coil used to produce each size pipe could not be identified and the gauge of the coil and pipe varied within approximately the same range, the Department did not assume that thinner pipe would require more rerolling. The rerolling expenses were averaged over all pipe produced.

Petitioners' comment 2: The petitioners argue that the respondent's method to derive the input of coil using theoretical weight, subtracting an amount representing a saving because of the lower tolerance level for the wall thickness of the pipe and adding scrap which was sold, will not appropriately state material usage. They contend that a weight saving cannot be assumed to be a consistent amount and that scrap sold should not be compared to pipe produced.

DOC position: The Department did not consider the amount of the input of coil to be appropriately calculated or verified and used "best information available." See the "Foreign Market Value" section of this notice.

Petitioners' comment 3: The petitioners contend that since the verification report indicates that the company maintained adequate records to allocate conversion costs on machine time, the theoretical methodology should not be accepted.

DOC position: The Department does not have specific verified machine times. Therefore, we used "best information"

all processes. We did use the verified "through-put" rate in the forming stage to develop labor costs for this process since this data was available. See the "Foreign Market Value" section of this notice.

Petitioners' comment 4: The petitioners argue that the respondent's methodology for allocating interest expenses based on assets used by the various operations of the company is not appropriate since interest expense is general and cannot be specifically tied to an operation.

DOC position: The Department agrees. Funds used to finance the company's operations are fungible and, therefore, the interest expense was allocated to all products based on the costs incurred for the goods sold.

Petitioners' comment 5: Petitioners urge the Department to add the total duty paid on imported raw materials to U.S. price and foreign market value, rather than adding the amount of duty drawback since petitioners contend that drawback amounts were excessive when compared to duties paid.

DOC position: We disagree. As required by the Act, we have added the total verified amount of duty drawback for each sale, instead of adding duties paid on raw materials. The verification showed that the actual amount of duty drawback granted was slightly less than duties which would have been paid, and not more, as indicated by petitioners. This nominal difference between duty paid on imported coil and duty rebated on exported pipes and tubes is collected by the Ministry of Finance as a handling charge for maintaining drawback accounts.

Respondent's Comments

Respondent's comment 1: The respondent argues that although the verification report does not directly disparage Yieh Hsing's actions or methods, certain statements have negative implications—specifically, that the 1986 trial balance of the company was not presented until the second to the last day of the verification. Respondent contends that the company did not have audited 1986 financial statements or audited quarterly statements and that these statements had not been requested by the Department's verification workplan presented to the respondent two days before verification.

DOC position: The 1986 financial statements were requested by the Department in its questionnaire. Since such statements were not available, only then did the Department resort to the possible use of the trial balance as a means to reconcile the data provided by

the respondent. Although the trial balance was not specified by the Department's verification workplan, this workplan is provided by the Department only as an aid to the respondent. The workplan, as stated in its first paragraph, does not limit the Department's ability to verify only those areas and to obtain only those documents specifically requested. The Department has the right to request any documents and verify any areas which may be needed for a satisfactory completion of the verification.

A trial balance is a primary financial document maintained in the ordinary course of business by a company, and therefore, should have been readily available. Since the trial balance is used as a means to reconcile all the various cost components, in the absence of an audited financial statement it must be an integral part of the total verification.

Respondent's comment 2: The respondent contends that the amount of scrap sold by the company is an adequate reflection of the amount of scrap produced, and therefore the actual output weight can be divided by the yield to derive the actual input weight.

DOC position: The Department disagrees. All scrap generated by the process may not be retrieved and, if retrieved, may not be sold. Therefore, the input would be understated if only the amount sold was added to the output.

Respondent's comment 3: Respondent contends that the methods used to allocate materials, labor, and overhead—namely, the theoretical weights obtained from the sales records, were the most appropriate bases of allocation; and that theoretical weights were verified by the Department during the sales verification.

DOC position: Production costs for a period of time should not be allocated based on the weight of the products sold during that time. Production during the period of investigation would not be equal to the sales since certain pipe sold had been produced prior to such time and other pipe produced was inventoried during that period.

Additionally, the weights of the various sizes of pipe, individually and in total, used by the respondent for the allocation of production costs, did not reconcile to the total weights or the various individual weights verified for sales.

Respondent's comment 4: The respondent contends that duties should be included in material costs only to the extent duties are paid. Since such duties are rebated if such materials are used in export, these amounts are contingent

liabilities and material costs should not include the rebated duties.

DOC position: The Act requires that duties paid and rebated upon exportation be added to the U.S. sales prices. Section 772(d)(1)(B). To reflect a commensurate amount of actual duties in the "foreign market," the duties rebated on materials were included as material costs.

Respondent's comment 5: The respondent argues that long-term interest expense should be allocated to product groups based on the value of the fixed assets used for that group and then allocated to the sales units based on production.

DOC position: The Department believes that expressing interest expenses as a percentage of the cost of goods is an appropriate method for the allocation of such expenses. See *Mirrors in Stock Sheet and Lehr End Sizes from Belgium* (52 FR 3156). The interest expense in incurred during a period of time; if allocated based on quantities produced and not on the goods sold, total interest expense for this period would not be captured since part of the interest expense would be attributed to those products which may have been inventoried.

Respondent's comment 6: Respondent contends that in the previous pipe and tube investigation in 1985, the Department accepted the methodology used by the respondent in computing the cost of production.

DOC position: The Department did not accept the respondent's methodology of computing the cost of production in the 1985 pipe and tube investigation for the final determination. In fact, in its final determination in the 1985 investigation, the Department used the best information available (which included certain information contained in the petition) and the respondent's methodology was rejected.

Respondent's comment 7: Respondent claims that the Department erred in its preliminary determination by using an incorrect conversion rate which had the effect of overstating adjustments relating to the sales prices and understated the constructed value calculations.

DOC position: We agree and have used the correct conversion factor for our final calculations.

Respondent's comment 8: The respondent states that the Department erred in the computation of the cost of production for the preliminary determination by using the average duty drawback added to the raw material costs rather than a weighted average duty drawback.

DOC position: For the final determination, the Department used the percentage of duties on purchases of raw materials. The average duty drawback was used in the preliminary determination because of the lack of specific data.

Respondent's comment 9: Respondent claims that the Department double-counted the packing expenses in computing the constructed value in the preliminary determination, since the cost of packing was included in the cost of production.

DOC position: We agree that we double-counted packing labor. This has been corrected. We note, however, that the Department had no basis to know that the cost of packing materials was included in the cost of production, since this fact was not disclosed in the submission.

Respondent's comment 10: The respondent declares that it included the costs of ocean freight, insurance, brokerage, and banking charges in selling, general and administrative expenses in the submission, and that these should be taken out, since the Department compares ex-factory prices to cost of production.

DOC position: Selling, general and administrative expenses have been adjusted in the final determination to exclude ex-factory costs. Again, it was not disclosed to DOC until verification that these expenses were included.

Respondent's comment 11: Respondent argues that Yieh Hsing's claim for duty drawback should be accepted on those sales for which drawback was applied but not yet received based on a presumption of regularity. Respondent refers to the verification where it was demonstrated that in other instances drawback was routinely granted once an application was filed. Respondent also claims that Yieh Hsing's drawback claim should be accepted on those contracts where applications were not filed at the time of the verification, but, have since been submitted to the Ministry of Finance for payment.

DOC Position: Regarding the first point raised by respondent, we agree and have allowed the drawback claim because the verification did not show any instances where drawback applications had been denied. We disagree, however, with respondent's contention that drawback should be granted on sales where applications were not filed until after verification. We disallowed Yieh Hsing's drawback claim on sales where drawback amounts could not be verified through the existence of a drawback application and other relevant documents.

Suspension of liquidation: In accordance with section 733(d) of the Act, we are directing the U.S. Customs Service to continue to suspend liquidation of all entries of light-walled rectangular pipes and tubes from Taiwan that are entered, or withdrawn from warehouse, for consumption, on or after March 17, 1987, the date of publication of our notice of preliminary determination in the Federal Register. The U.S. Customs Service shall continue to require a cash deposit or the posting of a bond equal to the estimated weighted-average amounts by which the foreign market value of the merchandise subject to this investigation exceeds the United States price as shown in the table below. The cash deposit or bonding rate established in the preliminary determination shall remain in effect with respect to entries or withdrawal from warehouse made prior to the date of publication of this notice in the Federal Register. The suspension of Liquidation will remain in effect until further notice.

Manufacturer/producer/exporter	Margin percentage
Yieh Hsing Enterprise Co., Ltd.	17.29
All others	17.29

ITC Notification

In accordance with section 735(d) of the Act, we have notified the ITC of our determination. In addition, we are making available to the ITC all nonprivileged and nonproprietary information relating to this investigation. We will allow the ITC access to all privileged and business proprietary information in our files, provided the ITC confirms that it will not disclose such information either publicly or under administrative protective order without the written consent of the Deputy Assistant Secretary for Import Administration. The ITC will determine whether these imports materially injure, or threaten material injury to, a United States industry within 45 days of the publication of this notice.

This determination is published pursuant to section 735(d) of the Act (19 U.S.C. 1673d(d)).

Dated: May 26, 1987.

Paul Freedenberg,

Assistant Secretary for Trade Administration.

[FR Doc. 87-12407 Filed 5-29-87; 8:45 am]

SELLING CODE 3810-05-40

APPENDIX C
LIST OF WITNESSES

TENTATIVE CALENDAR OF PUBLIC HEARING

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

Subject : Certain Welded Carbon Steel
Pipes and Tubes from Taiwan

Inv. No. : 731-TA-349 (Final)

Date and time : June 10 1987 - 9:30 a.m.

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

In support of the imposition of antidumping duties:

Schagrin Associates--Counsel
Washington, D.C.
on behalf of

Mechanical Tube and Fence Post Divisions and Western Tube
and Conduit Corporation

Don Finn, Manager,

Hannibal Industries (formerly Kaiser Steel Corporation)

Jerry Tippett, Vice President, Marketing

Roger B. Schagrin)--OF COUNSEL
Paul W. Jameson)

In opposition to the imposition of antidumping duties

Davis, Wright & Jones--Counsel
Washington, D.C.
on behalf of

Yieh Hsing Enterprise Company, Ltd

C. W. Lee, Manager of the Export-Import Department

David Simon--OF COUNSEL

APPENDIX D

LIGHT-WALLED RECTANGULAR PIPES AND TUBES: CAPACITY, PRODUCTION,
SHIPMENTS, INVENTORIES, AND EMPLOYMENT, WEST COAST REGION, BY FIRMS

Table D-1.--Light-walled rectangular pipes and tubes: U.S. production, capacity, and capacity utilization, West Coast region, by firms, 1984-86, January-March 1986, and January-March 1987

Item	1984	1985	1986	January-March--	
				1986	1987
Production:					
***.....tons...	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
Total.....do.....	69,842	70,135	74,434	20,184	21,284
Capacity:					
***.....tons...	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
Total.....do.....	140,960	144,250	130,425	34,945	32,985
Capacity utilization:					
***.....percent...	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
Average.....do.....	50	49	57	58	65

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

Table D-2.--Light-walled rectangular pipes and tubes: U.S. producers' domestic shipments produced within the West Coast region, by destinations and by firms, and total domestic shipments, 1984-86, January-March 1986, and January-March 1987

Item	(In tons)				
	1984	1985	1986	January-March-- 1986	1987
Produced in the West Coast region and shipped to destinations:					
Within the region:					
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Subtotal	69,136	69,792	***	***	***
Outside the region:					
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Subtotal	0	0	0	0	0
Total domestic shipments:					
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Total	69,136	69,792	***	***	***

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

Table D-3.--Light-walled rectangular pipes and tubes: U.S. producers' inventories, West Coast region, by firms, 1984-86, January-March 1986, and January-March 1987

Item	(In tons)				
	1984	1985	1986	January-March-- 1986	1987
End-of-period inventories:					
***.....	***	***	***	***	***
***.....	***	***	***	***	***
***.....	***	***	***	***	***
***.....	***	***	***	***	***
***.....	***	***	***	***	***
***.....	***	***	***	***	***
***.....	***	***	***	***	***
***.....	***	***	***	***	***
***.....	***	***	***	***	***
Total.....	8,709	7,152	8,058	9,377	7,781

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

Table D-4.--Average number of production and related workers producing light-walled rectangular pipes and tubes, hours worked, wages and total compensation paid to such employees, West Coast region, by firms, 1984-86, January-March 1986, and January-March 1987

Item	1984	1985	1986	January-March--	
				1986	1987
Number of workers:					
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Total.....	60	64	96	96	114
Total hours worked:					
***.....1,000 hours...	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
Total.....do.....	121	130	213	53	58

Table D-4.--Average number of production and related workers producing light-walled rectangular pipes and tubes, hours worked, wages and total compensation paid to such employees, West Coast region, by firms, 1984-86, January-March 1986, and January-March 1987--Continued

Item	1984	1985	1986	January-March--	
				1986	1987
Total wages paid:					
***.....1,000 dollars...	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
Total.....do.....	1,601	1,152	1,843	424	507
Total compensation paid:					
***.....1,000 dollars...	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
***.....do.....	***	***	***	***	***
Total.....do.....	2,178	1,481	2,465	574	691

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

APPENDIX E

LIGHT-WALLED RECTANGULAR PIPES AND TUBES: U.S. IMPORTS FOR CONSUMPTION
FROM TAIWAN AND SINGAPORE AND MARKET PENETRATION, BY REGIONS



Table E-1.—Light-walled rectangular pipes and tubes: U.S. imports for consumption from Taiwan and Singapore, by regions, 1984-86, January-March 1986, and January-March 1987

Item	1984	1985	January-March—		
			1986	1986	1987
<u>Quantity (tons)</u>					
From Taiwan—					
Into West Coast region.....	7,730	268	7,180	2	4,457
Into all other regions.....	2,024	137	2,795	—	965
Total.....	9,754	406	9,975	2	5,422
From Singapore—					
Into West Coast region.....	539	2,490	2,781	2,030	—
Into all other regions.....	34	247	2,628	884	417
Total.....	572	2,737	5,408	2,914	417
Total—					
Into West Coast region.....	8,269	2,758	9,961	2,032	4,457
Into all other regions.....	2,058	384	5,423	884	1,382
Total.....	10,326	3,143	15,383	2,916	5,839
<u>Percent</u>					
From Taiwan—					
Into West Coast region.....	79.2	66.3	72.0	100.0	82.2
Into all other regions.....	20.8	33.7	28.0	—	17.8
Total.....	100.0	100.0	100.0	100.0	100.0
From Singapore—					
Into West Coast region.....	94.2	91.0	51.4	69.7	—
Into all other regions.....	5.9	9.0	48.6	30.3	100.0
Total.....	100.0	100.0	100.0	100.0	100.0
Total—					
Into West Coast region.....	80.1	87.8	64.8	69.7	76.3
Into all other regions.....	19.9	12.2	35.2	30.3	23.7
Total.....	100.0	100.0	100.0	100.0	100.0
<u>Value (1,000 dollars, c.i.f., duty-paid)</u>					
From Taiwan—					
Into West Coast region.....	3,040	149	3,078	4	1,812
Into all other regions.....	917	66	1,130	—	396
Total.....	3,956	216	4,208	4	2,208
From Singapore—					
Into West Coast region.....	548	1,020	1,160	846	—
Into all other regions.....	14	99	1,107	361	190
Total.....	562	1,120	2,268	1,207	190
Total—					
Into West Coast region.....	3,588	1,169	4,238	850	1,812
Into all other regions.....	931	165	2,237	361	586
Total.....	4,518	1,336	6,476	1,211	2,398
<u>Percent</u>					
From Taiwan—					
Into West Coast region.....	76.8	69.3	73.1	100.0	82.1
Into all other regions.....	23.2	30.7	26.9	—	17.9
Total.....	100.0	100.0	100.0	100.0	100.0
From Singapore—					
Into West Coast region.....	97.5	91.2	51.2	70.1	—
Into all other regions.....	2.5	8.8	48.8	29.9	100.0
Total.....	100.0	100.0	100.0	100.0	100.0
Total—					
Into West Coast region.....	79.4	87.6	65.5	70.2	75.6
Into all other regions.....	20.6	12.4	34.5	29.8	24.4
Total.....	100.0	100.0	100.0	100.0	100.0

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

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

Table E-2.--Light-walled rectangular pipes and tubes: Volume of imports from Taiwan and Singapore and market penetration, by regions, 1984-86, January-March 1986, and January-March 1987

Item	1984	1985	1986	January-March--	
				1986	1987
Total U.S. imports--					
From Taiwan.....tons..	9,754	406	9,975	2	5,422
From Singapore.....do....	572	2,737	5,408	2,914	417
Total.....do....	10,326	3,142	15,383	2,916	5,839
Market penetration by imports--					
From Taiwan.....percent..	3.3	0.1	3.4	1/	7.2
From Singapore.....do....	0.2	1.0	1.8	3.5	0.6
Total.....do....	3.5	1.1	5.2	3.5	7.7
Within the West Coast region:					
Imports from Taiwan.....tons..	7,730	268	7,180	2	4,457
Imports from Singapore.....do....	539	2,490	2,781	2,030	-
Total.....do....	8,269	2,758	9,961	2,032	4,457
Market penetration by imports--					
From Taiwan.....percent..	6.5	0.2	6.2	1/	15.3
From Singapore.....do....	0.5	2.0	2.4	6.4	-
Total.....do....	6.9	2.2	8.6	6.4	15.3
Outside the West Coast region:					
Imports from Taiwan.....tons..	2,024	137	2,795	-	965
Imports from Singapore.....do....	34	247	2,628	884	417
Total.....do....	2,058	384	5,423	884	1,382
Market penetration by imports from--					
Taiwan.....percent..	1.2	0.1	1.5	-	2.1
Singapore.....do....	1/	0.2	1.5	1.7	0.9
Total.....do....	1.2	0.3	3.0	1.7	3.0

1/ Less than 0.05 percent.

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

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

Table E-3.--Light-walled rectangular pipes and tubes: Value ^{1/} of imports from Taiwan and Singapore, and market penetration, by regions, 1984-86, January-March 1986, an January-March 1987

Item	1984	1985	1986	January-March--	
				1986	1987
Total U.S. imports--					
From Taiwan.....1,000 dollars..	3,956	216	4,208	4	2,208
From Singapore.....do....	562	1,120	2,268	1,207	190
Total.....do....	4,518	1,336	6,476	1,211	2,398
Market penetration by imports--					
From Taiwan.....percent..	2.4	0.1	2.8	2/	5.5
From Singapore.....do....	0.3	0.7	1.5	2.9	0.5
Total.....do....	2.7	0.8	4.3	2.9	6.0
Within the West Coast region:					
Imports from Taiwan....1,000 dollars..	3,040	149	3,078	4	1,812
Imports from Singapore.....do....	548	1,021	1,160	846	-
Total.....do....	3,588	1,170	4,238	850	1,812
Market penetration by imports--					
From Taiwan.....percent..	4.9	0.2	5.9	2/	12.3
From Singapore.....do....	0.9	1.6	2.2	5.9	-
Total.....do....	5.7	1.8	8.1	5.9	12.3
Outside the West Coast region:					
Imports from Taiwan....1,000 dollars..	917	66	1,130	-	396
Imports from Singapore.....do....	14	99	1,107	361	190
Total.....do....	931	165	2,237	361	586
Market penetration by imports from--					
Taiwan.....percent..	0.9	0.1	1.1	-	1.5
Singapore.....do....	2/	0.1	1.1	1.3	0.7
Total.....do....	0.9	0.2	2.2	1.3	2.2

^{1/} Values are c.i.f., duty-paid.

^{2/} Less than 0.05 percent.

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

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

