Seamless Refined Copper Pipe and Tube from China and Mexico

Investigation Nos. 731-TA-1174-1175 (Review)

Publication 4650

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U.S. International Trade Commission



Washington, DC 20436

U.S. International Trade Commission

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Determinations	Page
Views of the Commission	
Part I: Introduction	I-1
Background	I-1
The original investigations	I-2
Prior related investigations	I-2
Summary data	I-2
Statutory criteria and organization of the report	I-9
Statutory criteria	I-9
Organization of report	I-11
Commerce's reviews	
Administrative reviews	
Changed circumstances reviews	I-13
Scope inquiry reviews	I-13
Five-year reviews	I-13
The subject merchandise	I-14
Commerce's scope	I-14
Tariff treatment	I-16
The subject product	I-16
Description and applications	I-16
Manufacturing processes	I-20
Domestic like product issues	I-24
U.S. market participants	I-24
U.S. producers	I-24
U.S. importers	I-25
U.S. purchasers	I-27
Apparent U.S. consumption	

Part II: Conditions of competition in the U.S. market	Page
U.S. market characteristics	ll-1
Channels of distribution	II-1
Geographic distribution	
Supply and demand considerations	
	II-3
U.S. demand	II-8
Substitutability issues	II-10
Lead times	II-10
Knowledge of country sources	II-11
Factors affecting purchasing decisions	II-11
Comparisons of domestic products, subject imports, and nonsubject imports	II-13
Comparison of U.Sproduced and imported SRC tubular products	II-15
Elasticity estimates	-17
U.S. supply elasticity	II-17
U.S. demand elasticity	II-17
, Substitution elasticity	II-18
Part III: Condition of the U.S. industry	-1
, Overview	
Changes experienced by the industry	111-2
Anticipated changes in operations	III-3
Constraints on capacity	III-6
U.S. producers' U.S. shipments and exports	III-6
U.S. producers' inventories	-7
U.S. producers' imports and purchases	111-8
U.S. employment, wages, and productivity	111-8
Financial experience of U.S. producers	III-10
Background	III-10
Operations on SRC tubular products	-11
Net sales quantity and value	III-18
Cost of goods sold and gross profit or (loss)	III-18

	Deser
SG&A expenses and operating income or (loss)	Page III-19
Other expenses and net income or (loss)	III-19
Variance analysis	III-20
Capital expenditures and research and development expenses	III-21
Assets and return on assets	111-22
Part IV: U.S. imports and the foreign industries	IV-1
U.S. imports	IV-1
Overview	IV-1
Imports from subject and nonsubject countries	IV-1
Cumulation considerations	IV-6
Fungibility	IV-6
Geographic markets	IV-6
Presence in the market	IV-7
U.S. importers' imports subsequent to June 30, 2016	IV-9
U.S. importers' inventories	IV-9
Subject country producers	IV-10
The industry in China	IV-10
Overview	IV-10
SRC tubular products operations in China	IV-11
Exports from China	IV-11
The industry in Mexico	IV-13
Overview	IV-13
SRC tubular products operations in Mexico	IV-15
Exports from Mexico	IV-16
Combined subject industries	IV-17
Antidumping or countervailing duty orders in third-country markets	IV-20
Global market	IV-20

Part V: Pricing data	Page V-1
Factors affecting prices	V-1
Raw material costs	V-1
Transportation costs to the U.S. market	V-2
U.S. inland transportation costs	V-2
Pricing practices	V-2
Pricing methods	V-2
Sales terms and discounts	V-4
Price leadership	V-4
Price data	V-5
Price trends	V-14
Price comparisons	V-14
Purchasers' perceptions of relative price trends	V-14
Appendixes	

A. Federal Register notices	A-1
B. List of hearing witnesses	B-1
C. Summary data	C-1
D. Comments on the effects of the orders and the likely effects of revocation	D-1

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

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 731-TA-1174-1175 (Review)

SEAMLESS REFINED COPPER PIPE AND TUBE FROM CHINA AND MEXICO

DETERMINATION

On the basis of the record¹ developed in these subject five-year reviews, the United States International Trade Commission (Commission) determines, pursuant to section 751(c) of the Tariff Act of 1930 (19 U.S.C. § 1675(c)) (the Act), that revocation of the antidumping duty orders on seamless refined copper pipe and tube from China and Mexico would likely to lead to the continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

BACKGROUND

The Commission instituted these reviews on October 1, 2015 (80 F.R. 59186) and determined on January 4, 2016 that it would conduct full reviews (81 F.R. 1967, January 14, 2016). Notice of the scheduling of the Commission's reviews and of a public hearing to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* on June 23, 2016 (81 F.R. 40922). The hearing was held in Washington, DC, on October 11, 2016, 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(f) of the Commission's Rules of Practice and Procedure (19 CFR § 207.2(f)).

Views of the Commission

Based on the record in these five-year reviews, we determine under section 751(c) of the Tariff Act of 1930, as amended ("the Tariff Act"), that revocation of the antidumping duty orders on seamless refined copper pipe and tube ("SRC pipe and tube") from China and Mexico would likely lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

I. Background

In November 2010, the Commission determined that an industry in the United States was threatened with material injury by reason of imports of SRC pipe and tube from China and Mexico that the U.S. Department of Commerce ("Commerce") had determined were sold in the United States at less than fair value ("LTFV").¹ Commerce issued antidumping duty orders with respect to SRC pipe and tube from both countries in November 2010.²

In October 2015, the Commission instituted these first five-year reviews of the antidumping duty orders on SRC pipe and tube from China and Mexico.³ In January 2016, the Commission found the domestic interested party group response and the respondent interested party group response adequate for both reviews, and decided to conduct full reviews.⁴

The Commission received joint prehearing and posthearing briefs from five domestic producers of SRC pipe and tube: (1) Cerro Flow Products, LLC; (2) Wieland Copper Products, LLC; (3) Howell Metal Company; (4) Mueller Copper Tube Products, Inc.; and (5) Precision Tube (collectively, "Domestic Producers"). Representatives of the Domestic Producers appeared at the Commission's hearing in support of continuation of the orders. The Commission also received prehearing and posthearing briefs from Nacional de Cobre, S.A. de C.V. ("Nacobre"), which is a Mexican producer and exporter of the subject merchandise. Representatives of Nacobre appeared at the Commission's hearing in opposition to the continuation of the orders. No Chinese respondent participated at the hearing or submitted a brief.

U.S. industry data are based on the questionnaire responses of eleven U.S. producers of SRC pipe and tube that are believed to account for virtually all domestic production of SRC pipe and tube in 2015.⁵ Import data are based primarily on official Commerce statistics.⁶ The

¹ Seamless Refined Copper Pipe and Tube from China and Mexico, Inv. Nos. 731-TA-1174-1175 (Final) ("Original Determinations"), USITC Pub. 4193 at 3 (November 2010).

² Seamless Refined Copper Pipe and Tube from Mexico and the People's Republic of China: Antidumping Duty Orders and Amended Final Determination of Sales at Less than Fair Value from Mexico, 75 Fed. Reg. 71070 (Nov. 22, 2010).

³ Seamless Refined Copper Pipe and Tube from China and Mexico, 80 Fed. Reg. 59186 (Oct. 1, 2015) (institution of five-year reviews).

⁴ Seamless Refined Copper Pipe and Tube from China and Mexico, 81 Fed. Reg. 1967-1968 (Jan. 4, 2016) (notice of Commission determinations to conduct full five-year reviews).

⁵ Confidential Report ("CR") at III-1, Public Report ("PR") at III-1.

Commission received questionnaire responses from 21 U.S. importers of SRC pipe and tube, which accounted for 93 percent of subject imports from China in 2014 and 20 percent of subject imports from China in 2015,⁷ 95 percent of subject imports from Mexico in 2014 and 100 percent of subject imports from Mexico in 2015, and 33 percent of nonsubject imports in 2014 and 32 percent of nonsubject imports in 2015.⁸ Foreign industry data and related information are based on the questionnaire responses of three producers and exporters of SRC pipe and tube in China accounting for approximately *** percent of production in China in 2015, and the questionnaire responses of four Mexican producers and exporters of SRC pipe and tube accounting for *** percent of production in Mexico in 2015.⁹

II. Domestic Like Product and Industry

A. Domestic Like Product

In making its determination under section 751(c) of the Tariff Act, the Commission defines the "domestic like product" and the "industry."¹⁰ The Tariff Act defines the "domestic like product" as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation under this subtitle."¹¹ The Commission's practice in five-year reviews is to examine the domestic like product definition from the original investigation and consider whether the record indicates any reason to revisit the prior findings.¹²

Commerce has defined the scope of the orders in these five-year reviews as follows:

{A}II seamless circular refined copper pipes and tubes, including redraw hollows, greater than or equal to 6 inches (152.4 mm) in length and measuring less than 12.130 inches (308.102 mm) (actual) in outside diameter ("OD"), regardless of wall thickness, bore

(...Continued)

⁸ CR/PR at IV-1.

⁹ CR at IV-16, PR at IV-10.

¹⁰ 19 U.S.C. § 1677(4)(A).

¹¹ 19 U.S.C. § 1677(10); see, e.g., Cleo Inc. v. United States, 501 F.3d 1291, 1299 (Fed. Cir. 2007); NEC Corp. v. Department of Commerce, 36 F. Supp. 2d 380, 383 (Ct. Int'l Trade 1998); Nippon Steel Corp. v. United States, 19 CIT 450, 455 (1995); Timken Co. v. United States, 913 F. Supp. 580, 584 (Ct. Int'l Trade 1996); Torrington Co. v. United States, 747 F. Supp. 744, 748-49 (Ct. Int'l Trade 1990), aff'd, 938 F.2d 1278 (Fed. Cir. 1991); see also S. Rep. No. 249, 96th Cong., 1st Sess. 90-91 (1979).

¹² See, e.g., Internal Combustion Industrial Forklift Trucks from Japan, Inv. No. 731-TA-377 (Second Review), USITC Pub. 3831 at 8-9 (Dec. 2005); *Crawfish Tail Meat from China*, Inv. No. 731-TA-752 (Review), USITC Pub. 3614 at 4 (July 2003); *Steel Concrete Reinforcing Bar from Turkey*, Inv. No. 731-TA-745 (Review), USITC Pub. 3577 at 4 (Feb. 2003).

⁶ CR/PR at Tables IV-1, IV-3, IV-4 & Figures IV-1 and IV-2.

⁷ The reason for the lower questionnaire coverage for subject imports from China in 2015 appears to be that ***, which responded to the importer's questionnaire, ***. CR/PR at IV-1 n.2.

(*e.g.*, smooth, enhanced with inner grooves or ridges), manufacturing process (*e.g.*, hot finished, cold-drawn, annealed), outer surface (*e.g.*, plain or enhanced with grooves, ridges, fins, gills), end finish (*e.g.*, plain end, swaged end, flared end, expanded end, crimped end, threaded), coating (*e.g.*, plastic, paint), insulation, attachments (*e.g.*, plain, capped, plugged, with compression or other fitting), or physical configuration (*e.g.*, straight, coiled, bent, wound on spools).

The scope of these investigations covers, but is not limited to, seamless refined copper pipe and tube produced or comparable to the American Society for Testing and Materials ("ASTM") ASTM-B42, ASTM-B68, ASTM-B75, ASTM-B88, ASTM-B88M, ASTM-B188, ASTM-B251, ASTM-B251M, ASTM-B280, ASTM-B302, ASTM-B306, ASTM-359, ASTM-B743, ASTM-B819, and ASTM-B903 specifications and meeting the physical parameters described therein. Also included within the scope are all sets of covered products, including "line sets" of seamless refined copper tubes (with or without fittings or insulation) suitable for connecting an outdoor air conditioner or heat pump to an indoor evaporator unit. The phrase "all sets of covered products" denotes any combination of items put up for sale that is comprised of merchandise subject to the scope.

"Refined copper" is defined as: (1) metal containing at least 99.85 percent by weight of copper; or (2) metal containing at least 97.5 percent by weight of copper, provided that the content by weight of any other element does not exceed the following limits:

ELEMENT	LIMITING CONTENT PERCENT BY WEIGHT
Ag – Silver	0.25
As – Arsenic	0.5
Cd – Cadmium	1.3
Cr – Chromium	1.4
Mg – Magnesium	0.8
Pb – Lead	1.5
S – Sulfur	0.7
Sn — Tin	0.8
Te – Tellurium	0.8
Zn – Zinc	1.0
Zr – Zirconium	0.3
Other elements (each)	0.3

Excluded from the scope of these orders are all seamless circular hollows of refined copper less than 12 inches in length whose OD (actual) exceeds its length. The products subject to these orders are currently classifiable under subheadings 7411.10.1030 and 7411.10.1090 of the Harmonized Tariff Schedule of the United States ("HTSUS"). Products subject to these investigations may also enter under HTSUS subheadings 7407.10.1500, 7419.99.5050, 8415.90.8065, and 8415.90.8085. Although the HTSUS subheadings are provided for convenience and customs purposes, the written

description of the scope of these orders is dispositive.¹³

The scope description has remained unchanged since the original investigations.¹⁴

SRC pipe and tube are fabricated products of high-purity copper, distinguished by a circular cross section of varying nominal sizes (typically 0.04"-12") and wall thicknesses.¹⁵ The inner and outer tubing surfaces are either smooth or enhanced (*e.g.*, with grooves, ridges, fins, or gills).¹⁶

SRC pipe and tube applications generally involve closed-loop thermal transfer or conveyance of fluids under pressure. Conveyance applications include residential, commercial, institutional, industrial, and municipal water systems, as well as distribution systems for other liquids and gasses. Thermal transfer applications include residential, commercial, institutional, and industrial heating systems; commercial refrigeration systems; and combined or split-unit air-conditioning systems.¹⁷

"Plumbing" (or "standard") tubing is commonly produced to various standards of the American Society for Testing and Materials ("ASTM"). The ASTM designations specify the chemical composition, outside diameter, wall thickness, strength, hardness, cleanliness, roundness, marking, and other requirements for SRC pipe and tube, based on end-use applications.¹⁸

In the original investigations, the Commission defined a single domestic like product, coextensive with the scope, consisting of all SRC pipe and tube.¹⁹ In these reviews, Domestic

¹⁹ Original Determination, USITC Pub. 4193 at 7-12. In the original investigations, the petitioners argued that the Commission should find a single domestic like product consisting of all SRC pipe and tube, coextensive with Commerce's scope. Id. at 7. Most respondents did not disagree with finding one like product, although two importers argued that the Commission should define plumbing SRC pipe and tube and industrial SRC pipe and tube as two separate domestic like products. Id. Applying its traditional six-factor test, the Commission defined a single domestic like product. It found that plumbing and industrial pipe and tube products possess at least some similarities with respect to physical characteristics and uses, regardless of their manner of production. Id. at 8. It observed that there was some interchangeability between plumbing and industrial pipe and tube, as well as some similarities in terms of the channels through which they are traded, and some commonality of manufacturing facilities and employees. Id. at 8-10. With respect to customer and producer perceptions, it found that the evidence was mixed with some market participants viewing plumbing and industrial SRC pipe and tube on a continuum while other market participants perceived them to be distinct. Id. at 10-11. It observed that, although plumbing and industrial pipe and tube are sold under different price structures, those structural differences did not necessarily result in actual price differences between plumbing and industrial pipe and tube with similar characteristics. Id. at 11. (Continued...)

¹³ Seamless Refined Copper Pipe and Tube from the People's Republic of China and Mexico, 81 Fed. Reg. 38134 (June 13, 2016) (final results of the full sunset reviews of the antidumping duty orders).

¹⁴ See Original Determinations, USITC Pub. 4193 at 5-6.

¹⁵ CR at I-21, PR at I-16.

¹⁶ CR at I-21, PR at I-17.

¹⁷ CR at I-22, PR at I-17.

¹⁸ CR at I-22, PR at I-17.

Producers agree with the domestic like product definition from the original investigations.²⁰ Nacobre states that it accepts this definition of the domestic like product.²¹ There is no new information obtained during these reviews that would suggest any reason to revisit the domestic like product definition from the original investigations.²² Accordingly, we again define a single domestic like product, coextensive with Commerce's scope, consisting of all SRC pipe and tube.

B. Domestic Industry and Related Parties

Section 771(4)(A) of the Tariff Act defines the relevant industry as the domestic "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."²³ In defining the domestic industry, the Commission's general practice has been to include in the industry producers of all domestic production of the like product, whether toll-produced, captively consumed, or sold in the domestic merchant market.

We must determine whether any producer of the domestic like product should be excluded from the domestic industry pursuant to section 771(4)(B) of the Tariff Act. This provision allows the Commission, if appropriate circumstances exist, to exclude from the domestic industry producers that are related to an exporter or importer of subject merchandise or which are themselves importers.²⁴ Exclusion of such a producer is within the Commission's discretion based upon the facts presented in each investigation.²⁵

(...Continued)

Explaining that the pertinent factors indicated that there was not a clear dividing line between plumbing and industrial tube, and most respondent parties did not disagree with defining one domestic like product as petitioners had proposed, the Commission defined one domestic like product consisting of all SRC pipe and tube. *Id*.

²⁰ Domestic Producers' Prehearing Br. at 9.

²¹ Hearing Tr. at 169 (Winton).

²² See generally, CR at I-16-22, PR at I-12-17.

²³ 19 U.S.C. § 1677(4)(A). The definitions in 19 U.S.C. § 1677 are applicable to the entire subtitle containing the antidumping and countervailing duty laws, including 19 U.S.C. §§ 1675 and 1675a. *See* 19 U.S.C. § 1677.

²⁴ See Torrington Co v. United States, 790 F. Supp. 1161, 1168 (Ct. Int'l Trade 1992), aff'd without opinion, 991 F.2d 809 (Fed. Cir. 1993); Sandvik AB v. United States, 721 F. Supp. 1322, 1331-32 (Ct. Int'l Trade 1989), aff'd mem., 904 F.2d 46 (Fed. Cir. 1990); Empire Plow Co. v. United States, 675 F. Supp. 1348, 1352 (Ct. Int'l Trade 1987).

²⁵ The primary factors the Commission has examined in deciding whether appropriate circumstances exist to exclude a related party include the following:

(1) the percentage of domestic production attributable to the importing producer;

(2) the reason the U.S. producer has decided to import the product subject to investigation (whether the firm benefits from the LTFV sales or subsidies or whether the firm must import in order to enable it to continue production and compete in the U.S. market);

(3) whether inclusion or exclusion of the related party will skew the data for the rest of the industry;

(Continued...)

Of the 11 responding domestic producers in the current reviews, three are related parties based on their imports of subject merchandise during the January 2010-June 2016 period of review ("POR"): ***.²⁶ *** are also related parties by virtue of their corporate affiliations with entities that exported subject merchandise during the POR.²⁷ Additionally, domestic producers *** are related parties because they are controlled by or share common control with exporters or importers of subject merchandise.²⁸ No party argues for the exclusion of any firm as a related party.²⁹ For the reasons below, we determine that appropriate circumstances do not exist to exclude any firm from the domestic industry as a related party.

***. *** accounted for *** percent of domestic production of SRC pipe and tube in 2015.³⁰ As such, it was the *** largest domestic producer.³¹ *** continuation of the order with respect to subject imports from China and *** on continuation of the order with respect to subject imports from Mexico.³² *** imported small and generally declining quantities of subject merchandise from Mexico in ***, and did not import any subject merchandise for the remainder of the POR.³³ As a ratio to its U.S. production, its subject imports were *** percent in 2010, *** percent in 2011, and *** percent in 2012.³⁴ Because its subject imports were minimal throughout the POR, the record indicates that *** principal interest lies in domestic production. In view of these factors, and because no party has argued for *** exclusion from the domestic industry, we find that circumstances are not appropriate for its exclusion.

(...Continued)

(4) the ratio of import shipments to U.S. production for the imported product; and

(5) whether the primary interest of the importing producer lies in domestic production or importation. *Changzhou Trina Solar Energy Co. v. USITC*, 100 F. Supp.3d 1314, 1326-31(Ct. Int'l. Trade 2015); see *also Torrington Co. v. United States*, 790 F. Supp. at 1168.

²⁶ 19 U.S.C. § 1677(4)(B)(i); CR/PR at Table III-8.

²⁷ 19 U.S.C. § 1677(4)(B)(ii)(I), (II). Domestic producer ***. CR/PR at Table I-8. *** exported subject merchandise to the United States during the POR. *See* *** Foreign Producers'/Exporters' Questionnaire at II-14. Domestic producer ***, a Chinese producer and exporter of subject merchandise. CR/PR at I-8; *see* *** Foreign Producers'/Exporters' Questionnaire at II-14.

²⁸ See 19 U.S.C. § 1677(4)(B)(ii)(II), (III). Domestic producers Howell and Precision are each subsidiaries of domestic producer Mueller, ***. CR/PR at Table I-8. National Copper is a subsidiary of domestic producer ST Products, ***. CR/PR at Tables I-7 and I-8.

²⁹ Domestic Producers argue that no related parties should be excluded from the domestic industry definition because appropriate circumstances do not exist to exclude them. Domestic Producers' Posthearing Br., Answers to Commissioners' Questions at 8-9; Hearing Tr. at 115 (Levy). At the hearing, counsel for Nacobre indicated that the issue of whether to exclude unspecified firms from the domestic industry under the related parties provision of the statute was an "open question" and that he "could see the argument being made that you should exclude the related parties." Hearing Tr. at 131, 169-70. Nevertheless, Nacobre did not address the issue of related parties in either its prehearing or posthearing briefs.

³⁰ CR/PR at Table I-7.

³¹ CR/PR at Table I-7.

³² CR/PR at Table I-7; *** U.S. Producer Questionnaire at I-3.

³³ *** imported subject merchandise from Mexico totaling ***. CR/PR at Table III-8.

³⁴ CR/PR at Table III-8.

***. *** accounted for *** percent of domestic production of SRC pipe and tube in 2015.³⁵ As such, it was the *** largest domestic producer.³⁶ *** on continuation of the orders.³⁷ *** imported small quantities of subject merchandise from China in ***, and did not import any subject merchandise for the remainder of the POR.³⁸ As a ratio to its U.S. production, its subject imports were *** percent in 2010, *** percent in 2011, and less than *** percent in 2012 and 2013.³⁹ Because its subject imports ranged from nonexistent to small during the POR, the record indicates that *** principal interest lies in domestic production. In view of these factors, and because no party has argued for *** exclusion from the domestic industry, we find that circumstances are not appropriate for its exclusion.

Because *** did not itself import subject merchandise, but is a related party by virtue of its relationship with ***, our analysis that *** primary interest is in domestic production is applicable as well to ***.⁴⁰ We accordingly find that appropriate circumstances do not exist to exclude *** from the domestic industry.

***. *** accounted for *** percent of domestic production of SRC pipe and tube in 2015.⁴¹ As such, it was the *** largest domestic producer.⁴² It *** on continuation of the orders.⁴³ *** imported subject merchandise from ***.⁴⁴ *** opened its U.S. production facility in Pine Hill, Alabama in May 2014 and invested over *** in this facility during 2014-2015.⁴⁵ *** ratio of subject imports to domestic production was *** before it ramped up its domestic production, whereupon the ratio declined *** for the remainder of the POR.⁴⁶ As a ratio to its domestic production, its subject imports were *** percent in 2014, *** percent in 2015, *** percent in interim 2015, and *** percent in interim 2016.⁴⁷ Given that *** ratio of subject imports to domestic production *** as it increased its U.S. production, the record supports finding that its interests rested primarily in domestic production. Moreover, no party argues for its exclusion from the domestic industry. We find that appropriate circumstances do not exist to exclude *** from the domestic industry.

***. *** accounted for *** percent of domestic production in 2015.⁴⁸ As such, it was the *** domestic producer.⁴⁹ *** of the orders.⁵⁰ It is a related party solely based on its

³⁵ CR/PR at Table I-7.

³⁶ CR/PR at Table I-7.

³⁷ CR/PR at Table I-7.

³⁸ *** imported subject merchandise from China totaling ***. CR/PR at Table III-8.

³⁹ CR/PR at Table III-8.

⁴⁰ ***. *** U.S. Producers' Questionnaire at II-5a. *** on continuation or revocation of the orders. CR/PR at Table I-7.

⁴¹ CR/PR at Table I-7.

⁴² CR/PR at Table I-7.

⁴³ CR/PR at Table I-7.

⁴⁴ CR/PR at Table III-8.

⁴⁵ CR/PR at Tables III-1, III-8, and III-13.

⁴⁶ CR/PR at Table III-8.

⁴⁷ CR/PR at Table III-8.

⁴⁸ CR/PR at Table I-7.

corporate affiliation with a subject producer in China. *** did not import subject merchandise during the POR and its interests rested exclusively in domestic production.⁵¹ We find that appropriate circumstances do not exist to exclude *** from the domestic industry.

Because *** did not themselves import subject merchandise during the POR, but are related parties by virtue of their relationship with ***, our analysis that *** interests rested exclusively in domestic production is applicable as well to ***.⁵² We accordingly find that appropriate circumstances do not exist to exclude *** or *** from the domestic industry.

For the above reasons, we find that appropriate circumstances do not exist to exclude any firms from the domestic industry. We therefore define the domestic industry as all domestic producers of SRC pipe and tube.

III. Cumulation

A. Legal Standard

With respect to five-year reviews, section 752(a) of the Tariff Act provides as follows: the Commission may cumulatively assess the volume and effect of imports of the subject merchandise from all countries with respect to which reviews under section 1675(b) or (c) of this title were initiated on the same day, if such imports would be likely to compete with each other and with domestic like products in the United States market. The Commission shall not cumulatively assess the volume and effects of imports of the subject merchandise in a case in which it determines that such imports are likely to have no discernible adverse impact on the domestic industry.⁵³

Cumulation therefore is discretionary in five-year reviews, unlike original investigations, which are governed by section 771(7)(G)(i) of the Tariff Act.⁵⁴ The Commission may exercise its discretion to cumulate, however, only if the reviews are initiated on the same day, the

(...Continued)

⁵² *** accounted for *** percent of U.S. SRC pipe and tube production in 2015 and *** continuation of the orders. *** accounted for *** percent of domestic production of SRC pipe and tube production in 2015 and *** continuation of the orders. CR/PR at Table I-7.

⁵³ 19 U.S.C. § 1675a(a)(7).

⁵⁴ 19 U.S.C. § 1677(7)(G)(i); *see also, e.g., Nucor Corp. v. United States*, 601 F.3d 1291, 1293 (Fed. Cir. 2010) (Commission may reasonably consider likely differing conditions of competition in deciding whether to cumulate subject imports in five-year reviews); *Allegheny Ludlum Corp. v. United States*, 475 F. Supp. 2d 1370, 1378 (Ct. Int'l Trade 2006) (recognizing the wide latitude the Commission has in selecting the types of factors it considers relevant in deciding whether to exercise discretion to cumulate subject imports in five-year reviews); *Nucor Corp. v. United States*, 569 F. Supp. 2d 1328, 1337-38 (Ct. Int'l Trade 2008).

⁴⁹ CR/PR at Table I-7.

⁵⁰ CR/PR at Table I-7.

⁵¹ CR/PR at Table III-8.

Commission determines that the subject imports are likely to compete with each other and the domestic like product in the U.S. market, and imports from each such subject country are not likely to have no discernible adverse impact on the domestic industry in the event of revocation. Our focus in five-year reviews is not only on present conditions of competition, but also on likely conditions of competition in the reasonably foreseeable future.

B. Original Investigations

In the original investigations, the Commission cumulated subject imports from China and Mexico for purposes of its analysis of present material injury and exercised its discretion to cumulate subject imports for purposes of its analysis of threat of material injury.⁵⁵ It found that SRC pipe and tube was a fungible product sold in overlapping channels of distribution, including both distributors and end users.⁵⁶ It also found that there was geographic overlap between subject imports from both countries and the domestic like product, and that subject imports from both countries and the U.S. market throughout the original period of investigation ("POI").⁵⁷

For purposes of its threat analysis, the Commission acknowledged that there were some differences in volume and market share trends between subject imports from China and Mexico but emphasized that the market share of subject imports from both countries declined by similar percentages in interim 2010 at the end of the POI.⁵⁸ It observed that subject imports from both countries undersold the domestic like product at times during the original POI, with subject imports from Mexico underselling the domestic like product somewhat more frequently than did subject imports from China.⁵⁹ It found that, while the SRC pipe and tube industry in Mexico was significantly smaller than the industry in China, the Mexican industry had undergone significant expansion during the POI and that the SRC pipe and tube industries in both China and Mexico relied on export markets to absorb a significant share of production.⁶⁰ It highlighted the fact that the Mexican industry was closely intertwined with both the domestic and Chinese industries producing SRC pipe and tube, especially since all of the reported capacity expansions in Mexico were undertaken by producers with production affiliates in the United States or in China.⁶¹ Furthermore, it concluded that there was significant and growing overlap in the product types exported to the United States by subject producers in China and Mexico during the POI.⁶²

⁵⁵ Original Determinations, USITC Pub. 4193 at 16-18.

⁵⁶ Original Determinations, USITC Pub. 4193 at 16-17.

⁵⁷ Original Determinations, USITC Pub. 4193 at 17.

⁵⁸ Original Determinations, USITC Pub. 4193 at 17-18.

⁵⁹ Original Determinations, USITC Pub. 4193 at 18.

⁶⁰ Original Determinations, USITC Pub. 4193 at 18.

⁶¹ Original Determinations, USITC Pub. 4193 at 18.

⁶² Original Determinations, USITC Pub. 4193 at 18.

C. Arguments of the Parties

Domestic Producers argue that the Commission should exercise its discretion to cumulate subject imports from China and Mexico. They argue that the discernible adverse impact and reasonable overlap requirements for cumulation are satisfied based upon the pertinent record evidence in these five-year reviews.⁶³ They assert that subject imports from China and Mexico competed under similar conditions of competition in the U.S. market during the POR since they displayed similar volume and price trends.⁶⁴

Nacobre argues that the Commission should not cumulate subject imports from Mexico with subject imports from China. It asserts that subject imports from China and Mexico will likely continue to compete under different conditions of competition in the U.S. market based upon Mexico's close proximity to the United States and purported shorter lead times for subject imports from Mexico.⁶⁵ It also emphasizes that subject imports from Mexico and China displayed different volume trends during the POR.⁶⁶

D. Likelihood of No Discernible Adverse Impact

The statute precludes cumulation if the Commission finds that subject imports from a country are likely to have no discernible adverse impact on the domestic industry.⁶⁷ Neither the statute nor the Uruguay Round Agreements Act ("URAA") Statement of Administrative Action ("SAA") provides specific guidance on what factors the Commission is to consider in determining that imports "are likely to have no discernible adverse impact" on the domestic industry.⁶⁸ With respect to this provision, the Commission generally considers the likely volume of subject imports and the likely impact of those imports on the domestic industry within a reasonably foreseeable time if the orders are revoked. Our analysis for each of the subject countries takes into account, among other things, the nature of the product and the behavior of subject imports in the original investigations.

Based on the record in these reviews, we do not find that imports from either subject country would likely have no discernible adverse impact on the domestic industry in the event of revocation.

China. In the original investigations, the quantity of subject imports from China increased from 2007 to 2008, declined thereafter, and was its lowest at the end of the January 2007-June 2010 POI.⁶⁹ Their market share, however, increased from 2007 to 2009.⁷⁰ The

⁶³ Domestic Producers' Prehearing Br. at 11-14.

⁶⁴ Domestic Producers' Prehearing Br. at 3-4.

⁶⁵ Nacobre's Posthearing Br. at 1-4.

⁶⁶ Nacobre's Posthearing Br. at 4.

⁶⁷ 19 U.S.C. § 1675a(a)(7).

⁶⁸ SAA, H.R. Rep. No. 103-316, vol. I at 887 (1994).

⁶⁹ Confidential Report from the Original Investigations at Table IV-2 (EDIS Doc. No. 571247); CR/PR at Table I-1.

⁷⁰ Confidential Report from the Original Investigations at Table IV-2; CR/PR at Table I-1.

volume of subject imports from China was 41.6 million pounds in 2010, 20.0 million pounds in 2011, 19.6 million pounds in 2012, 19.5 million pounds in 2013, 21.8 million pounds in 2014, 1.1 million pounds in 2015, 301,000 pounds in interim 2015, and 633,000 pounds in interim 2016.⁷¹ Subject imports from China as a share of apparent U.S. consumption were 6.4 percent in 2010, 3.3 percent in 2011, 3.4 percent in 2012, 3.3 percent in 2013, 3.5 percent in 2014, 0.2 percent in 2015, 0.1 percent in interim 2015, and 0.2 percent in interim 2016.⁷²

Three Chinese producers accounting for approximately *** percent of China's production of SRC pipe and tube in 2015 responded to the Commission's questionnaires.⁷³ These producers reported capacity in China of *** pounds in 2010, *** pounds in 2011, *** pounds in 2012, *** pounds in 2013, *** pounds in 2014, *** pounds in 2015, and *** pounds in interim 2015 and interim 2016.⁷⁴ Capacity utilization of the responding producers ranged from a period high of *** percent in 2010 to a period low of *** percent in interim 2016.⁷⁵ Exports of SRC pipe and tube ranged from *** to *** percent of responding producers' total shipments over the POR.⁷⁶ Subject imports from China undersold the domestic like product in 74 of 135 quarterly comparisons during the original investigations and in 22 of 50 quarterly comparisons in these reviews.⁷⁷ Thus, subject imports from China declined significantly after the order was imposed, Chinese producers have excess capacity and have maintained an interest in the U.S. market throughout the POR, and the subject imports have continued to undersell the domestic like product with the order in place. In light of the foregoing, we do not find that subject imports from China would likely have no discernible adverse impact on the domestic industry if the order on China were revoked.

Mexico. In the original investigations, subject imports from Mexico decreased steadily throughout the POI.⁷⁸ During the POR, they fluctuated from 26.0 million pounds in 2010 to 4.0 million pounds in 2011, 1.9 million pounds in 2012, 1.4 million pounds in 2013, 4.5 million pounds in 2014, and 13.3 million pounds in 2015; they were 6.0 million pounds in interim 2015 and 7.9 million pounds in interim 2016.⁷⁹ Subject imports from Mexico as a share of apparent U.S. consumption were 4.0 percent in 2010, 0.6 percent in 2011, 0.3 percent in 2012, 0.2 percent in 2013, 0.7 percent in 2014, 2.1 percent in 2015, 2.4 percent in interim 2015, and 1.7 percent in interim 2016.⁸⁰ Reported capacity by subject producers in Mexico for production of SRC pipe and tube was *** pounds in 2010, *** pounds in each year from 2011 to 2015, and

⁷⁷ CR/PR at Table V-14.

⁷⁸ Confidential Report from the Final Investigation at Table IV-2.

⁷⁹ CR/PR at Table IV-1.

⁸⁰ CR/PR at Table I-10.

⁷¹ CR/PR at Table IV-1.

⁷² CR/PR at Table I-10.

⁷³ CR at IV-16, PR at IV-10.

⁷⁴ CR/PR at Table IV-9.

⁷⁵ CR/PR at Table IV-9.

⁷⁶ CR/PR at Table IV-8. This range describes total exports to all countries, including the United States.

*** pounds in interim 2015 and interim 2016.⁸¹ Subject producers in Mexico had a large amount of unused capacity throughout the POR. These producers' capacity utilization ranged from a period low of *** percent in interim 2015 to a period high of *** percent in 2014.⁸² These producers reported that *** to *** percent of total shipments was exported on an annual basis during the POR.⁸³ Subject imports from Mexico undersold the domestic like product in 75 of 114 quarterly comparisons during the original investigations and in 19 of 38 quarterly comparisons in these reviews.⁸⁴

To the extent that Nacobre is arguing that cumulation is not warranted because subject imports from Mexico would likely have no discernible adverse impact, these arguments are unpersuasive. The volume and market share of subject imports from Mexico did not remain constant during the POR; instead, they increased steadily from 2013 to 2015.⁸⁵ Consequently, data from the POR do not support a finding that the industry in Mexico is either unable or disinclined to increase exports to the United States upon revocation. Moreover, Nacobre has not furnished any basis for its speculation concerning the likely behavior upon revocation by Mexican subject producers other than itself. To the contrary, Mexican subject producer *** indicated in its questionnaire response that it *** if the order on subject imports from Mexico were revoked.⁸⁶ Given these considerations, and the fact that the Mexican industry for SRC pipe and tube possesses considerable excess capacity accounting for approximately *** percent of U.S. apparent consumption in 2015,⁸⁷ we cannot conclude that subject imports from Mexico.

E. Likelihood of a Reasonable Overlap of Competition

The Commission generally has considered four factors intended to provide a framework for determining whether subject imports compete with each other and with the domestic like product.⁸⁸ Only a "reasonable overlap" of competition is required.⁸⁹ In five-year reviews, the

⁸⁶ See *** Foreign Producer Questionnaire at III-6 and III-7.

⁸⁷ Derived from CR/PR at Tables I-10 and IV-12.

⁸⁸ The four factors generally considered by the Commission in assessing whether imports compete with each other and with the domestic like product are as follows: (1) the degree of fungibility between subject imports from different countries and between subject imports and the domestic like product, including consideration of specific customer requirements and other quality-related questions; (2) the presence of sales or offers to sell in the same geographical markets of imports from different countries and the domestic like product; (3) the existence of common or similar channels of distribution for subject imports from different countries and the domestic like product; and (4) whether subject (Continued...)

⁸¹ CR/PR at Table IV-12.

⁸² CR/PR at Table IV-12.

⁸³ CR/PR at Table IV-12.

⁸⁴ CR/PR at Table V-14.

⁸⁵ Subject imports from Mexico increased from 1.4 million pounds in 2013 to 4.5 million pounds in 2014 and 13.3 million pounds in 2015. Their market share increased 0.2 percent in 2013 to 0.7 percent in 2014 and 2.1 percent in 2015. CR/PR at Table IV-1.

relevant inquiry is whether there likely would be competition even if none currently exists because the subject imports are absent from the U.S. market.⁹⁰

Fungibility. There is a high degree of substitutability among subject imports from China and Mexico and the domestic like product.⁹¹ All U.S. producers and most responding importers and purchasers reported that SRC pipe and tube from China, Mexico, and the United States are always or frequently interchangeable.⁹² Out of the five non-price factors most frequently identified as very important in purchasing decisions, majorities or pluralities of responding purchasers found that the domestic like product and subject imports from China and Mexico were comparable in three (availability, product consistency, and quality meets industry standards),⁹³ the domestic like product was superior to subject imports from China and Mexico in one (delivery time),⁹⁴ and the domestic like product was superior to subject imports from China Mexico from China while comparable to subject imports from Mexico in one (reliability of supply).⁹⁵

Channels of Distribution. U.S. shipments of SRC pipe and tube by domestic producers and U.S. importers are sold to both distributors and end users. During the POR, the slight majority of U.S. producers' U.S. shipments of SRC pipe and tube was sold to distributors while the remainder was sold to end users.⁹⁶ SRC pipe and tube from China was sold exclusively or almost exclusively to end users for most of the POR, except for 2015 when it was sold predominantly to end users and in substantial quantities to distributors, and interim 2016 when it was sold exclusively to distributors.⁹⁷ For most of the POR, SRC pipe and tube from Mexico was sold predominantly to end users except for 2012 when it was sold predominantly to distributors.⁹⁸ That most subject imports from China and Mexico were shipped for most of the

(...Continued)

imports are simultaneously present in the market with one another and the domestic like product. *See, e.g., Wieland Werke, AG v. United States,* 718 F. Supp. 50 (Ct. Int'l Trade 1989).

⁸⁹ See Mukand Ltd. v. United States, 937 F. Supp. 910, 916 (Ct. Int'l Trade 1996); Wieland Werke, 718 F. Supp. at 52 ("Completely overlapping markets are not required."); United States Steel Group v. United States, 873 F. Supp. 673, 685 (Ct. Int'l Trade 1994), *aff'd*, 96 F.3d 1352 (Fed. Cir. 1996). We note, however, that there have been investigations where the Commission has found an insufficient overlap in competition and has declined to cumulate subject imports. *See, e.g., Live Cattle from Canada and Mexico*, Inv. Nos. 701-TA-386 and 731-TA-812-13 (Preliminary), USITC Pub. 3155 at 15 (Feb. 1999), *aff'd sub nom, Ranchers-Cattlemen Action Legal Foundation v. United States*, 74 F. Supp. 2d 1353 (Ct. Int'l Trade 1999); *Static Random Access Memory Semiconductors from the Republic of Korea and Taiwan*, Inv. Nos. 731-TA-761-62 (Final), USITC Pub. 3098 at 13-15 (Apr. 1998).

⁹⁰ See generally, Chefline Corp. v. United States, 219 F. Supp. 2d 1313, 1314 (Ct. Int'l Trade 2002).

⁹¹ CR at II-14, PR at II-10.

⁹² CR/PR at Table II-10.

⁹³ CR/PR at Tables II-7 and II-9.

⁹⁴ CR/PR at Tables II-7 and II-9. With respect to delivery time, most purchasers reported that subject imports from China were inferior to subject imports from Mexico. CR/PR at Table II-9.

⁹⁵ CR/PR at Tables II-7 and II-9. With respect to reliability of supply, most purchasers reported that subject imports from China and Mexico were comparable. CR/PR at Table II-9.

⁹⁶ CR/PR at Table II-1.

⁹⁷ CR/PR at Table II-1.

⁹⁸ CR/PR at Table II-1.

POR to the same channel of distribution (end users), as were appreciable proportions of the domestic like product, is sufficient in our view to establish a likely reasonable overlap of channels of distribution. Also, the record indicates that during the POR subject imports from both China and Mexico were sold in substantial quantities in the industrial sector of the U.S. market, along with domestically produced SRC pipe and tube.⁹⁹ This further demonstrates reasonable overlap in the channels of distribution.

Geographic Overlap. Most responding domestic producers reported selling SRC pipe and tube to all continental regions of the United States during the POR.¹⁰⁰ Most responding importers reported selling SRC pipe and tube to all regions in the continental United States except for the Mountains Region where four of nine responding importers reported selling SRC pipe and tube during the POR.¹⁰¹

Simultaneous Presence in Market. Subject imports from China and Mexico were both present in the U.S. market in every month of the POR between January 2010 and August 2016.¹⁰² The domestic like product also was sold in the U.S. market throughout the POR.¹⁰³

Conclusion. We find that, upon revocation, there would likely be a reasonable overlap of competition between subject imports from China and Mexico and between subject imports from both sources and the domestic like product. SRC pipe and tube products from all three sources remain fungible. Upon revocation, subject imports from China and Mexico and the domestic like product would likely be sold in common channels of distribution and have geographic overlap and simultaneous presence in the market, as was the case during the current POR and the original POI.

F. Other Likely Conditions of Competition

In determining whether to exercise our discretion to cumulate the subject imports, we next consider whether subject imports from the subject countries would likely compete under different conditions of competition in the U.S. market if the orders under review were to be revoked.

The record in these reviews does not indicate that there would likely be any significant differences in the conditions of competition between subject imports from China and Mexico upon revocation. Subject producers in both China and Mexico have substantial available

⁹⁹ CR/PR at Tables IV-2 and V-14. At the hearing, counsel for Nacobre acknowledged that Nacobre was not arguing specifically that the Commission should decline to cumulate subject imports from China and Mexico on the basis of a lack of a likely reasonable overlap in competition. Hearing Tr. at 147-48 (Winton). Moreover, Nacobre did not specifically dispute the Domestic Producers' assertions concerning the overlap in competition between subject imports from China and Mexico in the industrial sector of the market. *See, e.g.*, Domestic Producers' Posthearing Br. at 4.

¹⁰⁰ CR/PR at Table II-2.

¹⁰¹ CR/PR at Table II-2.

¹⁰² CR/PR at Table IV-4.

¹⁰³ CR/PR at Table III-6.

capacity to produce SRC pipe and tube and rely substantially on export markets.¹⁰⁴ Moreover, as discussed above, subject imports from both China and Mexico remained present in the U.S. market in fluctuating quantities during the POR, and quantities of subject imports from each source were lower in 2015 than in 2010.¹⁰⁵ Although Nacobre asserts that subject imports from Mexico have shorter lead times than imports from China due to Mexico's geographic proximity to the United States, the record does not indicate that this will have an appreciable effect on likely conditions of competition.¹⁰⁶ Purchasers were mixed in terms of their perceptions concerning the comparability between subject imports from China and Mexico with respect to delivery times.¹⁰⁷ Moreover, there is no evidence in the record that any difference in lead times restricted Chinese subject imports from competing in the U.S. market during the POR or attenuated competition during the POR between subject imports from China and Mexico. We find that their comparability in other purchasing factors reported as equally or more important than delivery times strengthens our finding that there would not likely be any significant differences in the conditions of competition between subject imports from China and Mexico

¹⁰⁴ CR/PR at Tables IV-8 to IV-14.

¹⁰⁵ CR/PR at Table IV-1. Nacobre argues that the Commission should not exercise its discretion to cumulate subject imports from China and Mexico because they exhibited different volume trends during the POR. Nacobre's Posthearing Br. at 4. We recognize that subject imports from Mexico increased during the latter portion of the POR while subject imports from China declined. CR/PR at Table IV-1. In our view, however, the record does not indicate any appreciable difference in overall volume trends during the POR between subject imports from China and Mexico. Subject import volumes for both China and Mexico declined dramatically after the imposition of the orders in 2010. CR/PR at Table I-1. During the POR, subject imports from both subject countries were significantly lower in the last full year of the period (*i.e.*, 2015) than in the first full year of the period (*i.e.*, 2010). CR/PR at Table IV-1. Subject imports from China declined from 41.6 million pounds in 2010 to 1.1 million pounds in 2015. *Id*.

¹⁰⁶ We note that Nacobre's counsel did not specifically identify lead times for subject merchandise from Mexico, indicating instead that they must be "considerably shorter" than 11.2 days, the average for subject import shipments in 2015 based on importers' reports. *See, e.g.,* Nacobre Posthearing Br. at 2; *see* CR at II-14-II-15, PR at II-10. Moreover, the overwhelming majority of subject import shipments in 2015 consisted of subject import shipments from Mexico. *See, e.g.,* ***; see also CR/PR at Tables IV-1 and C-1 (indicating that the overwhelming majority of subject imports in 2015 consisted of subject imports from Mexico).

¹⁰⁷ CR/PR at Table II-9. When comparing subject merchandise from China and Mexico in terms of delivery time, 3 purchasers reported that the Chinese product was superior, 3 purchasers reported that it was comparable, and 7 purchasers reported that it was inferior. *Id.*

¹⁰⁸ Majorities or pluralities of responding purchasers found that subject imports from China and Mexico were comparable in four of five non-price factors most frequently identified as very important in purchasing decisions (*i.e.*, availability, product consistency, reliability of supply, and quality meets industry standards). CR/PR at Table II-9. For these reasons, we do not find any differences in likely conditions of competition between subject imports from China and Mexico that would warrant exercising our discretion not to cumulate these imports.

G. Conclusion

We find that the subject imports from China and Mexico would not have no discernible adverse impact upon revocation and that there would likely be a reasonable overlap of competition between subject imports from these countries and between subject imports from each country and the domestic like product. We also determine that subject imports from China and Mexico would likely compete under similar conditions of competition upon revocation. Accordingly, we exercise our discretion to cumulate subject imports from China and Mexico for purposes of these reviews.

IV. Revocation of the Antidumping Orders Would Likely Lead to Continuation or Recurrence of Material Injury Within a Reasonably Foreseeable Time

A. Legal Standards

In a five-year review conducted under section 751(c) of the Tariff Act, Commerce will revoke an antidumping or countervailing duty order unless: (1) it makes a determination that dumping or subsidization is likely to continue or recur and (2) the Commission makes a determination that revocation of the antidumping or countervailing duty order "would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time."¹¹⁰ The SAA states that "under the likelihood standard, the Commission will engage in a counterfactual analysis; it must decide the likely impact in the reasonably foreseeable future of an important change in the status quo – the revocation or termination of a proceeding and the elimination of its restraining effects on volumes and prices of imports."¹¹¹ Thus, the likelihood standard is prospective in nature.¹¹² The U.S. Court of International Trade has found that

¹¹⁰ 19 U.S.C. § 1675a(a).

¹¹¹ SAA at 883-84. The SAA states that "{t}he likelihood of injury standard applies regardless of the nature of the Commission's original determination (material injury, threat of material injury, or material retardation of an industry). Likewise, the standard applies to suspended investigations that were never completed." *Id*. at 883.

¹¹² While the SAA states that "a separate determination regarding current material injury is not necessary," it indicates that "the Commission may consider relevant factors such as current and likely (Continued...)

^{(...}Continued)

¹⁰⁹ Nacobre also suggests that the Commission should exercise its discretion not to cumulate subject imports from Mexico and China because Nacobre sells a niche product to select customers. *See, e.g.,* Nacobre's Posthearing Br. at 1-2; Hearing Tr. at 140-41 (Elloriaga). However, the record in these five-year reviews indicates that, as a whole, Mexican subject producers manufactured and sold the full range of SRC pipe and tube products during the POR. *See, e.g.,* CR/PR at Table V-14; Nacobre's Foreign Producer Questionnaire Response at III-17; Domestic Producers' Posthearing Br. at Exh. 2.

"likely," as used in the five-year review provisions of the Act, means "probable," and the Commission applies that standard in five-year reviews.¹¹³

The statute states that "the Commission shall consider that the effects of revocation or termination may not be imminent, but may manifest themselves only over a longer period of time."¹¹⁴ According to the SAA, a "'reasonably foreseeable time' will vary from case-to-case, but normally will exceed the 'imminent' timeframe applicable in a threat of injury analysis in original investigations."¹¹⁵

Although the standard in a five-year review is not the same as the standard applied in an original investigation, it contains some of the same fundamental elements. The statute provides that the Commission is to "consider the likely volume, price effect, and impact of imports of the subject merchandise on the industry if the orders are revoked or the suspended investigation is terminated."¹¹⁶ It directs the Commission to take into account its prior injury determination, whether any improvement in the state of the industry is related to the order or the suspension agreement under review, whether the industry is vulnerable to material injury if an order is revoked or a suspension agreement is terminated, and any findings by Commerce regarding duty absorption pursuant to 19 U.S.C. § 1675(a)(4).¹¹⁷ The statute further provides that the presence or absence of any factor that the Commission is required to consider shall not necessarily give decisive guidance with respect to the Commission's determination.¹¹⁸

(...Continued)

continued depressed shipment levels and current and likely continued {sic} prices for the domestic like product in the U.S. market in making its determination of the likelihood of continuation or recurrence of material injury if the order is revoked." SAA at 884.

¹¹³ See NMB Singapore Ltd. v. United States, 288 F. Supp. 2d 1306, 1352 (Ct. Int'l Trade 2003) ("'likely' means probable within the context of 19 U.S.C. § 1675(c) and 19 U.S.C. § 1675a(a)"), aff'd mem., 140 Fed. Appx. 268 (Fed. Cir. 2005); Nippon Steel Corp. v. United States, 26 CIT 1416, 1419 (2002) (same); Usinor Industeel, S.A. v. United States, 26 CIT 1402, 1404 nn.3, 6 (2002) ("more likely than not" standard is "consistent with the court's opinion;" "the court has not interpreted 'likely' to imply any particular degree of 'certainty'"); Indorama Chemicals (Thailand) Ltd. v. United States, 26 CIT 1059, 1070 (2002) ("standard is based on a likelihood of continuation or recurrence of injury, not a certainty"); Usinor v. United States, 26 CIT 767, 794 (2002) ("'likely' is tantamount to 'probable,' not merely 'possible'").

¹¹⁴ 19 U.S.C. § 1675a(a)(5).

¹¹⁵ SAA at 887. Among the factors that the Commission should consider in this regard are "the fungibility or differentiation within the product in question, the level of substitutability between the imported and domestic products, the channels of distribution used, the methods of contracting (such as spot sales or long-term contracts), and lead times for delivery of goods, as well as other factors that may only manifest themselves in the longer term, such as planned investment and the shifting of production facilities." *Id*.

¹¹⁶ 19 U.S.C. § 1675a(a)(1).

¹¹⁷ 19 U.S.C. § 1675a(a)(1). Commerce has not made any duty absorption findings with respect to the antidumping duty orders on SRC pipe and tube from China and Mexico. CR at I-15 n. 14, PR at I-11.

¹¹⁸ 19 U.S.C. § 1675a(a)(5). Although the Commission must consider all factors, no one factor is necessarily dispositive. SAA at 886.

In evaluating the likely volume of imports of subject merchandise if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider whether the likely volume of imports would be significant either in absolute terms or relative to production or consumption in the United States.¹¹⁹ In doing so, the Commission must consider "all relevant economic factors," including four enumerated factors: (1) any likely increase in production capacity or existing unused production capacity in the exporting country; (2) existing inventories of the subject merchandise, or likely increases in inventories; (3) the existence of barriers to the importation of the subject merchandise into countries other than the United States; and (4) the potential for product shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products.¹²⁰

In evaluating the likely price effects of subject imports if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider whether there is likely to be significant underselling by the subject imports as compared to the domestic like product and whether the subject imports are likely to enter the United States at prices that otherwise would have a significant depressing or suppressing effect on the price of the domestic like product.¹²¹

In evaluating the likely impact of imports of subject merchandise if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider all relevant economic factors that are likely to have a bearing on the state of the industry in the United States, including but not limited to the following: (1) likely declines in output, sales, market share, profits, productivity, return on investments, and utilization of capacity; (2) likely negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment; and (3) likely negative effects on the existing development and production efforts of the industry, including efforts to develop a derivative or more advanced version of the domestic like product.¹²² All relevant economic factors are to be considered within the context of the business cycle and the conditions of competition that are distinctive to the industry. As instructed by the statute, we have considered the extent to which any improvement in the state of the domestic industry is related to the orders under review and whether the industry is vulnerable to material injury upon revocation.¹²³

¹²⁰ 19 U.S.C. § 1675a(a)(2)(A-D).

¹²¹ See 19 U.S.C. § 1675a(a)(3). The SAA states that "{c}onsistent with its practice in investigations, in considering the likely price effects of imports in the event of revocation and termination, the Commission may rely on circumstantial, as well as direct, evidence of the adverse effects of unfairly traded imports on domestic prices." SAA at 886.

¹²² 19 U.S.C. § 1675a(a)(4).

¹²³ The SAA states that in assessing whether the domestic industry is vulnerable to injury if the order is revoked, the Commission "considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they may also demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports." SAA at 885.

¹¹⁹ 19 U.S.C. § 1675a(a)(2).

B. Conditions of Competition and the Business Cycle

In evaluating the likely impact of the subject imports on the domestic industry if an order is revoked, the statute directs the Commission to consider all relevant economic factors "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."¹²⁴ The following conditions of competition inform our determinations.

1. Demand Conditions

In the original investigations, the Commission found that demand for SRC pipe and tube is largely driven by demand for its end uses, including residential and commercial construction and air conditioning and refrigeration units.¹²⁵ It found that demand as measured by apparent U.S. consumption declined from 2007 to 2009, and was lower in interim 2010 than in interim 2009.¹²⁶ It observed that most market participants reported that demand for SRC pipe and tube declined during the original POI, especially with increased substitution of plastic in plumbing applications, and aluminum and stainless steel pipe and tube in industrial applications, in the place of SRC pipe and tube.¹²⁷

The end uses and drivers of demand for SRC pipe and tube have not changed since the original investigations.¹²⁸ Most market participants reported that demand for SRC pipe and tube declined during the POR, and that they anticipated demand declining or fluctuating with no clear trend within the reasonably foreseeable future.¹²⁹ As measured by apparent U.S. consumption, demand fluctuated during the POR and was lower in 2015 than in 2010. Apparent U.S. consumption was 647.3 million pounds in 2010, 612.5 million pounds in 2011, 585.2 million pounds in 2012, 592.1 million pounds in 2013, 630.6 million pounds in 2014, 633.4 million pounds in 2015, 332.5 million pounds in interim 2015, and 348.1 million pounds in interim 2016.¹³⁰

¹²⁹ CR/PR at Table II-3.

¹²⁴ 19 U.S.C. § 1675a(a)(4).

¹²⁵ Original Determinations, USITC Pub. 4193 at 37.

¹²⁶ Original Determinations, USITC Pub. 4193 at 37.

¹²⁷ Original Determinations, USITC Pub. 4193 at 37.

¹²⁸ CR at I-21 and II-11-12, PR at I-17 and II-8. SRC pipe and tube has two basic applications, (1) plumbing and (2) industrial uses. CR at I-22, PR at I-17. The record in these current reviews indicates that the domestic industry competes significantly in both the plumbing and industrial sectors of the market for SRC pipe and tube, and that subject imports on a cumulated basis also compete significantly in both sectors. CR/PR at Table IV-2.

¹³⁰ CR/PR at Table I-10.

2. Supply Conditions

During the original investigations, the Commission found that the U.S. market was supplied predominantly by the domestic industry, with subject imports being the second largest supplier, and nonsubject imports being the smallest source of supply.¹³¹ The domestic industry's market share declined overall from 2007 to 2009, although it was higher in interim 2010 than in interim 2009.¹³² Cumulated subject imports' market share increased overall from 2007 to 2009, but was lower in interim in 2010 than in interim 2009.¹³³ Nonsubject imports as a share of the U.S. market increased overall from 2007 to 2009, and were higher in interim 2010 than in interim 2019.¹³⁴

In these reviews, the domestic industry continues to be the dominant supplier in the U.S. market for SRC pipe and tube. The domestic industry's market share was relatively stable throughout the POR; it was 77.0 percent in 2010, 79.7 percent in 2011, 78.8 percent in 2012, 77.8 percent in 2013, 77.0 percent in 2014, 79.5 percent in 2015, 78.4 percent in interim 2015, and 80.3 percent in interim 2016.¹³⁵ The four largest domestic producers (Mueller, Cerro, Wieland, and Cam Lee) collectively accounted for approximately *** percent of domestic SRC pipe and tube production in 2015.¹³⁶

During the POR, the domestic industry experienced several important changes. GD Copper USA became a domestic producer of SRC pipe and tube, opening a new \$100 million facility in Pine Hill, Alabama in May 2014.¹³⁷ Domestic producer (***,¹³⁸ and another domestic producer, ***.¹³⁹ There were also several acquisitions and consolidations in the domestic industry during the POR, including Mueller's acquisition of three other domestic producers (***) and ST Products' acquisition of domestic producer ***.¹⁴⁰ Finally, two domestic producers (***) made significant additional investments during the POR in order to upgrade their production facilities for SRC pipe and tube.¹⁴¹ As discussed previously, three domestic producers (***) are affiliated with subject producers in China and/or Mexico.¹⁴²

Cumulated subject imports maintained a presence in the U.S. market during the POR, albeit at reduced levels from the original investigations.¹⁴³ The market share of cumulated

¹³¹ Original Determinations, USITC Pub. 4193 at 37-39.

¹³² Original Determinations, USITC Pub. 4193 at 37-38.

¹³³ Original Determinations, USITC Pub. 4193 at 38.

¹³⁴ Original Determinations, USITC Pub. 4193 at 39.

¹³⁵ CR/PR at Table I-10. In the original investigations, the domestic industry's market share was 75.8 percent in 2007, 71.3 percent in 2008, and 73.5 percent in 2009. CR/PR at Table I-1.

¹³⁶ CR/PR at Table I-7.

¹³⁷ CR/PR at Tables III-1 and III-8.

¹³⁸ CR/PR at Tables III-1 and III-2.

¹³⁹ CR/PR at Table III-1.

¹⁴⁰ CR/PR at Table III-1 and III-2; Precision Tube's U.S. Producers' Questionnaire at I-4.

¹⁴¹ CR/PR at Tables III-2 and III-3.

¹⁴² CR/PR at Table I-8.

¹⁴³ CR/PR at Tables I-1 and I-10.

subject imports was 10.4 percent in 2010, 3.9 percent in 2011, 3.7 percent in 2012, 3.5 percent in 2013, 4.2 percent in 2014, 2.3 percent in 2015, 2.6 percent in interim 2015, and 1.8 percent in interim 2016.¹⁴⁴

Nonsubject imports gained market share during the POR and became the second largest supplier for the U.S. market after the domestic industry. Nonsubject imports' market share was 12.5 percent in 2010, 16.4 percent in 2011, 17.5 percent in 2012, 18.7 percent in 2013, 18.8 percent in 2014, 18.2 percent in 2015, 19.1 percent in interim 2015, and 17.9 percent in interim 2016.¹⁴⁵

3. Substitutability and Other Conditions

In the original investigations, the Commission found that domestically produced SRC pipe and tube and subject imports from China and Mexico were moderately substitutable.¹⁴⁶ It observed, however, that the interchangeability between plumbing and industrial pipe and tube appeared to be somewhat limited with respect to finished product characteristics, channels of distribution, and the manner in which they were priced.¹⁴⁷ The Commission also found that plumbing pipe and tube was typically sold at a discount off published price lists, while commercial pipe and tube was sold by the largest U.S. producers and importers of product from China at the prevailing price of copper plus a fabrication charge.¹⁴⁸

In these reviews, the record indicates that there is a high degree of substitutability among domestically produced SRC pipe and tube and subject imports from China and Mexico.¹⁴⁹ As discussed above, all U.S. producers and most responding importers and purchasers reported that SRC pipe and tube from China, Mexico, and the United States are always or frequently interchangeable.¹⁵⁰

The record in these reviews also indicates that price remains an important factor in purchasing decisions, along with availability, reliability of supply, product consistency, delivery time, and quality.¹⁵¹ Twenty-two of 24 responding purchasers indicated that price is a very important factor in their purchasing decisions.¹⁵² Additionally, most purchasers ranked price as the first or second factor used in making their purchasing decisions.¹⁵³

¹⁴⁴ CR/PR at Table I-10. In the original investigations, cumulated subject imports' market share was 16.7 percent in 2007, 21.2 percent in 2008, and 20.0 percent in 2009. CR/PR at Table I-1.

¹⁴⁵ CR/PR at Table I-10. In the original investigations, nonsubject imports' market share was 7.5 percent in 2007 and 2008 and 6.5 percent in 2009. CR/PR at Table I-1.

¹⁴⁶ Original Determinations, USITC Pub. 4193 at 39.

¹⁴⁷ Original Determinations, USITC Pub. 4193 at 39.

¹⁴⁸ Original Determinations, USITC Pub. 4193 at 39.

¹⁴⁹ CR at II-14, PR at II-10.

¹⁵⁰ CR/PR at Table II-10.

¹⁵¹ CR/PR at Tables II-6 and II-7.

¹⁵² CR/PR at Table II-7. The remaining two purchasers reported that price was somewhat important in their purchasing decisions. *Id*.

¹⁵³ CR/PR at Table II-6.

Copper is the primary raw material used in the production of SRC pipe and tube.¹⁵⁴ Copper prices declined by *** between January 2010 and June 2016.¹⁵⁵

C. Likely Volume of Subject Imports

In the original investigations, for purposes of its present injury analysis, the Commission found that the volume of subject imports was significant, both in absolute terms and relative to apparent U.S. consumption and production.¹⁵⁶ The volume of cumulated subject imports increased, then decreased during the POI.¹⁵⁷ Demand for SRC pipe and tube also declined during the POI, and the market share of cumulated subject imports increased sharply from 2007 to 2008, and declined slightly from 2008 to 2009.¹⁵⁸

In its threat analysis, the Commission found that the volume and the increase in volume of cumulated subject imports would likely be significant in the imminent future.¹⁵⁹ It found that subject producers from China and Mexico had the ability to increase their exports to the U.S. market based upon their reported excess capacity, export orientation, and available inventories of SRC pipe and tube.¹⁶⁰ It observed that subject producers in China and Mexico had the incentive to increase their exports to the U.S. market given their established distribution channels and relationships with a broad range of importers, and the attractiveness of the U.S. market.¹⁶¹

In the current reviews, cumulated subject imports were present in the U.S. market throughout the entire POR. The record shows that the antidumping duty orders have had a disciplining effect on the volume of subject imports, which declined sharply from 2010 to 2011, declined for most of the remainder of the POR, and ended the POR at lower levels than at the beginning. The volume of cumulated subject imports was 67.5 million pounds in 2010, 24.0 million pounds in 2011, 21.6 million pounds in 2012, 20.9 million pounds in 2013, 26.3 million pounds in 2014, 14.5 million pounds in 2015, 8.5 million pounds in interim 2015, and 6.3 million pounds in interim 2016.¹⁶² As a share of apparent U.S. consumption, cumulated subject imports followed similar patterns. They were 10.4 percent in 2010, 3.9 percent in 2011, 3.7 percent in 2012, 3.5 percent in 2013, 4.2 percent in 2014, 2.3 percent in 2015, 2.6 percent in interim 2015, and 1.8 percent in interim 2016.¹⁶³

¹⁵⁴ CR/PR at V-1.

¹⁵⁵ CR at V-2, PR at V-1; CR/PR at Figure V-1.

¹⁵⁶ Original Determinations, USITC Pub. 4193 at 26-28.

¹⁵⁷ Original Determinations, USITC Pub. 4193 at 26-28.

¹⁵⁸ Original Determinations, USITC Pub. 4193 at 26-27. The Commission found that reduced volume and market penetration of subject imports in interim 2010 was due to the pendency of the investigations. *Id.* at 27.

¹⁵⁹ Original Determinations, USITC Pub. 4193 at 28-31.

¹⁶⁰ Original Determinations, USITC Pub. 4193 at 28-30.

¹⁶¹ Original Determinations, USITC Pub. 4193 at 30-31.

¹⁶² CR/PR at Table IV-1.

¹⁶³ CR/PR at Table I-10.

Several factors support a conclusion that the volume of subject imports would likely be significant in the event of revocation. As an initial matter, we observe that the available questionnaire data, although they understate actual capacity, ¹⁶⁴ show that the cumulated subject industries have considerable unused capacity to produce additional subject merchandise and have the incentive to ship to the U.S. market in large quantities absent the orders.

In particular, the production and production capacity of the reporting producers in China and Mexico fluctuated over the POR, but remained significant throughout the period.¹⁶⁵ Capacity utilization fluctuated over the period, but was significantly lower in 2015 than in 2010 for the SRC pipe and tube industry in China, indicating an increasing amount of excess capacity, and was consistently low for the SRC pipe and tube industry in Mexico.¹⁶⁶ The record indicates that the SRC pipe and tube industries in both China and Mexico had substantial excess capacity during the POR, and that, on a cumulated basis, their reported excess capacity represented approximately *** percent of apparent U.S. consumption in 2015.¹⁶⁷ Although end-of-period inventories for Chinese and Mexican subject producers fluctuated during the POR, they were

¹⁶⁴ The questionnaire data covering the foreign industries' production and exports to the United States are understated on a cumulated basis because the record contains only limited data concerning the SRC pipe and tube industry in China due to the failure of most Chinese subject producers to respond to the Commission's questionnaires. As noted earlier, the three Chinese producers that supplied usable information in these reviews accounted for *** percent of total production of SRC pipe and tube in China and *** percent of subject exports to the United States in 2015. CR at IV-16, PR at IV-10. The Commission did not receive questionnaire response from most Chinese subject producers, including, for example, Zhejiang Hailiang ("Hailiang"), the second largest producer of SRC pipe and tube in China during the original investigations. The record indicates that Hailiang announced significant expansions for its SRC pipe and tube capacity in 2015 and 2016. CR at IV-16-18, PR at IV-10-11.

¹⁶⁵ Production capacity for responding subject producers in China was *** pounds in 2010, *** pounds in 2011, *** pounds in 2012, *** pounds in 2013, *** pounds in 2014, *** pounds in 2014, and *** pounds in interim 2015 and interim 2016. The subject producers in China reported production of *** pounds in 2010, *** pounds in 2011, *** pounds in 2012, *** pounds in 2013, *** pounds in 2014, *** pounds in 2015, *** pounds in 2015, *** pounds in interim 2015, and *** pounds in interim 2016. CR/PR at Table IV-8.

Production capacity for subject producers in Mexico was *** pounds in 2010, *** pounds in 2011-2015, and *** pounds in interim 2015 and interim 2016. The subject producers in Mexico reported production of *** pounds in 2010, *** pounds in 2011, *** pounds in 2012, *** pounds in 2013, *** pounds in 2014, *** pounds in 2015, *** pounds in interim 2015, and *** pounds in interim 2016. CR/PR at Table IV-12.

¹⁶⁶ Capacity utilization for reporting subject producers in China was *** percent in 2010, *** percent in 2011, *** percent in 2012, *** percent in 2013, *** percent in 2014, *** percent in 2015, *** percent in interim 2015, and *** percent in interim 2016. CR/PR at Table IV-8. Capacity utilization for subject producers in Mexico was *** percent in 2010, *** percent in 2011, *** percent in 2012, *** percent in 2013, *** percent in 2014, *** percent in 2015, *** percent in interim 2015, and *** percent in 2016. CR/PR at Table IV-12.

¹⁶⁷ CR/PR at Tables IV-8 and IV-12.

higher in 2015 than in 2010.¹⁶⁸ Thus, the reporting subject producers in China and Mexico themselves have significant capacity, excess capacity, and significant inventory levels that could be directed to the U.S. market if the orders were revoked. Because the capacity of all subject producers of SRC pipe and tube is far greater than that of the reporting subject producers, the data in the record concerning the reporting subject producers' capacity and capacity utilization are likely substantially understated. Consequently, the industries producing subject merchandise have the ability to increase exports of SRC pipe and tube to the United States by an even greater amount that the questionnaire data indicate.

Several factors further support a finding that the subject producers have the incentive to increase exports of subject merchandise upon revocation. Their behavior during the POI indicates that the subject producers have both interest in and the ability to increase shipments to the U.S. market. As previously discussed, subject imports from both China and Mexico maintained a presence in the U.S. market throughout the POR and hence maintain customers and distribution networks in the United States. Moreover, the record indicates that numerous importers and purchasers plan to increase subject imports upon revocation.¹⁶⁹ Exports also comprised substantial proportions of SRC pipe and tube shipments from reporting subject producers in both China and Mexico. Exports accounted for between *** percent and *** percent of China's total shipments during the POR.¹⁷⁰ Exports also comprised substantial amounts of SRC pipe and tube shipments from producers in Mexico, ranging from *** percent to *** percent of total shipments over the course of the POR.¹⁷¹ Nevertheless, export markets for the subject producers are constrained because there are antidumping duty orders in effect

¹⁶⁸ End-of-period inventories of SRC pipe and tube in China were *** pounds in 2010, *** pounds in 2011, *** pounds in 2012, *** pounds in 2013, *** pounds in 2014, *** pounds in 2015, *** pounds in interim 2015, and *** pounds in interim 2016. CR/PR at Table IV-8. End-of-period inventories of SRC pipe and tube held by subject producers in Mexico was *** pounds in 2010, *** pounds in 2011, *** pounds in 2012, *** pounds in 2013, *** pounds in 2014, *** pounds in 2015, *** pounds in interim 2015, and *** pounds in interim 2016. CR/PR at Table IV-12. U.S. importers' end-of-period inventories of subject merchandise were *** pounds in 2010, *** pounds in 2011, *** pounds in 2012, *** pounds in 2013, *** pounds in 2014, *** pounds in 2010, *** pounds in 2011, *** pounds in 2012, *** pounds in 2013, *** pounds in 2014, *** pounds in 2015, *** in interim 2015, and *** in interim 2016. CR/PR at Table IV-6.

¹⁶⁹ CR/PR at Appendix D-7-8 contains information concerning various U.S. purchasers' and U.S. importers' statements about the likely impact of revocation of the orders. Importer *** CR/PR at Appendix D-7. Several other importers and purchasers similarly have indicated that they may source subject imports from China and Mexico in the event of revocation of the orders, including importers *** CR/PR at Appendix D-7-8.

¹⁷⁰ CR/PR at Table IV-8. Total exports of SRC pipe and tube from China as a percentage of total shipments for the reporting subject producers were *** percent in 2010, *** percent in 2011, *** percent in 2012, *** percent in 2013, *** percent in 2014, *** percent in 2015, *** percent in interim 2015, and *** percent in interim 2016. CR/PR at Table IV-8.

¹⁷¹ CR/PR at Table IV-12. Total exports of SRC pipe and tube from Mexico as a percentage of total shipments for the reporting subject producers were *** percent in 2010, *** percent in 2011, *** percent in 2012, *** percent in 2013, *** percent in 2014, *** percent in 2015, *** percent in interim 2015, and *** percent in interim 2016. CR/PR at Table IV-12.

on SRC pipe and tube from China and Mexico in other countries, which creates further incentives for them to increase exports to the United States upon revocation.^{172 173}

Accordingly, based on the subject producers' substantial production capacity, significant excess capacity, available inventories, and export orientation, and the attractiveness of the U.S. market, we find that the volume of cumulated subject imports, in absolute terms and relative to both U.S. production and consumption, would likely be significant in the event of revocation.¹⁷⁴

D. Likely Price Effects

In the original investigations, the Commission observed that the domestic like product and subject imports from China and Mexico were generally interchangeable, and that price was an important factor in purchasing decisions.¹⁷⁵ For purposes of its present injury analysis, the Commission found that there was not significant underselling by cumulated subject imports because there was mixed underselling and overselling.¹⁷⁶ It observed that cumulated subject

Nacobre also argues that subject producers in Mexico are unlikely to increase their exports of SRC pipe and tube from Mexico to the United States because they have SRC pipe and tube production operations in both countries and are unlikely to adversely impact their U.S. operations by ramping up production in Mexico. Nacobre's Posthearing Br. at 8-9. We do not find this argument persuasive. While several subject producers in China and Mexico have affiliates that produce SRC pipe and tube in the United States, there are a substantial number of other subject producers that do not. When considered on a cumulated basis, approximately one-half of the total number of known subject producers do not have U.S. operations for producing SRC pipe and tube. *See, e.g.*, *** Foreign Producers'/Exporters' Questionnaire at I-4; Nacobre's Foreign Producers'/Exporters' Questionnaire at I-4; *** Foreign Producers'/Exporters' Questionnaire at I-4; teDIS Doc. No. 431738). In particular, two of the four Mexican subject producers (***) were not affiliated with domestic producers of SRC pipe and tube during the POR. *See e.g.*, *** Foreign Producers'/Exporters' Questionnaire at I-4.

¹⁷⁴ No party has argued that product-shifting is an issue in these five-year reviews, and we have not relied on this particular factor in our analysis.

¹⁷⁵ Original Determinations, USITC Pub. 4193 at 47.

¹⁷⁶ Original Determinations, USITC Pub. 4193 at 48.

¹⁷² SRC pipe and tube from China and Mexico, as well as other copper pipe and tube products, became subject to antidumping duties in Canada and Brazil in 2014 and 2015, respectively. CR at IV-35, PR at IV-20.

¹⁷³ Nacobre argues that Mexican subject producers of SRC pipe and tube are unlikely to increase their exports of SRC pipe and tube to the United States due to purported labor shortages in Mexico and resulting production difficulties for Mexican producers. *See, e.g.,* Nacobre's Prehearing Br. at 6-7 and Nacobre's Posthearing Br. at 9. The record, however, indicates that the Mexican industry as a whole increased its production of SRC pipe and tube over the course of the POR. The Mexican industry's production increased by approximately *** percent between 2010 and 2015, increasing from *** pounds in 2010 to *** pounds in 2015. CR/PR at Table IV-12.

imports were not currently having significant adverse price effects on domestic producers' prices, especially since domestic prices for SRC pipe and tube generally increased during the POI, and that declining demand for SRC pipe and tube played an important role in the inability of the domestic industry to raise prices.¹⁷⁷

In its threat analysis, the Commission reiterated that the domestic like product and subject imports from China and Mexico were generally interchangeable and that price was an important factor in purchasing decisions.¹⁷⁸ It observed that demand was expected to remain severely depressed in the imminent future and found that the underselling it observed during the POI would likely increase in the imminent future as cumulated subject imports would use lower prices to gain market share from the domestic industry.¹⁷⁹ It found that, as cumulated subject imports caused the domestic industry's sales volumes and prices to deteriorate and per-unit costs to increase, the industry would likely experience significant adverse price effects through higher unit costs, compressed margins, and some price suppression.¹⁸⁰

In these reviews, as described above, the record indicates that there is generally a high degree of substitutability between subject imports from China and Mexico and between these imports and the domestic like product. Moreover, price plays an important role in purchasing decisions, although other factors are also important.

In these reviews, the Commission collected pricing data on six SRC pipe and tube products.¹⁸¹ Seven U.S. producers and four importers of subject product provided usable pricing data, although not all firms reported pricing for all products in all quarters.¹⁸² Pricing data reported by these firms accounted for approximately 9.8 percent by value of U.S. producers' commercial U.S. shipments of SRC pipe and tube, 5.1 percent by value of U.S. shipments of subject imports from China, and 0.9 percent by value of U.S. shipments of subject imports from Mexico in 2015.¹⁸³

¹⁷⁷ Original Determinations, USITC Pub. 4193 at 48-49.

¹⁷⁸ Original Determinations, USITC Pub. 4193 at 49-50.

¹⁷⁹ Original Determinations, USITC Pub. 4193 at 49-51.

¹⁸⁰ Original Determinations, USITC Pub. 4193 at 51.

¹⁸¹ These products are:

Product 1.—Seamless refined copper pipe and tube, 1/2" Type L, hard temper, 20' lengths. Product 2.—Seamless refined copper pipe and tube, 3/8" OD, ACR/RST coil, 50'-100' lengths. Product 3.—Seamless refined copper pipe and tube, 3/4" OD, ACR/RST coil, 50'-100' lengths. Product 4.—Seamless refined copper pipe and tube, 3/8" OD, smooth bore LWC, 0.0249"-

^{0.0327&}quot; bottom wall thickness.

Product 5.—Seamless refined copper pipe and tube, 3/4" OD, smooth bore LWC, 0.0327"-0.0430" bottom wall thickness.

Product 6.—Seamless refined copper pipe and tube, 3/8" OD, inner-grooved LWC, 0.0110"-0.0144" bottom wall thickness.

CR at V-8, PR at V-5. ¹⁸² CR at V-9, PR at V-5. ¹⁸³ CR at V-9, PR at V-5.
During the POR, there was a much greater degree of underselling than overselling on a volume basis, although the quarterly price comparisons showed mixed overselling/underselling in terms of instances. There were 16.3 million pounds of cumulated subject imports involved in underselling observations and 8.4 million pounds of subject imports involved in overselling observations.¹⁸⁴ In other words, approximately 66.0 percent of cumulated subject imports were involved in underselling on a volume basis.¹⁸⁵ In terms of instances, cumulated subject imports undersold the domestic like product in 41 of 88 or 46.6 percent of quarterly comparisons, with margins of underselling ranging from 0.0 percent to 24.8 percent.¹⁸⁶ Thus, even with the discipline of the orders, subject imports undersold the domestic like product, particularly on a volume basis. We find that, in the absence of the orders, subject producers would price their product aggressively to gain market share and this underselling would likely continue or increase.

In view of our finding of a likely significant volume of cumulated subject imports, the high degree of substitutability between subject imports and the domestic like product, and the importance of price in purchasing decisions, we find that subject producers would likely undersell the domestic like product upon revocation to gain market share. As a result, in the face of increasing subject import competition, domestic producers would likely be forced to cut prices, forego price increases, or risk losing market share. We consequently find that if the orders were revoked, cumulated subject imports would undersell the domestic like product to gain market share, and the pricing pressure from cumulated subject imports would cause the domestic industry to lose market share and/or depress or suppress prices of the domestic like product, thereby having likely significant adverse price effects.

E. Likely Impact

In the present injury analysis in the original investigations, the Commission found that there was no correlation between cumulated subject imports and the domestic industry's declining financial performance. It found that the domestic industry's employment indicators generally declined over the POI, as did many of its financial indicators, but also found that this deterioration coincided with an economic downturn and appeared to be largely demand driven.¹⁸⁷ Accordingly, it concluded that it could not find a sufficient causal nexus between any present injury to the domestic industry and the cumulated subject imports.¹⁸⁸

In its threat analysis, the Commission observed that the downward trends in the domestic industry's performance, particularly toward the end of the POI (2009 and interim 2010), weighed heavily in its analysis.¹⁸⁹ It found that the domestic industry was vulnerable to material injury and that it would likely continue to experience even lower employment levels,

¹⁸⁴ CR/PR at Table V-14.

¹⁸⁵ *Derived from* CR/PR at Table V-14.

¹⁸⁶ CR at V-33, PR at V-18, and CR/PR at Table V-14.

¹⁸⁷ Original Determinations, USITC Pub. 4193 at 51-52.

¹⁸⁸ Original Determinations, USITC Pub. 4193 at 52.

¹⁸⁹ Original Determinations, USITC Pub. 4193 at 52.

net sales, operating income, and profitability as demand for SRC pipe and tube remained anemic and increasing volumes of subject imports from China and Mexico entered the U.S. market.¹⁹⁰ It concluded that, given the domestic industry's vulnerable condition, these effects would be significant and the domestic industry was threatened with material injury by reason of cumulated subject imports.¹⁹¹

During the POR, the domestic industry's performance was stable or improving by several measures as reflected in its output and employment data. U.S. production capacity increased from 1.0 billion pounds in 2010 to 1.1 billion pounds in 2015.¹⁹² Production increased from 522,313 pounds in 2010 to 537,684 pounds in 2015.¹⁹³ Capacity utilization, which was relatively low throughout the POR, declined from 51.5 percent in 2010 to 50.5 percent in 2015.¹⁹⁴ The domestic industry's U.S. shipments increased from 498,535 pounds in 2010 to 503,789 pounds in 2015.¹⁹⁵ End-of-period inventories increased over the POR, increasing from 28,032 pounds in 2010 to 32,858 pounds in 2015.¹⁹⁶

¹⁹¹ Original Determinations, USITC Pub. 4193 at 52-53. In its non-attribution analysis for threat, the Commission considered other factors, including demand and nonsubject imports. It found that, although demand was likely to remain at depressed levels in the imminent future, it was not likely to decline further from present levels. Accordingly, it found that the likely further declines in the domestic industry's performance in the imminent future would likely come as a result of cumulated subject imports gaining market share rather than as a result of continued or renewed declines in demand. It observed that the market share of nonsubject imports declined during the POI and that declining presence in the U.S. market of these imports did not alter the finding that cumulated subject imports were likely to have a significant adverse impact on the domestic industry in the imminent future. *Id.* at 53-54.

¹⁹² CR/PR at Table III-5. The domestic industry's capacity was 1.0 billion pounds in 2010, 936,890 pounds in 2011, 936,983 pounds in 2012, 978,370 pounds in 2013, 1.0 billion pounds in 2014, 1.1 billion pounds in 2015, 525,523 pounds in interim 2015, and 537,966 pounds in interim 2016. *Id*.

¹⁹³ CR/PR at Table III-5. The domestic industry's production was 522,313 pounds in 2010, 519,852 pounds in 2011, 490,260 pounds in 2012, 488,225 pounds in 2013, 516,811 pounds in 2014, 537,684 pounds in 2015, 277,366 pounds in interim 2015, and 296,654 pounds in interim 2016. *Id*.

¹⁹⁴ CR/PR at Table III-5. The domestic industry's capacity utilization was 51.5 percent in 2010, 55.5 percent in 2011, 52.3 percent in 2012, 49.9 percent in 2013, 50.3 percent in 2014, 50.5 percent in 2015, 52.8 percent in interim 2015, and 55.1 percent in interim 2016. *Id*.

¹⁹⁵ CR/PR at Table III-6. The domestic industry's U.S. shipments were 498,535 pounds in 2010, 487,892 pounds in 2011, 461,376 pounds in 2012, 460,395 pounds in 2013, 485,412 pounds in 2014, 503,789 pounds in 2015, 260,595 pounds in interim 2015, and 279,509 pounds in interim 2016. *Id*.

¹⁹⁶ CR/PR at Table III-7. The domestic industry's end-of-period inventories were 28,032 pounds in 2010, 29,961 pounds in 2011, 29,312 pounds in 2012, 27,823 pounds in 2013, 30,932 pounds in 2014, 32,858 pounds in 2015, 29,495 pounds in interim 2015, and 33,033 pounds in interim 2016. The domestic industry's ratio of inventories to U.S. production was 5.4 percent in 2010, 5.8 percent in 2011, 6.0 percent in 2012, 5.7 percent in 2013, 6.0 percent in 2014, 6.1 percent in 2015, 5.3 percent in interim 2015, and 5.6 percent in interim 2016. *Id*.

¹⁹⁰ Original Determinations, USITC Pub. 4193 at 52-53.

The domestic industry's employment data also showed stability or improvements during the POR. The number of domestic production and related workers ("PRWs") increased from 2,521 in 2010 to 2,768 in 2015.¹⁹⁷ Total hours worked increased from 5.3 million in 2010 to 5.8 million in 2015.¹⁹⁸ Hours worked per worker increased from 2,100 in 2010 to 2,105 in 2015.¹⁹⁹ Wages paid increased from \$100.7 million in 2010 to \$116.3 million in 2015.²⁰⁰ Hourly wages also increased from \$19.02 per hour in 2010 to \$19.95 per hour in 2015.²⁰¹ Worker productivity, however, declined from 98.6 pounds per hour in 2010 to 92.3 pounds per hour in 2015.²⁰²

The domestic industry's financial condition, however, showed declines in certain aspects during the POR. The value of total net sales was \$2.2 billion in 2010, peaked at \$2.6 billion in 2011, and declined to \$1.9 billion in 2015.²⁰³ The domestic industry's COGS was \$2.0 billion in 2010, peaked at \$2.4 billion in 2011, and declined to \$1.7 billion in 2015.²⁰⁴ Operating income was \$61.2 million in 2010, peaked at \$98.3 million in 2011, and declined to \$57.6 million in

¹⁹⁹ Hours worked per PRW were 2,100 in 2010, 2,059 in 2011, 2,060 in 2012, 2,101 in 2013, 2,158 in 2014, 2,105 in 2015, 1,044 in interim 2015, and 1,049 in interim 2016. CR/PR at Table III-9.

²⁰⁰ Wages paid were \$100.7 million in 2010, \$102.1 million in 2011, \$99.1 million in 2012, \$100.3 million in 2013, \$108.7 million in 2014, \$116.3 million in 2015, \$58.4 million in interim 2015, and \$58.9 million in interim 2016. CR/PR at Table III-9.

²⁰¹ Hourly wages paid were \$19.02 in 2010, \$19.00 in 2011, \$19.24 in 2012, \$19.71 in 2013, \$19.02 in 2014, \$19.95 in 2015, \$19.84 in interim 2015, and \$19.55 in interim 2016. CR/PR at Table III-9.

²⁰² Worker productivity was 98.6 pounds per hour in 2010, 96.8 pounds per hour in 2011, 95.1 pounds per hour in 2012, 95.9 pounds per hour in 2013, 90.4 pounds per hour in 2014, 92.3 pounds per hour in 2015, 94.3 pounds per hour in interim 2015, and 98.6 pounds per hour in interim 2016. CR/PR at Table III-9.

²⁰³ The value of the domestic industry's total net sales was \$2.2 billion in 2010, \$2.6 billion in 2011, \$2.2 billion in 2012, \$2.1 billion in 2013 and 2014, \$1.9 billion in 2015, \$1.0 billion in interim 2015, and \$899.5 million in interim 2016. CR/PR at Table III-10.

²⁰⁴ The domestic industry's COGS was \$2.0 billion in 2010, \$2.4 billion in 2011, \$2.1 billion in 2012, \$1.9 billion in 2013 and 2014, \$1.7 billion in 2015, \$934.7 million in interim 2015, and \$822.3 million in interim 2016. CR/PR at Table III-10.

¹⁹⁷ The domestic industry's number of PRWs was 2,521 in 2010, 2,609 in 2011, 2,501 in 2012, 2,423 in 2013, 2,648 in 2014, 2,768 in 2015, 2,816 in interim 2015, and 2,869 in interim 2016. CR/PR at Table III-9.

¹⁹⁸ Total hours worked were 5.3 million in 2010, 5.4 million in 2011, 5.2 million in 2012, 5.1 million in 2013, 5.7 million in 2014, 5.8 million in 2015, 2.9 million in interim 2015, and 3.0 million in interim 2016. CR/PR at Table III-9.

2015.²⁰⁵ Operating income as a ratio to net sales, however, increased from 2.8 percent in 2010 to 3.1 percent in 2015.²⁰⁶ Capital expenditures also increased overall from 2010 to 2015.²⁰⁷

Based on these data, Chairman Williamson and Commissioners Pinkert and Schmidtlein find the domestic industry vulnerable to material injury given its low capacity utilization rate, its low operating margin (operating income as a ratio to net sales), and the fact that apparent U.S. consumption has decreased since the orders were imposed in 2010. Although the industry has gained some market share since that time, its total net sales value and operating income were lower in 2015 than in 2010. They find that the industry is performing at levels comparable to those at the end of the original POI, when the Commission found the industry to be vulnerable.

Vice Chairman Johanson and Commissioners Broadbent and Kieff do not find that the domestic industry is in a vulnerable condition. The domestic industry has showed stability and improvement overall since the original investigations. Production and employment indicators improved during the POR, as discussed above. Despite some fluctuation in apparent U.S. consumption over the POR, the industry has remained profitable, with operating income margins fluctuating within a narrow range. Moreover, the industry's market share in 2015 and interim 2016, at 79.5 percent and 80.3 percent respectively, was higher than at any other period examined by the Commission.

As discussed above, we conclude that the revocation of the antidumping duty orders on imports of SRC pipe and tube from China and Mexico would likely lead to an increased and significant volume of cumulated subject imports that would likely significantly undersell the domestic like product. This increased volume of low-priced subject imports would in turn likely have the effect of requiring the domestic industry to choose whether to cut prices, forego price increases or forfeit market share, all of which would have a negative impact on the domestic industry's performance. In light of these likely adverse effects, we find that the cumulated subject imports would likely have a significant impact on the production, shipments, sales, market share, and revenue of the domestic industry. These reductions would have a direct adverse impact on the domestic industry's profitability and employment, as well as on its ability to raise capital and make and maintain necessary capital investments. We conclude that, if the orders were revoked, subject imports from China and Mexico would be likely to have a significant impact on the domestic industry within a reasonably foreseeable time.

²⁰⁵ The domestic industry's reported operating income was \$61.2 million in 2010, \$98.3 million in 2011, \$53.7 million in 2012, \$65.2 million in 2013, \$64.0 million in 2014, \$57.6 million in 2015, \$37.3 million in interim 2015, and \$36.3 million in interim 2016. CR/PR at Table III-10.

²⁰⁶ The domestic industry's operating income as a ratio to net sales was 2.8 percent in 2010, 3.8 percent in 2011, 2.4 percent in 2012, 3.1 percent in 2013, 2014, and 2015, 3.7 percent in interim 2015, and 4.0 percent in interim 2016. CR/PR at Table III-10.

²⁰⁷ CR/PR at Table III-13. The domestic industry's capital expenditures were \$11.9 million in 2010, \$14.7 million in 2011, \$56.6 million in 2012, \$38.4 million in 2013, \$57.1 million in 2014, \$27.9 million in 2015. \$13.6 million in interim 2015, and \$10.8 million in interim 2016. *Id*. The domestic industry's research and development expenses were \$*** in 2010, \$*** in 2011, \$*** in 2012, \$*** in 2013, \$*** in 2014, \$*** in 2015, \$*** in interim 2015, and \$*** in interim 2016. *Id*.

We have also considered the likely role of nonsubject imports in the U.S. market. As discussed previously, nonsubject imports' share of the U.S. market increased slightly overall from 2010 to 2015,²⁰⁸ but the domestic industry maintained the bulk of the market and its market share remained higher than in the original investigations.²⁰⁹ We find that nonsubject imports are not likely to prevent subject imports from increasing their presence in the U.S. market in the event of revocation, given the amount of unused capacity in the subject countries, the subject producers' export orientation, and the attractiveness of the U.S. market. As previously stated, in the event of revocation, additional subject imports would be likely to compete at reduced prices without the discipline of the orders and these prices would likely place additional competitive pressures on the domestic industry. In light of this, we find that the subject imports would likely have adverse effects distinct from those of nonsubject imports and that subject imports.

Thus, we conclude that revocation of the antidumping duty orders on SRC pipe and tube from China and Mexico would likely lead to a continuation or recurrence of material injury to the domestic industry within a reasonably foreseeable time.

V. Conclusion

For the foregoing reasons, we determine that revocation of the antidumping duty orders on SRC pipe and tube from China and Mexico would likely lead to a continuation or recurrence of material injury to the domestic industry within a reasonably foreseeable time.

 ²⁰⁸ Nonsubject imports' market share increased by 5.7 percentage points between 2010 and 2015, increasing from 12.5 percent in 2010 to 18.2 percent in 2015. CR/PR at Table I-10.
 ²⁰⁹ CR/PR at Tables I-1 and I-10.

PART I: INTRODUCTION

BACKGROUND

On October 1, 2015, the U.S. International Trade Commission ("Commission" or "USITC") gave notice, pursuant to section 751(c) of the Tariff Act of 1930, as amended ("the Act"),¹ that it had instituted reviews to determine whether revocation of the antidumping duty orders on seamless refined copper pipe and tube ("SRC tubular products") from China and Mexico would likely lead to the continuation or recurrence of material injury to a domestic industry.^{2 3} Effective January 4, 2016, the Commission determined that it would conduct full reviews pursuant to section 751(c) (5) of the Act.⁴ The following tabulation presents information relating to the background and schedule of this proceeding: ⁵

Effective date	Action
October 1, 2015	Commission's institution of five-year reviews (80 FR 59186)
October 1, 2015	Commerce's initiation of five-year reviews (80 FR 59133)
January 4, 2016	Commission's determination to conduct full five-year reviews (81 FR 1967, January 14, 2016)
June 13, 2016	Commerce's final results of the full five-year reviews of the antidumping duty orders (81 FR 38134)
June 23, 2016	Commission's scheduling of full five-year reviews (81 FR 40922)
October 11, 2016	Commission's hearing
November 15, 2016	Commission's vote
December 2, 2016	Commission's determinations

¹ 19 U.S.C. 1675(c).

² Seamless Refined Copper Pipe and Tube From China and Mexico; Institution of Five Year Reviews, 80 FR 59186, October 1, 2015. All interested parties were requested to respond to this notice by submitting the information requested by the Commission.

³ In accordance with section 751(c) of the Act, the U.S. Department of Commerce ("Commerce") published a notice of initiation of five-year reviews of the subject antidumping orders concurrently with the Commission's notice of institution. *Initiation of Five-Year ("Sunset") Review*, 80 FR 59133, October 1, 2015.

⁴ Commission Determination to Conduct a Full Five-Year Review, 81 FR 1967, January 14, 2016. The Commission found that both the domestic and respondent interested party group responses to its notice of institution (80 FR 59186, October 1, 2015) were adequate with respect to each order under review.

⁵ The Commission's notice of institution, notice to conduct full reviews, scheduling notice, and statement on adequacy are referenced in app. A and may also be found at the Commission's web site (internet address <u>www.usitc.gov</u>). Commissioners' votes on whether to conduct full reviews may also be found at the web site. App. B presents the witnesses appearing at the hearing.

The original investigations

The original investigations resulted from petitions filed on September 30, 2009, with Commerce and the Commission by domestic producers Cerro Flow Product, Inc. ("Cerro"), St. Louis, Missouri; Kobe Wieland Copper Products, LLC ("Wieland"), Pine Hall, North Carolina; Mueller Copper Tube Products, Inc. and Mueller Copper Tube Company, Inc., ("Mueller"), Memphis, Tennessee (collectively, "the Ad-Hoc Copper Tube Coalition"(AHCTC)), alleging that an industry in the United States is materially injured and threatened with material injury due to less-than-fair-value ("LTFV") imports of SRC tubular products from China and Mexico. On October 1, 2010, Commerce determined that imports of SRC tubular products from China and Mexico were being sold at less than fair value ("LTFV").⁶ Following notification of a final determination by Commerce that imports of SRC tubular products from China and Mexico were being sold at LTFV,⁷ the Commission determined effective November 15, 2010 that a domestic industry was threatened with material injury because of LTFV imports of SRC tubular products from China and Mexico.⁸ On November 19, 2010, Commerce amended its final determination regarding imports of SRC tubular products from Mexico due to a ministerial error.^{9 10}

PRIOR RELATED INVESTIGATIONS

SRC tubular products have not been the subject of any prior related antidumping or countervailing duty investigations in the United States.

SUMMARY DATA

Table I-1 presents a summary of data from the original investigations (2007-09) and the current full five-year reviews (2010-15). Since the original investigations, the subject imports' share of apparent U.S. consumption, by quantity, decreased from 20.0 percent in 2009 to 2.3 percent in 2015, while the subject imports' share of apparent U.S. consumption, by value,

⁶ Seamless Refined Copper Pipe and Tube From Mexico: Final Determination of Sales at Less Than Fair Value, 75 FR 60723, October 1, 2010; Seamless Refined Copper Pipe and Tube From the People's Republic of China: Final Determination of Sales at Less Than Fair Value, 75 FR 60725, October 1, 2010.

⁷ Seamless Refined Copper Pipe and Tube From Mexico: Final Determination of Sales at Less Than Fair Value, 75 FR 60723, October 1, 2010; Seamless Refined Copper Pipe and Tube From the People's Republic of China: Final Determination of Sales at Less Than Fair Value, 75 FR 60725, October 1, 2010.

 ⁸ Seamless Refined Copper Pipe and Tube from China and Mexico, 75 FR 71146, November 22, 2010.
 ⁹ Memorandum from Melissa G. Skinner, Director, AD/CVD Operations, Office 3, to Ronald K.

Lorentzen, Deputy Assistant Secretary for Import Administration, "Ministerial Error Allegations in the Final Determination of the Antidumping Duty Investigation of Seamless Refined Copper Pipe and Tube from Mexico" (October 18, 2010).

¹⁰ Seamless Refined Copper Pipe and Tube from Mexico and the People's Republic of China: Antidumping Duty Orders and Amended Final Determination of Sales at Less Than Fair Value From Mexico, 75 FR 71070, November 22, 2010.

decreased from 17.8 percent to 2.4 percent over the same time period. The majority of subject imports in 2015 were from Mexico. The shift of subject imports from China to Mexico occurred as ***.¹¹ Overall, the quantity of apparent U.S. consumption was 9.3 percent lower in 2015 than in 2009, while the value of apparent U.S. consumption increased 4.0 percent. The quantity of U.S. producers' shipments were 1.8 percent lower in 2015 than in 2009, while the value of U.S. producers' U.S. shipments were 9.2 percent higher during the same period. Demand for SRC tubular products has declined in the U.S. market largely due to a shift to PVC pipe and tube for plumbing applications and aluminum pipe and tube for air conditioning applications.

Table I-1

SRC tubular products: Comparative data from the original investigations (2007-09) and current	nt
reviews (2010-15)	

	Original investigations				
Item	2007	2008	2009		
		Quantity (1,000 pounds)			
U.S. consumption quantity	992,539	858,926	698,018		
	S	hare of quantity (percent)		
Share of U.S. consumption:		= 4.0			
U.S. producers' share'	/5.8	/1.3	/3.5		
U.S. importers' share: ¹					
China	9.1	12.9	13.2		
Mexico	7.6	8.3	6.9		
Subject sources	16.7	21.2	20.0		
Nonsubject sources	7.5	7.5	6.5		
All sources	24.2	28.7	26.5		
	Value (1,000 dollars)				
U.S. consumption	3,959,314	3,574,571	2,110,170		
		Share of value (percent)			
Share of U.S. consumption:					
U.S. producers' share ¹	76.6	72.1	76.0		
U.S. importers' share: ¹					
China	8.8	12.5	11.6		
Mexico	7.2	7.9	6.2		
Subject sources	16.0	20.4	17.8		
Nonsubject sources	7.4	7.5	6.3		
All sources	23.4	27.9	24.0		

Table I-1--Continued SRC tubular products: Comparative data from the original investigations (2007-09) and current reviews (2010-15)

			First r	eviews		
Item	2010	2011	2012	2013	2014	2015
			Quantity (1,	,000 pounds	5)	
U.S. consumption quantity	647,284	612,520	585,173	592,059	630,568	633,432
		S	hare of qua	ntity (perce	nt)	
Share of U.S. consumption: U.S. producers' share ¹	77.0	79.7	78.8	77.8	77.0	79.5
U.S. importers' share: ¹ China	6.4	3.3	3.4	3.3	3.5	0.2
Mexico	4.0	0.6	0.3	0.2	0.7	2.1
Subject sources	10.4	3.9	3.7	3.5	4.2	2.3
All other sources	12.5	16.4	17.5	18.7	18.8	18.2
All sources	23.0	20.3	21.2	22.2	23.0	20.5
	Value (1,000 dollars)					
U.S. consumption	2,680,194	3,048,024	2,646,981	2,521,190	2,549,735	2,197,395
	Share of value (percent)					
Share of U.S. consumption: U.S. producers' share ¹	78.2	80.0	79.2	78.2	77.5	79.7
U.S. importers' share: ¹ China	5.9	3.1	3.2	3.1	3.3	0.2
Mexico	3.6	0.6	0.4	0.2	0.7	2.2
Subject sources	9.6	3.7	3.5	3.3	4.0	2.4
All other sources	12.2	16.3	17.3	18.5	18.5	17.9
All sources	21.8	20.0	20.8	21.8	22.5	20.3

Table I-1--Continued SRC tubular products: Comparative data from the original investigations (2007-09) and current reviews (2010-15)

	Original investigations				
Item	2007 2008				
	Quantity (1,000 pounds); value (1,000 dollars); and unit value (dollars per 1,000 pounds)				
U.S. imports from: ² China: Quantity	90,624	111,126	91,768		
Value	348,772	446,282	244,101		
Unit value	\$3,849	\$4,016	\$2,660		
Mexico: Quantity	75,199	71,327	48,014		
Value	284,287	281,957	131,261		
Unit value	\$3,780	\$3,953	\$2,734		
Subject sources: Quantity	165,823	182,453	139,782		
Value	633,059	728,238	375,362		
Unit value	\$3,818	\$3,991	\$2,685		
All other sources: Quantity	74,226	64,441	45,426		
Value	292,345	268,218	131,960		
Unit value	\$3,939	\$4,162	\$2,905		
All sources: Quantity	240,049	246,894	185,209		
Value	925,404	996,456	507,321		
Unit value	\$3,855	\$4,036	\$2,739		

Table I-1--Continued SRC tubular products: Comparative data from the original investigations (2007-09) and current reviews (2010-15)

	First reviews					
Item	2010	2011	2012	2013	2014	2015
	Quantity	(1,000 pou	nds); value	(1,000 dol	lars); and u	nit value
		(a	ollars per 1	,000 pound	is)	
U.S. imports from: ² China:	44 505	00.044	40.040	40.470	04 770	4 400
Quantity	41,565	20,044	19,643	19,473	21,772	1,138
Value	159,289	95,572	84,257	77,041	83,664	4,849
Unit value	\$3,832	\$4,768	\$4,289	\$3,956	\$3,843	\$4,259
Mexico: Quantity	25,983	3,962	1,929	1,393	4,547	13,347
Value	97,276	18,039	9,408	6,226	18,569	48,445
Unit value	\$3,744	\$4,553	\$4,877	\$4,470	\$4,084	\$3,630
Subject sources: Quantity	67,548	24,006	21,572	20,866	26,319	14,485
Value	256,565	113,611	93,665	83,268	102,233	53,294
Unit value	\$3,798	\$4,733	\$4,342	\$3,991	\$3,884	\$3,679
All other sources: Quantity	81,201	100,622	102,225	110,798	118,837	115,158
Value	328,311	496,803	457,733	465,399	470,746	393,595
Unit value	\$4,043	\$4,937	\$4,478	\$4,200	\$3,961	\$3,418
All sources: Quantity	148,749	124,628	123,797	131,664	145,156	129,643
Value	584,876	610,414	551,397	548,666	572,980	446,889
Unit value	\$3,932	\$4,898	\$4,454	\$4,167	\$3,947	\$3,447

Table I-1--Continued SRC tubular products: Comparative data from the original investigations (2007-09) and current reviews (2010-15)

	Original investigations			
Item	2007	2008	2009	
	Quantity (1,000 p value	ounds); value (1,000 (dollars per 1,000 po	dollars); and unit ounds)	
U.S. industry:	4 000 000	4 400 004	4 400 70 4	
Capacity (quantity)	1,223,928	1,120,991	1,122,794	
Production (quantity)	781,123	640,036	531,562	
Capacity utilization (percent)	63.8	57.1	47.3	
U.S. shipments: Quantity	752,491	612,032	512,809	
Value	3,033,910	2,578,115	1,602,849	
Unit value	\$4,032	\$4,212	\$3,126	
Ending inventory	52,936	48,747	38,053	
Inventories/total shipments ¹	6.7	7.6	7.0	
Production workers	3,644	3,303	2,902	
Hours worked (1,000)	7,791	6,980	5,873	
Wages paid (1,000 dollars)	136,285	124,976	104,257	
Hourly wages	\$17.49	\$17.90	\$17.75	
Productivity (pounds per hour)	100.1	91.6	90.5	
Financial data: Net sales: Quantity	772.482	649.879	526.474	
Value	3.151.317	2.761.903	1.630.144	
Unit value	\$4,079	\$4,250	\$3,096	
Cost of goods sold	2,857,802	2,526,052	1,523,536	
Gross profit or (loss)	293,515	235,851	106,608	
SG&A expense	73,637	68,408	61,715	
Operating income or (loss)	219,878	167,443	44,893	
Unit COGS	\$3,700	\$3,887	\$2,894	
Unit operating income	\$280	\$260	\$90	
COGS/ Sales (percent) ¹	90.7	91.5	93.5	
Operating income or (loss)/ Sales (percent) ¹	7.0	6.1	2.8	

Table I-1--Continued SRC tubular products: Comparative data from the original investigations (2007-09) and current reviews (2010-15)

	First reviews					
Item	2010	2011	2012	2013	2014	2015
	Quantity (1,000 pounds); value (1,000 dollars); and unit value				nit value	
			(dollars per	1,000 poun	d)	1
U.S. industry:	1 014 661	026.000	026.002	070 270	1 007 054	1 062 862
Capacity (quantity)	1,014,001	930,090	930,963	970,370	1,027,234	1,003,003
Production (quantity)	522,313	519,852	490,260	488,225	516,811	537,684
Capacity utilization (percent)	51.5	55.5	52.3	49.9	50.3	50.5
U.S. shipments: Quantity	498,535	487,892	461,376	460,395	485,412	503,789
Value	2,095,318	2,437,610	2,095,584	1,972,524	1,976,755	1,750,506
Unit value	\$4,203	\$4,996	\$4,542	\$4,284	\$4,072	\$3,475
Ending inventory	28,032	29,961	29,312	27,823	30,932	32,858
Inventories/total shipments ¹	5.3	5.8	6.0	5.7	6.0	6.1
Production workers	2,521	2,609	2,501	2,423	2,648	2,768
Hours worked (1,000)	5,295	5,373	5,153	5,090	5,714	5,828
Wages paid (1,000 dollars)	100,688	102,108	99,121	100,330	108,703	116,286
Hourly wages	\$19.02	\$19.00	\$19.24	\$19.71	\$19.02	\$19.95
Productivity (pounds per hour)	98.6	96.8	95.1	95.9	90.4	92.3
Financial data:						
Net sales:	504 774	F17.000	400.004	407.005	500 000	EDE 40E
Value	521,774	517,969	469,091	467,920	0.075.750	535,125
Value	2,157,718	2,593,346	2,216,732	2,090,351	2,075,752	1,873,704
Unit value	\$4,135	\$5,007	\$4,532	\$4,284	\$4,075	\$3,501
Cost of goods sold	2,025,097	2,412,607	2,081,655	1,949,440	1,923,396	1,733,382
Gross profit or (loss)	132,621	180,739	135,077	140,911	152,356	140,322
SG&A expense	71,424	82,434	81,378	75,742	88,403	82,717
Operating income or (loss)	61,197	98,305	53,699	65,169	63,953	57,605
Unit COGS	\$3,881	\$4,658	\$4,256	\$3,995	\$3,776	\$3,239
Unit operating income	\$117	\$190	\$110	\$134	\$126	\$108
COGS/ Sales (percent) ¹	93.9	93.0	93.9	93.3	92.7	92.5
Operating income or (loss)/ Sales (percent) ¹	2.8	3.8	2.4	3.1	3.1	3.1

(1) "Reported data" are in percent and "period changes" are in percentage points.

(2) Import data are from official Commerce statistics.

Source: Import data are from official Commerce statistics, Office of Investigations memo INV-HH-101, October 13, 2010, and compiled from data submitted in response to Commission questionnaires.



Figure I-1 SRC pipe and tube: Market shares, 2007-15

Source: Compiled from data submitted in response to Commission questionnaires and official U.S import statistics under HTS statistical reporting numbers 7411.10.1030 and 7411.10.0090, accessed August 29, 2016.

STATUTORY CRITERIA AND ORGANIZATION OF THE REPORT

Statutory criteria

Section 751(c) of the Act requires Commerce and the Commission to conduct a review no later than five years after the issuance of an antidumping or countervailing duty order or the suspension of an investigation to determine whether revocation of the order or termination of the suspended investigation "would be likely to lead to continuation or recurrence of dumping or a countervailable subsidy (as the case may be) and of material injury."

Section 752(a) of the Act provides that in making its determination of likelihood of continuation or recurrence of material injury--

(1) IN GENERAL.--... the Commission shall determine whether revocation of an order, or termination of a suspended investigation, would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time. The Commission shall consider the likely volume, price effect, and impact of imports of the subject merchandise on the industry if the order is revoked or the suspended investigation is terminated. The Commission shall take into account--

(A) its prior injury determinations, including the volume, price effect, and impact of imports of the subject merchandise on the industry before the order was issued or the suspension agreement was accepted,

(B) whether any improvement in the state of the industry is related to the order or the suspension agreement,

(C) whether the industry is vulnerable to material injury if the order is revoked or the suspension agreement is terminated, and
(D) in an antidumping proceeding . . ., (Commerce's findings) regarding duty absorption

(2) VOLUME.--In evaluating the likely volume of imports of the subject merchandise if the order is revoked or the suspended investigation is terminated, the Commission shall consider whether the likely volume of imports of the subject merchandise would be significant if the order is revoked or the suspended investigation is terminated, either in absolute terms or relative to production or consumption in the United States. In so doing, the Commission shall consider all relevant economic factors, including--

(A) any likely increase in production capacity or existing unused production capacity in the exporting country,

(B) existing inventories of the subject merchandise, or likely increases in inventories,

(C) the existence of barriers to the importation of such merchandise into countries other than the United States, and

 (D) the potential for SRC tubular products-shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products.
 (3) PRICE.--In evaluating the likely price effects of imports of the subject merchandise if the order is revoked or the suspended investigation is terminated, the Commission shall consider whether--

(A) there is likely to be significant price underselling by imports of the subject merchandise as compared to domestic like products, and (B) imports of the subject merchandise are likely to enter the United States at prices that otherwise would have a significant depressing or suppressing effect on the price of domestic like products.

(4) IMPACT ON THE INDUSTRY.--In evaluating the likely impact of imports of the subject merchandise on the industry if the order is revoked or the suspended investigation is terminated, the Commission shall consider all relevant economic factors which are likely to have a bearing on the state of the industry in the United States, including, but not limited to-

(A) likely declines in output, sales, market share, profits, production, return on investments, and utilization of capacity,
(B) likely negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment, and
(C) likely negative effects on the existing development and

production efforts of the industry, including efforts to develop a derivative or more advanced version of the domestic like products. The Commission shall evaluate all such relevant economic factors . . . within the context of the business cycle and the conditions of competition that are distinctive to the affected industry.

Section 752(a) (6) of the Act states further that in making its determination, "the Commission may consider the magnitude of the margin of dumping or the magnitude of the net countervailable subsidy. If a countervailable subsidy is involved, the Commission shall consider information regarding the nature of the countervailable subsidy and whether the subsidy is a subsidy described in Article 3 or 6.1 of the Subsidies Agreement."

Organization of report

Information obtained during the course of these reviews that relates to the statutory criteria is presented throughout this report. A summary of trade and financial data for SRC tubular products as collected in these reviews is presented in appendix C. U.S. industry data are based on the questionnaire responses of 11 U.S. producers of SRC tubular products that are believed to have accounted for essentially all domestic production of SRC tubular products in 2015.¹² U.S. import data and related information are based on Commerce's official import statistics and the questionnaire responses of 21 U.S. importers of SRC tubular products that are believed to have accounted for virtually all of the subject U.S. imports from China and Mexico in 2014-15, as well as approximately one-third of imports from nonsubject sources. Foreign industry data and related information are based on the guestionnaire responses of seven producers of SRC tubular products. Three producers in China are believed to account for *** percent of Chinese production of SRC tubular products and four producers in Mexico accounted for essentially all Mexican production of SRC tubular products in submitted questionnaire responses.¹³ Golden Dragon's Mexican and Chinese producers (GD Affiliates S de RL de CV and Golden Dragon Precise Tube Group) indicated that they each accounted for greater than 50 percent of the quantity of exports from each respective country. Responses by U.S. producers, importers, purchasers, and foreign producers of SRC tubular products to a series of questions concerning the significance of the existing antidumping orders and the likely effects of revocation of such orders are presented in appendix D.

COMMERCE'S REVIEWS

Administrative reviews¹⁴

Commerce has completed a series of antidumping duty administrative reviews with regard to subject imports of SRC tubular products from China and Mexico. The results of the administrative reviews are shown in tables I-2 (China) and I-3 (Mexico).

¹² ***.

¹³ Compiled from data submitted in response to Commission questionnaires and official U.S import statistics.

¹⁴ Commerce has not issued any duty absorption findings or anti-circumvention findings since the imposition of the antidumping duty orders. In addition, there have been no scope inquiry reviews or changed circumstances reviews since the imposition of the antidumping duty orders.

SRC tubular products: Administrative reviews of the antidumping duty orders for China

Date results published	Period of review	Producer or exporter	Margin (percent)
June 12, 2013 (78 FR 35244	05/01/11-10/31/11	Hong Kong GD Trading Co., Ltd. (Golden Dragon)	0.00
June 12, 2013 (78 FR 35251)	11/22/10 – 10/31/11	Golden Dragon Precise Copper Tube Group, Inc.	0.00
	11/22/10 – 10/31/11	Hong Kong Hailiang Metal Trading Limited, Zjhejiang Hailiang Co., Ltd., and Shanghai Hailiang Co., Ltd.	60.85
April 28, 2014 (79 FR 23324),corrected August 12, 2014 (79 FR 47091)	11/01/11 – 10/31/12	Golden Dragon Precise Copper Tube Group, Inc., Hong Kong GD Trading Co., Ltd., and Golden Dragon Holding (Hong Kong) International, Ltd.	4.48
April 28, 2014 (79 FR 23324),corrected August 12, 2014 (79 FR 47091)	11/01/11 – 10/31/12	Hong Kong Hailiang Metal Trading Limited, Zjhejiang Hailiang Co., Ltd., and Shanghai Hailiang Copper Co., Ltd.	4.5
April 28, 2014 (79 FR 23324),corrected August 12, 2014 (79 FR 47091)	11/01/11-10/31/12	PRC-wide Entity	60.85
June 5, 2015 (80 FR 32087)	11/01/12 – 10/31/13	Golden Dragon Precise Copper Tube Group, Inc., Hong Kong GD Trading Co., Ltd., and Golden Dragon Holding (Hong Kong) International, Ltd	10.50
		PRC-wide Entity	60.85

Source: Cited Federal Register notices.

SRC tubular products	: Administrative reviews	of the antidumping	duty order for Mexico

Date results published	Period of review	Producer or exporter	Margin (percent)
June 12, 2013 (78 FR 35244)	05/01/11 – 10/31/11	GD Affiliates S. de R.L. de C.V.	0.00
	11/22/10-10/31/11	Nacional de Cobre	0.00
June 30, 2014 (79 FR 36719)	11/01/11 – 10/31/12	GD Affiliates S. de R.L. de C.V.	2.26
		Nacional de Cobre, S.A. de C.V.	0.58
June 21, 2015 (80 FR 33482)	11/1/12 – 10/31/13	GD Affiliates S. de R.L. de C.V.	0.00
	11/1/12 – 10/31/13	Nacional de Cobre, S.A. de C.V.	0.00

Source: Cited Federal Register notices.

Changed circumstances reviews

Commerce has not issued any duty absorption findings or anti-circumvention findings with respect to SRC tubular products from China and Mexico since the imposition of the antidumping duty orders.

Scope inquiry reviews

Commerce has not conducted any scope inquiry reviews or changed circumstances reviews with respect to SRC tubular products from China and Mexico since the imposition of the antidumping duty orders.

Five-year reviews

Commerce issued the final results of its antidumping duty order full reviews with respect to China and Mexico on June 13, 2016.¹⁵ Table I-4 presents the antidumping margins calculated by Commerce in its original investigations and five-year reviews.

¹⁵ Seamless Refined Copper Pipe and Tube from Mexico and the People's Republic of China: Final results of the full sunset reviews of the antidumping orders on SRC tubular products, 81 FR 38134, June 13, 2016.

SRC tubular products: Commerce's original and first five-year review margins for
producers/exporters in China and Mexico

Country	Producer/exporter	Original margin (percent)	First five-year review margin (percent)
China	Golden Dragon Precise Copper Tube Group, Inc.	11.25	11.25
China	Zhejiang Hailiang Co., Ltd.; Hong Kong Hailiang Metal Trading Limited; Shanghai Hailiang Copper Co., Ltd.	60.85	60.85
China	Zhejiang Naile Copper Co., Ltd.; Zhejiang Jiahe Pipes Inc.; Luvata Tube (Zhongshan) Ltd.	36.05	36.05
China	Luvata Alltop (Zhongshan), Ltd.; Ningbo Jintian Copper Tube Co. Ltd.	36.05	36.05
China	All Others	36.05	60.85
Mexico	IUSA S.A. de C.V.	24.89	24.89
Mexico	Nacional de Cobre, S.A. de C.V.	31.43	27.16
Mexico	All Others	28.16	26.03

Source: 75 FR 60723, 75 FR 60725, 75 FR 71070, and 81 FR 38134.

New shipper review

On September 26, 2012, Commerce published the final results of its new shipper review. Commerce determined that that a weighted-average margin of 5.53 percent existed for GD Affiliates S. de R.L. de C.V. (Golden Dragon) during the period of November 22, 2010 through April 30, 2011.¹⁶

THE SUBJECT MERCHANDISE

Commerce's scope

Commerce has defined the scope of these reviews as follows:

{A}II seamless circular refined copper pipes and tubes, including redraw hollows, greater than or equal to 6 inches (152.4 mm) in length and measuring less than 12.130 inches (308.102 mm) (actual) in outside diameter ("OD"), regardless of wall thickness, bore

¹⁶ Seamless Refined Copper Pipe and Tube from Mexico and the People's Republic of China: Final Results of Antidumping Duty New Shipper Review," 77 FR 59178, September 26, 2012.

(*e.g.*, smooth, enhanced with inner grooves or ridges), manufacturing process (*e.g.*, hot finished, cold-drawn, annealed), outer surface (*e.g.*, plain or enhanced with grooves, ridges, fins, gills), end finish (e.g., plain end, swaged end, flared end, expanded end, crimped end, threaded), coating (*e.g.*, plastic, paint), insulation, attachments (*e.g.*, plain, capped, plugged, with compression or other fitting), or physical configuration (*e.g.*, straight, coiled, bent, wound on spools).

The scope of these investigations covers, but is not limited to, seamless refined copper pipe and tube produced or comparable to the American Society for Testing and Materials ("ASTM") ASTM-B42, ASTM-B68, ASTM-B75, ASTM-B88, ASTM-B88M, ASTM-B188, ASTM-B251, ASTM-B251M, ASTM-B280, ASTM-B302, ASTM-B306, ASTM-359, ASTM-B743, ASTM-B819, and ASTM-B903 specifications and meeting the physical parameters described therein. Also included within the scope are all sets of covered products, including "line sets" of seamless refined copper tubes (with or without fittings or insulation) suitable for connecting an outdoor air conditioner or heat pump to an indoor evaporator unit. The phrase "all sets of covered products" denotes any combination of items put up for sale that is comprised of merchandise subject to the scope.

"Refined copper" is defined as: (1) metal containing at least 99.85 percent by weight of copper; or (2) metal containing at least 97.5 percent by weight of copper, provided that the content by weight of any other element does not exceed the following limits:

ELEMENT	LIMITING CONTENT PERCENT BY WEIGHT
Ag – Silver	0.25
As – Arsenic	0.5
Cd – Cadmium	1.3
Cr – Chromium	1.4
Mg – Magnesium	0.8
Pb – Lead	1.5
S – Sulfur	0.7
Sn — Tin	0.8
Te – Tellurium	0.8
Zn – Zinc	1.0
Zr – Zirconium	0.3
Other elements (each)	0.3

Excluded from the scope of these orders are all seamless circular hollows of refined copper less than 12 inches in length whose OD (actual) exceeds its length. The products subject to these orders are currently classifiable under subheadings 7411.10.1030 and 7411.10.1090 of the Harmonized Tariff Schedule of the United States ("HTSUS"). Products subject to these investigations may also enter under HTSUS subheadings 7407.10.1500, 7419.99.5050, 8415.90.8065, and 8415.90.8085. Although the HTSUS

subheadings are provided for convenience and customs purposes, the written description of the scope of these orders is dispositive.

Tariff treatment

SRC tubular products' classification in the Harmonized Tariff Schedule of the United States ("HTSUS" or "HTS") has not changed since the conclusion of the final phase of the original investigations. SRC tubular products currently are classifiable under HTS subheading 7411.10.10, and are reported under statistical reporting numbers 7411.10.1030 and 7411.10.1090 based on outside diameter and form.¹⁷ The general duty rate for this subheading is 1.5 percent ad valorem.¹⁸

Goods that importers consider to be SRC tubular products may also be imported under HTS subheading 7407.10.15 (refined copper hollow profiles, which include goods not meeting the definition of tubes and pipes, often because they do not have a uniform cross-section along their whole length or have inner and outer surfaces of the same form). They may also be imported as articles of copper under HTS statistical reporting numbers 7419.99.5050 (covering miscellaneous articles of refined copper and copper alloys), 8415.90.8065 (nonenumerated parts of heat pumps), and 8415.90.8085 (miscellaneous parts of air-conditioning machinery). Imports under these HTS provisions from countries (including China) that qualify for normal trade relations status are eligible to enter the United States at general duty rates of 3.0 percent for HTS subheading 7407.10.15 or 1.4 percent under HTS subheading 8415.90.80, while imports under HTS subheading 7419.99.50 can enter the United States at a general rate of "Free." Imports of SRC tubular products from Mexico that are originating goods under HTS general note 12 are eligible to enter the United States under these HTS subheadings at the special duty rate of "Free," under the North American Free Trade Agreement.

THE SUBJECT PRODUCT

Description and applications¹⁹

SRC tubular products are fabricated products²⁰ of refined copper,²¹ distinguished by a circular cross section of varying nominal OD sizes (typically 0.04"–12")²² and wall thicknesses.

¹⁷ Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

¹⁸ USITC, *HTSUS (2016), Supplement 1, Update 1*, USITC Publication 4635, July 1, 2016.

¹⁹ Unless otherwise noted, this information is based on *Seamless Refined Copper Pipe and Tube from China and Mexico*, Inv. Nos. 731-TA-1174-1175 (Final), USITC Publication 4193, November 2010, pp. I-6 through I-9.

²⁰ SRC tubular product manufacturers distinguish between "tubes" with smooth ends that are joined together by soldering or brazing, versus "pipes" that are threaded. Almost all SRC tubular products considered in these reviews are tubes rather than pipes.

The inner and outer tubing surfaces are either smooth or enhanced (e.g., with grooves, ridges, fins, or gills). Additional characteristics can include: outer surface coatings for corrosion protection or insulation; marking or color coding for product identification; cleaning, pressurizing with nitrogen gas, and capping of each end to ensure interior cleanliness; end finishes; and attachments. SRC tubular products are available in straight lengths, bent to shape, coiled flat without spools ("pancake coils"), or coiled onto spools. "Line sets" consist of two different sizes of SRC tubular products, a smaller diameter liquid line (commonly with end finishes) and a larger diameter suction line (commonly insulated), usually to connect outdoor air conditioners and heat pumps with indoor evaporator units.

The variety of physical dimensions and characteristics available for SRC tubular products reflects the range of end-use applications ²³ that take advantage of copper's strength, malleability, ductility, thermal conductivity, corrosion resistance, and chemical (e.g., lead-free) purity. These applications generally involve fluids under pressure for either conveyance or closed-loop thermal transfer. Conveyance applications include residential, commercial, institutional, industrial, and municipal water systems, as well as distribution systems for other liquids and gases. Thermal transfer applications include residential, commercial, and industrial heating systems; commercial refrigeration systems; and combined or split-unit air-conditioning systems.

"Plumbing" (or "standard") tubing is commonly produced to various ASTM standards that specify the chemical composition, OD, wall thickness, strength, hardness, cleanliness, roundness, marking, and other requirements for SRC tubular products based on end-use applications (tables I-5 and I-6). "Commercial" (or "industrial") tubing is produced to either industry standard specifications or customer nonstandard specifications, including any surface enhancements designed to improve thermal transfer capabilities. Individual purchasers may require more exacting specifications for industrial tubing than plumbing tubing, the latter being considered a commodity product. Common applications for industrial SRC tubular products include refrigeration and heating units; split-system central, room and window, central, and vehicle air conditioners; and chillers and freezers.

The extent to which nonsubject materials substitute for copper varies among three major SRC tubular product applications. Plastics predominate over copper for residential plumbing, although the rate of substitution has reportedly slowed and leveled out, but copper still predominates over other materials for commercial plumbing. For air conditioning equipment, the rate to which aluminum substitutes for copper is slowing but still ongoing.²⁴

^{(...}continued)

²¹ "Refined copper" is defined in Commerce's scope as: (1) metal containing at least 99.85 percent by weight of copper; or (2) metal containing at least 97.5 percent by weight of copper, provided that the content by weight of any other element does not exceed specified limits.

²² Capillary tube is available with actual OD sizes less than 0.04". The nominal size of 12" is equivalent to an OD of 12.130" (the upper width limit in the petition scope), or more specifically an actual OD of 12.125" with a tolerance of \pm 0.005".

²³ Hearing transcript, pp. 22–24 (Baker).

²⁴ Hearing transcript, pp. 51–52 (Sigloch).

Table I-5

ASTM designation	Title	Specified end-use applications
B-42	Standard Specification for Seamless Copper Pipe, Standard Sizes	Plumbing and boiler feed lines
B-68	Standard Specification for Seamless Copper Tube, Bright Annealed	Refrigeration, oil lines, gasoline lines, and other applications requiring interior surfaces free of scale and dirt
B-75	Standard Specification for Seamless Copper Tube	General engineering applications
B-88	Standard Specification for Seamless Copper Water Tube	Water and fire-sprinkler systems
B-88M	Standard Specification for Seamless Copper Water Tube (Metric)	Water and fire-sprinkler systems
B-188	Standard Specification for Seamless Copper Bus Pipe and Tube	Electrical conductors
B-251	Standard Specification for Wrought Seamless Copper and Copper-Alloy Tube	Applications listed in ASTM B-68 and ASTM B-75
B-251M	Standard Specification for General Requirements for Wrought Seamless Copper and Copper-Alloy Tube (Metric)	Applications listed in ASTM B-68 and ASTM B-75
B-280	Standard Specification for Seamless Copper Tube for Air Conditioning and Refrigeration Field	Air conditioning and refrigeration units
B-302	Standard Specification for Threadless Copper Pipe	Assembled piping systems
B-306	Standard Specification for Copper Drainage Tube (DWV)	Sanitary drainage, waste, and vent piping
B-359	Standard Specification for Copper and Copper- Alloy Seamless Condenser and Heat Exchanger Tubes With Integral Fins	Surface condensers, evaporators, and heat exchangers
B-743	Standard Specification for Seamless Copper Tube in Coils	Refrigeration, air conditioning, and oil lines
B-819	Standard Specification for Seamless Copper Tube for Medical Gas Systems	Medical gas systems requiring specially cleaned interior surfaces
B-903	Standard Specification for Seamless Copper Tube for Heat Exchanger Tubes with Internal	Refrigeration, air conditioning, and other heat exchangers

SRC tubular products: ASTM standard designations, titles, and specified end-use applications

Source: Seamless Refined Copper Pipe and Tube from China and Mexico, Inv. Nos. 731-TA-1174-1175 (Final), USITC Publication 4193, November 2010, p. I-8.

				Commercially available lengths			
Designation	Designation Code ASTM Applications		Size	Drawn	Annealed		
Туре К	Green	B-88	Water service and distribution	Straight length	s:		
(thicker			Fire protection Solar energy Fuel and fuel oil Heating, ventilation, air conditioning Snow melting Compressed air	1⁄4"-8"	20'	20'	
walled)				10"	18'	18'	
				12"	12'	12'	
				Coils:			
			Liquefied petroleum gas		_	60'	
			Vacuums	1⁄4"—1"		100'	
				1¼"–1½"	_	60'	
					_	40'	
				2"	_	45'	
Type L	Blue	B-88	Water service and distribution	Straight length	s:		
(intermediate			Fire protection Solar energy Fuel	1⁄4"-10"	20'	20'	
walled)			and fuel oil	12"	18'	18'	
			Snow melting Compressed air Natural gas Liquefied petroleum gas Vacuums	Coils:			
				1⁄4"—1"	—	60'	
					_	100'	
				1¼"-1½"	_	60'	
				2"	—	40'	
					_	45'	
Туре М	Red	B-88	Water service and distribution	Straight lengths:			
walled	Inner Ied Solar energy Fuel and fuel oil Heating, ventilation, air conditioning Snow melting Vacuums		Solar energy Fuel and fuel oil Heating, ventilation, air conditioning Snow melting Vacuums	1⁄4"–12"	20'	_	
DWV	Yellow	B-306	Drain, waste, vent Heating, ventilation, air conditioning	Straight lengths:			
			Solar energy	1¼"-8"	20'	—	
ACR/RST	Blue	B-280	Air conditioning	Straight length	s:		
			Natural gas Liquefied petroleum gas Compressed air	³ ⁄8"—4 ¹ ⁄8"	20'	(²)	
				Coils:			
				¹ ⁄8"—1 ⁵ ⁄8"	—	50'	
OXY/MED	(K) Green	Green B-819 Blue	Medical gases Compressed air	Straight lengths:			
	(L) Blue		Vacuums	1⁄4"—8"	20'	_	

 Table I-6

 SRC tubular products: Designations, color codes, standards, apps, sizes, tempers, and lengths

¹ Wall thicknesses differ for Types K, L, and M plumbing pipes having a common nominal diameter, being greater for Type K than for Type L, and lesser for Type M than for Type L. ² Available by special order.

Source: Seamless Refined Copper Pipe and Tube from China and Mexico, Inv. Nos. 731-TA-1174-1175 (Final), USITC Publication 4193, November 2010, p. I-9.

Manufacturing processes ²⁵

The steps for producing SRC tubular products can be grouped into three stages:

- 1. prefabricating, which includes melting, casting, and either extrusion or rolling of rough tubing;
- 2. intermediate fabrication, consisting of cold drawing of unfinished tubing; and
- 3. finishing of the SRC tubular products.

The starting material is metallic copper in the form of whole or sections cut from refined cathodes, scrap, or cast ingots.²⁶ The exact input mix depends on the cost and availability of the various forms of copper, technical capabilities of the melting furnace, and customer specifications. SRC tubular product facilities can use a substantial share of scrap in their input mix to manufacture plumbing tubing, since the metallic specifications for plumbing tubing are not as exacting as for industrial tubing.^{27 28}

Prefabricating

The production process begins with melting and refining copper in a furnace to produce molten copper. A shaft furnace is adequate to melt high-purity cathodes, new scrap,²⁹ and ingots into molten copper that does not need further refining. Alternatively, inclusion of less-pure old scrap³⁰ in the initial furnace charge requires a reverberatory or other hearth-type furnace that allows for further refining of the molten copper. The copper charge ³¹ is melted at temperatures between 2,300° and 2,400° F (above the melting point of copper at 1,981° F), and fire-refined by exposure to oxygen. Most impurities are converted into oxides that are trapped in the surface slag, whereas less-readily oxidized impurities (especially tin and nickel) must be

²⁵ Unless otherwise noted, this information is based on *Seamless Refined Copper Pipe and Tube from China and Mexico*, Inv. Nos. 731-TA-1174-1175 (Final), USITC Publication 4193, November 2010, pp. I-10 through I-14.

²⁶ Brick-shaped copper ingots cast from melted-down cathodes and scrap are more commonly consumed by SRC tubular product mills with smaller-scale melting furnaces with doors that cannot accommodate full cathode sections and baled scrap.

²⁷ Seamless Refined Copper Pipe and Tube from China and Mexico, Inv. Nos. 731-TA-1174-1175 (Final), USITC Publication 4193, November 2010, p. I-10.

^{28 *** ***}

²⁹ Pieces of refined copper recovered within the mill from the various downstream production steps.

³⁰ Crushed and baled refined copper wire and tubing recovered from demolished or renovated structures, which may include various amounts of tin-lead solder, plastic insulation, or other materials still adhering to the copper.

³¹ The proportion of cathode to scrap copper widely varies among SRC tubular product facilities. For example, among the various Muller Group companies, the share of scrap in the copper charge reportedly ranges from none to 100 percent among individual facilities. Hearing transcript, p. 94 (Sigloch). The copper charge is approximately 50-50 scrap-to-cathode mix at Wieland's Pine Hill NC facility. Hearing transcript, p. 94 (Baker).

removed by reaction with a special slag compound. The molten copper is then stirred with greenwood poles ("poling"), which burn and vaporize to create a stirring motion that drives reactions to completion. After the surface slag is skimmed-off, the fire-refined melt exceeds 99.9 percent pure copper.

In the casting step, molten copper is transferred from the melting/refining furnace to either a holding furnace or a heated tundish (reservoir dam) to maintain the molten copper at constant temperature for casting. A layer of pulverized graphite protects the surface of the molten copper from oxidation. The SRC tubular product industry relies on three different technologies for casting molten copper into unfabricated forms. "Continuous casting" and "semi-continuous casting" are both well-established technologies for producing large-diameter solid "logs" or thick-walled hollow "tube rounds." In the continuous casting process, molten copper flows into vertical graphite-lined cylindrical steel molds, which are water-cooled to solidify the copper quickly. The solidified copper is then gripped and withdrawn from the bottom as more molten copper is poured into the top of the mold. Some mills utilize casting molds with a central water-cooled core to produce a hollow tube round. A moving saw cuts the withdrawn log or tube round into solid or hollow billets, respectively, which are approximately two to four feet long in order to fit the downstream extrusion or rolling equipment. In the semicontinuous casting process, a water-cooled floor of the mold cavity seals the vertical mold until the molten copper solidifies. More molten copper is poured into the top of the mold at the same rate as the floor is lowered. When the log or tube round reaches the depth of the pit beneath the mold, the mold is (and central core are) raised to allow the log or tube round to be removed from the pit for sawing into shorter billets.

The billet is preheated to approximately 1,535° F before being placed in a horizontal extrusion press. The press includes a ram fitted with a dummy block (that is smaller in diameter than the billet), and either a rod slightly smaller in diameter than that of the die opening if the billet was either cast hollow or already pierced, or a piercing mandrel if the billet is still solid.³² The ram forces the heated copper over the rod or mandrel and through the die to form a long rough tube. Material that accumulates over the dummy block is recovered for remelting. The extruded rough tube is carried along a run-out table to maintain its straightness until it is cool enough to be cleaned and descaled. The ends are removed and the length is subsequently coiled in preparation for drawing.

A more recent innovation is the "continuous horizontal cast and roll" process that combines horizontal casting and milling, followed by planetary rolling, and is capable of producing unfinished "mother tube" directly from molten copper.^{33 34} The cast and roll process

³² If the reheated billet is solid, it must be pierced lengthwise with a mandrel (pointed rod) to form a hole through its center that will eventually become the inner wall of the resulting tubing. Solid billets can be pierced either prior to or concurrent with extrusion. However, billet piercing is no longer prevalent among major global producers.

³³ The cast and roll process was developed by Outokumpu (now Luvata) and subsequently patented in October 1989. ***. *Seamless Refined Copper Pipe and Tube from China and Mexico*, Inv. Nos. 731-TA-1174-1175 (Final), Staff Report, INV-HH-101, October 13, 2010, p. I-17.

offers the advantage over the extrusion process of reduced production costs, as this prefabrication technology is continuous and involves far fewer production steps, particularly by eliminating billet reheating and extrusion. Another advantage of the cast and roll process is the improved control of wall thickness along the length of the mother tube, compared to the greater variability resulting from the extrusion process. A maximum final diameter limit of 1½ inches for SRC tubular products is attainable with the cast and roll technology, but the share of the market that cannot be served by facilities solely reliant upon this technology for the prefabrication stage is estimated by domestic interested parties at ***.³⁵

Intermediate fabricating

The mother tube resulting from the prefabrication stage (irrespective of which of the three different casting technologies) is successively cold drawn through a series of (as many as 14) steel dies to reduce OD and wall thickness (by approximately 35 percent per draw) to final dimensions. Prior to drawing the tube through each die, a tapered plug mandrel is inserted into one end and that end is crimped to fit through the die and gripped by the jaws of the drawing machine. As the tube is drawn, the die and mandrel reduce the OD and wall thickness, respectively. The mandrel also imparts either a smooth or enhanced surface to the inside of the tube. Industrial tubing, generally being *** than does plumbing tubing.³⁶

(...continued)

In February 1991, GD China obtained licenses for Outokompu's cast and roll technology, initially limited to a single facility in Xiangxiang. Subsequently, GD China obtained additional licenses in April 2001 for production on a new cast and roll line through March 2003, and in December 2004 for lines in three GD China facilities and for its SRC tubular product exports to market destinations worldwide, including cast and roll-based SRC tubular products (including inner-groove tube) in North America. Mexican producer IUSA initiated construction of its cast and roll facility in 2007 and started production trials in 2008, but the equipment was manufactured by Danieli & Kalamari rather than by Outokompu. MXGDA's facility in Mexico manufactures SRC tubular products drawn from cast and rolled mother tube. *Seamless Refined Copper Pipe and Tube from China and Mexico*, Inv. Nos. 731-TA-1174-1175 (Final), USITC Publication 4193, November 2010, p. I-13.

GD Copper USA was the most recent U.S. producer to install cast and roll at its Pine Hill, Alabama mill, which opened in May 2014. Andy Nguyen, "Golden Dragon Opens Factory in Wilcox County, Alabama," Asia Matters for America, July 8, 2014; AMM.com, "Golden Dragon Selects New Ala. Site," February 8, 2012.

³⁴ In this process, ***. The emerging hollow shell is cut by a saw into "shells" 30–60 feet in length. ***, referred to as a "mother tube." *Seamless Refined Copper Pipe and Tube from China and Mexico*, Inv. Nos. 731-TA-1174-1175 (Final), Staff Report, INV-HH-101, October 13, 2010, pp. I-14 and I-15.

³⁵ ***. Domestic interested parties' posthearing brief, Attachment 1, "Responses to Commissioner Questions," p. 9.

³⁶ Seamless Refined Copper Pipe and Tube from China and Mexico, Inv. Nos. 731-TA-1174-1175 (Final), Staff Report, INV-HH-101, October 13, 2010, p. I-18.

Finishing

The finishing steps depend on the specific type of SRC tubular product being produced. Tubing to be sold as straight lengths is passed through a series of straightening rolls that bend the tubing less at each successive roll station so that the tubing emerges straight and can be subsequently cut to length. Tubing to be sold in coils is passed through rolls that impart a bend of the coil radius as the tubing emerges from the coiler. Annealed tubing for thermal transfer applications is passed through a series of rollers and over a mandrel to impart enhancements to the inner surface. Similar enhancements can also be imparted to the outer surface by additional operations. For some SRC tubular products, the ends also can be finished by swaging (crimping), flaring, expanding, crimping, or threading.

SRC tubular products are sold either as drawn ("hard") or annealed ("soft"). SRC tubular products (either in straight lengths or coils) are annealed by passing through either a continuous (long, heated box) furnace or an in-line induction (short, electric-powered) furnace, heated at 1,300° F in a non-reactive gas atmosphere to prevent oxidation of the copper. Some mills utilize bell furnaces for batch annealing in which coils are stacked beneath the bell and heated in a non-reactive atmosphere. Annealed SRC tubular products can be distinguished by the matte surface finish and lesser stiffness compared to as-drawn tubing. Otherwise, annealed and non-annealed SRC tubular products are of the same product quality and exhibit the same performance characteristics when in contact with fluids.

Pipe and tube surfaces are then cleaned to remove any remaining drawing lubricants or other debris, which is particularly critical for SRC tubular products designed to carry medical gases and cooling refrigerants. Outer surfaces can be coated for corrosion protection or insulation, and are marked or color-coded for product identification. Attachments are also added to the ends, depending on the requirements of industry standards or customer specifications.

The number and extent of finishing processes typically varies between SRC tubular products for plumbing versus industrial applications. The finishing process is extremely important for the vast majority of industrial tubing, since the latter undergoes *** than does plumbing tubing.³⁷

DOMESTIC LIKE PRODUCT ISSUES

The Commission's decision regarding the appropriate domestic products that are "like" the subject imported SRC tubular products is based on a number of factors including: (1) physical characteristics and uses; (2) common manufacturing facilities and production employees; (3) interchangeability; (4) customer and producer perceptions; (5) channels of distribution; and (6) price. Information regarding these factors is discussed below.

³⁷ Seamless Refined Copper Pipe and Tube from China and Mexico, Inv. Nos. 731-TA-1174-1175 (Final), Staff Report, INV-HH-101, October 13, 2010, p. I-19.

In its original determinations, the Commission defined the domestic like product as coterminous with the scope of the original investigations, consisting of all SRC tubular products.³⁸ In its notice of institution in these current five-year reviews, the Commission solicited comments from interested parties regarding the appropriate domestic like SRC tubular products and domestic industry.³⁹ Both the domestic producers and Golden Dragon commented on the Commission's definition of the domestic like SRC tubular products and indicated agreement with the Commission's definition of the domestic like product that was adopted during the original investigations.⁴⁰ At the hearing, Nacobre testified that it does not dispute the Commission's like-product finding.⁴¹

U.S. MARKET PARTICIPANTS

U.S. producers

During the original investigations, 12 firms supplied the Commission with usable information on their U.S. operations with respect to SRC tubular products. These firms accounted for 73.5 percent of U.S. SRC tubular products in 2009. In these current proceedings, the Commission issued U.S. producers' questionnaires to 29 firms, 11 of which provided the Commission with information on their SRC tubular products operations. These firms are believed to account for essentially all production of U.S. SRC tubular products in 2015.^{42 43} Presented in table I-7 is a list of current domestic producers of SRC tubular products and each company's position on continuation of the orders, SRC tubular products locations, and share of reported SRC tubular products in 2015.

³⁸ Seamless Refined Copper Pipe and Tube from China and Mexico, Inv. Nos. 731-TA-1174-1175 (Final), USITC Publication 4193, November 2010, p. I-12.

³⁹ Seamless Refined Copper Pipe and Tube from China and Mexico; Institution of Five-Year Reviews, 80 FR 59186, October 1, 2016.

⁴⁰ Substantive Response of domestic producers, p. 21; Substantive Response of Golden Dragon, p. 9.

⁴¹ Hearing transcript, p. 169 (Winton).

⁴² ***.

⁴³ Staff telephone interview with ***, October 28, 2016.

Table I-7

SRC tubular products: U.S. producers, positions on orders, U.S. SRC tubular products locations, and shares of 2015 production

Firm	Position on petition	Production location(s)	Share of production (percent)
Cam-Lee	***	Reading, PA	***
Corro	***	Sauget, IL Shelbina, MO Vinita Park, MO	***
Freeport	***	Flizabeth NI	***
GD Copper USA	***	Pine Hill, AL	***
H&H Tube	***	Vanderbilt, MI	***
Howell Metal	***	New Market, VA	***
Mueller	***	Wynne, AR Fulton, MS Phoenix, AZ Lawrenceville, GA	***
National Copper	***	Huntsville, AL	***
Precision	***	North Wales, PA	***
ST Products	***	Duncansville, PA Huntsville, AL	***
Wieland	***	Pine Hall, NC Wheeling, IL	***
Wolverine Tube	***	Shawnee, OK	***
Total			100.0

1***

Source: Compiled from data submitted in response to Commission questionnaires.

As indicated in table I-8, three U.S. producers are related to foreign producers of the subject merchandise and five are related to U.S. importers of the subject merchandise. In addition, as discussed in greater detail in Part III, five U.S. producers directly import the subject merchandise and purchase the subject merchandise from U.S. importers.

Table I-8 SRC tubular products: U.S. producers' ownership, related and/or affiliated firms, and affiliated countries

* * * * * * *

U.S. importers

In the original investigations, 42 U.S. importing firms supplied the Commission with usable information on their operations involving the importation of SRC tubular products, accounting for 20 percent of U.S. imports of SRC tubular products during 2009. Of the responding U.S. importers, five were domestic producers: ***

In the current proceedings, the Commission issued U.S. importers' questionnaires to 60 firms believed to be importers of SRC tubular products, as well as to all U.S. producers of SRC tubular products. Usable questionnaire responses were received from 21 firms, representing 96.0 percent of U.S. imports from China and Mexico. Table I-9 lists all responding U.S. importers of SRC tubular products from China and Mexico and other sources, their locations, and their shares of U.S. imports in 2015.

Table I-9

SRC tubular products: U.S. importers, sources of imports, U.S. headquarters, and shares of imports in 2015

		Share of imports by source (percent)				
		Subject No			Nonsubject	
Firm	Headquarters	China	Mexico	sources	sources	Total
ABCo	Chatham, MA	***	***	***	***	***
CMC	Fort Lee, NJ	***	***	***	***	***
CPW America	Houston, TX	***	***	***	***	***
GD Copper USA	Pine Hill, AL	***	***	***	***	***
H&H	Vanderbilt, MI	***	***	***	***	***
Hailiang	Rowland Heights CA	***	***	***	***	***
Homewerks	Lincolnshire, IL	***	***	***	***	***
Cam-Lee	Reading, PA	***	***	***	***	***
JMF	Bettendorf, IA	***	***	***	***	***
JSC	Moody, AL	***	***	***	***	***
Lennox	Richardson, TX	***	***	***	***	***
Lloyds	Hacienda Hts., CA	***	***	***	***	***
Luvata Franklin	Franklin, KY	***	***	***	***	***
Luvata Grenada	Grenada, MS	***	***	***	***	***
Modine	Racine, WI	***	***	***	***	***
Nacobre	Azcapotzalco, DF	***	***	***	***	***
Nortek	O'Fallon, MO	***	***	***	***	***
Panduit	Tinley Park, IL	***	***	***	***	***
Refricenter	Miami, FL	***	***	***	***	***
ST Products	Duncansville, PA	***	***	***	***	***
Wieland	Pine Hall, NC	***	***	***	***	***
Total		100.0	100.0	100.0	100.0	100.0

Source: Compiled from data submitted in response to Commission questionnaires.

U.S. purchasers

The Commission received 24 usable questionnaire responses from firms that bought SRC tubular products during January 2010 to June 2016.⁴⁴ Thirteen responding purchasers are distributors, while 11 are end users.⁴⁵ The majority of responding U.S. purchasers were located in the Southeast and Central Southwest regions, while others were located in the Northeast, Midwest, and Pacific Coast regions. The responding purchasers represented firms in a variety of domestic industries, including distributors of HVAC and plumbing supplies and producers of *** as well as HVAC equipment. The largest responding purchasers of SRC tubular products are distributors *** and equipment manufacturers ***.

APPARENT U.S. CONSUMPTION AND U.S. MARKET SHARES

Data concerning apparent U.S. consumption and U.S. market shares of SRC tubular products are shown in table I-10. Apparent U.S. consumption by quantity decreased by 2.1 percent (13.9 million pounds) from 2010 to 2015, while the quantity of imports from China decreased with the opening and start of production at GD Copper USA in 2014 from over 41.6 million pounds in 2010 to 1.1 million in 2015. The quantity of imports from Mexico also decreased from 26.0 million pounds in 2010 to 13.3 million in 2015 (imports from Mexico were as low as 1.4 million pounds in 2013).

U.S. producers' U.S. shipments market shares based on quantity (percent) increased by 2.5 percent from 2010 to 2015. U.S. imports from China and Mexico accounted for 0.2 and 2.1 percent of apparent U.S. consumption in 2015, down from 6.4 and 4.0 percent in 2010. U.S. imports from nonsubject countries, however, accounted for 18.2 percent of apparent U.S. consumption in 2015, up from 12.5 percent in 2010.

⁴⁴ Of the 24 responding purchasers, all 24 purchased the domestic SRC tubular products, four purchased imports of the subject merchandise from China, two purchased the subject product from Mexico, and nine purchased imports of SRC tubular products from other sources.

⁴⁵ Two purchasers, *** identified their operations as "other," but described themselves as *** and were classified as a distributor and end user, respectively.

SRC tubular products: U.S. shipments of domestic SRC tubular products, U.S. shipments of imports, and apparent U.S. consumption, 2010-15, January to June 2015, and January to June 2016

	Calendar year				January to June			
Item	2010	2011	2012	2013	2014	2015	2015	2016
	Quantity (1,000 pounds)							
U.S. producers' U.S. shipments	498,535	487,892	461,376	460,395	485,412	503,789	260,595	279,509
U.S. imports from China	41,565	20,044	19,643	19,473	21,772	1,138	633	301
Mexico	25,983	3,962	1,929	1,393	4,547	13,347	7,858	5,966
Subject sources	67,548	24,006	21,572	20,866	26,319	14,485	8,491	6,267
All other sources	81,201	100,622	102,225	110,798	118,837	115,158	63,453	62,327
All sources	148,749	124,628	123,797	131,664	145,156	129,643	71,944	68,594
Apparent U.S. consumption	647,284	612,520	585,173	592,059	630,568	633,432	332,539	348,103
		•	•	Value (1,0	00 dollars)	•	•	•
U.S. producers' U.S. shipments	2,095,318	2,437,610	2,095,584	1,972,524	1,976,755	1,750,506	949,605	848,760
U.S. imports from China	159,289	95,572	84,257	77,041	83,664	4,849	2,818	1,286
Mexico	97,276	18,039	9,408	6,226	18,569	48,445	29,083	19,493
Subject sources	256,565	113,611	93,665	83,268	102,233	53,294	31,902	20,779
All other sources	328,311	496,803	457,733	465,399	470,746	393,595	225,515	181,868
All sources	584,876	610,414	551,397	548,666	572,980	446,889	257,417	202,648
Apparent U.S. consumption	2,680,194	3,048,024	2,646,981	2,521,190	2,549,735	2,197,395	1,207,022	1,051,408
		•	Market s	hare based	on quantity ((percent)	•	
U.S. producers' U.S. shipments	77.0	79.7	78.8	77.8	77.0	79.5	78.4	80.3
U.S. imports from China	6.4	3.3	3.4	3.3	3.5	0.2	0.2	0.1
Mexico	4.0	0.6	0.3	0.2	0.7	2.1	2.4	1.7
Subject sources	10.4	3.9	3.7	3.5	4.2	2.3	2.6	1.8
All other sources	12.5	16.4	17.5	18.7	18.8	18.2	19.1	17.9
All sources	23.0	20.3	21.2	22.2	23.0	20.5	21.6	19.7
	Market share based on value (percent)							
U.S. producers' U.S. shipments	78.2	80.0	79.2	78.2	77.5	79.7	78.7	80.7
U.S. imports from China	5.9	3.1	3.2	3.1	3.3	0.2	0.2	0.1
Mexico	3.6	0.6	0.4	0.2	0.7	2.2	2.4	1.9
Subject sources	9.6	3.7	3.5	3.3	4.0	2.4	2.6	2.0
All other sources	12.2	16.3	17.3	18.5	18.5	17.9	18.7	17.3
All sources	21.8	20.0	20.8	21.8	22.5	20.3	21.3	19.3

Source: Compiled from data submitted in response to Commission questionnaires and official U.S. import statistics under HTS statistical reporting numbers 7411.10.1030 and 7411.10.90, accessed August 29, 2016.

Figure I-2 SRC tubular products: Apparent U.S. consumption, 2010-15, January to June 2015, and January to June 2016



Sources: Compiled from data submitted in response to Commission questionnaires and official U.S import statistics under HTS statistical reporting numbers 7411.10.1030 and 7411.10.0090, accessed August 29, 2016.
PART II: CONDITIONS OF COMPETITION IN THE U.S. MARKET

U.S. MARKET CHARACTERISTICS

Apparent U.S. consumption of SRC tubular products declined by 9.6 percent during 2010-12, and increased by 8.2 percent during 2012-15. Overall, apparent U.S. consumption in 2015 was 2.1 percent lower than in 2010. Apparent U.S. consumption in interim 2016 (January-June) was 4.7 percent higher than in interim 2015. Average unit values generally declined after 2011. Thus the value of apparent U.S. consumption in 2015 was 18.0 percent lower than in 2010, and was 12.9 percent lower in interim 2016 compared to interim 2015.

CHANNELS OF DISTRIBUTION

As presented in table II-1, U.S. producers sold to both distributors and end users, with more sales to distributors during January 2010-June 2016. Imports from China were overwhelmingly sold to end users throughout this period. The share of imports from Mexico and from nonsubject sources sold to end users increased over this period.

The distinction between SRC tubing for plumbing and industrial applications is not clearcut.¹ However, most reported sales for plumbing applications were to distributors and most sales for industrial applications were to end users. Of reported sales of domestic SRC tubing products for plumbing applications in 2015, 88 percent were to distributors and 12 percent to end users; conversely, only 6 percent of sales for industrial applications were to distributors and 94 percent to end users. All reported sales of SRC tubing products from China for plumbing applications were to distributors, and all sales for industrial applications were to end users. All reported sales of SRC tubing products from Mexico to both distributors and end users were for industrial applications. All reported sales of SRC tubing products from nonsubject sources for plumbing applications were to distributors, and sales for industrial applications were to end users and distributors (89 percent and 11 percent, respectively).

¹ For example, purchasers ***, both producers of HVAC equipment, reported that their purchases were of 100 percent for industrial applications, and 100 percent for plumbing applications, respectively. Both are customers of *** that reportedly sells SRC tubing products only for industrial applications.

Table II-1

SRC tubular products: U.S. producers' and importers' share of reported U.S. commercial shipments (percent), by sources and channels of distribution, 2010-15, January-June 2015, and January-June 2016

	Calendar year					January to June		
ltem	2010	2011	2012	2013	2014	2015	2015	2016
		Share	of comn	nercial U	.S. shipn	nents (pe	ercent)	
U.S. producers to distributors / wholesale / retail	59.6	58.8	61.2	60.1	58.9	59.3	58.7	57.2
to end users / OEM	40.4	41.2	38.8	39.9	41.1	40.7	41.3	42.8
U.S. importers: China to distributors / wholesale / retail	***	***	***	***	***	***	***	***
to end users / OEM	***	***	***	***	***	***	***	***
U.S. importers: Mexico to distributors / wholesale / retail	***	***	***	***	***	***	***	***
to end users / OEM	***	***	***	***	***	***	***	***
U.S. importers: All other sources to distributors / wholesale / retail	***	***	***	***	***	***	***	***
to end users / OEM	***	***	***	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

GEOGRAPHIC DISTRIBUTION

U.S. producers reported selling SRC tubular products to all regions in the contiguous United States. Seven of 10 responding U.S. producers reported selling in all continental regions (table II-2), with somewhat fewer producers serving the Mountain and Pacific Coast regions. The pattern of distribution was similar for importers. Most responding importers reported selling into all regions east of the Mountain region, with 4 of 9 serving the Mountains and 6 serving the Pacific Coast. For U.S. producers, 12.5 percent of sales were within 100 miles of their production facility, 60.1 percent were between 101 and 1,000 miles, and 27.4 percent were over 1,000 miles. Importers reported much shorter shipping distances, with 95.6 percent of sales within 100 miles of their U.S. point of shipment, 1.6 percent between 101 and 1,000 miles, and 2.8 percent over 1,000 miles.

Table II-2 SRC tubular products: Geographic market areas in the United States served by U.S. producers and importers

		Subject U.S. importers					
Region	U.S. producers	China	Mexico	Subject sources			
Northeast	10	5	3	8			
Midwest	10	5	4	9			
Southeast	10	6	4	8			
Central Southwest	10	6	4	9			
Mountains	7	3	1	4			
Pacific Coast	8	4	2	6			
Other ¹	4	1	2	3			
Present in all continental regions	7	3	1	4			

¹ All other U.S. markets, including AK, HI, PR, and VI.

Source: Compiled from data submitted in response to Commission questionnaires.

SUPPLY AND DEMAND CONSIDERATIONS

U.S. supply

Domestic production

Based on available information, U.S. producers of SRC tubular products have the ability to respond to changes in demand with moderate changes in the quantity of shipments of U.S.-produced SRC tubular products to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity, minimal sales to alternate markets, and some ability to produce alternate products.

Industry capacity

Since the original investigations, GD Copper USA began production of SRC tubular products in Pine Hill, Alabama and Cambridge-Lee (Cam-Lee) built a production facility in Reading, Pennsylvania. GD Copper USA is a wholly-owned subsidiary of GD Copper Cooperatief U.A., Amsterdam, the Netherlands, which also owns Golden Dragon Precise Copper Tube Group, a producer of SRC tubular products in China and GD Affiliates S de RL de CV, a producer of SRC tubular products in Mexico. GD Copper USA began production in late 2014. Cam-Lee is wholly-owned by Industrias Unidas SA de CV, a producer of SRC tubular products in Mexico. The Cam-Lee facility in Reading began production in 2013, *** Cam-Lee's production capacity in the United States. These capacity increases were largely offset by ***. In all, U.S. capacity to produce SRC tubular products increased by 4.8 percent during 2010-15.

Domestic capacity utilization decreased slightly from 51.5 percent in 2010 to 50.5 percent in 2015. This relatively low level of capacity utilization suggests that U.S. producers have substantial ability to increase production of product in response to an increase in prices.

Alternative markets

U.S. producers' exports have accounted for a small share of total shipments since 2010. Exports accounted for *** percent of total shipments in 2010 and *** percent in 2015; and were *** percent of total shipments in interim 2016, compared to *** percent in interim 2015. The low level of U.S. producers' export shipments indicates that U.S. producers may have limited ability to shift shipments between the U.S. market and other markets in response to price changes. Of 11 responding U.S. producers, eight reported having some sales in export markets. Of those, five reported export sales only to Canada and/or Mexico. Most U.S. producers stated that it would be difficult to shift their shipments to other markets. Reasons reported include the lack of a sales network and excess global capacity.²

Inventory levels

U.S. producers' inventories increased slightly relative to total shipments, from *** percent in 2010 to *** percent in 2015, and were *** percent in interim 2016, compared to *** percent in interim 2015. These inventory levels suggest that U.S. producers may have limited ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

Five of 11 responding U.S. producers stated that they could shift some production from SRC tubular products to other products. Other products that producers reportedly can produce on the same equipment as SRC tubular products are primarily tube products of other metals. One U.S. producer reported the ability to produce other extruded copper products.

Supply constraints

SRC tubular products are available in straight lengths and coils, in a wide variety of diameters, packaging sizes, and annealing conditions, and with smooth or grooved surfaces. Of 24 responding purchasers, 19 reported no supply constraints during 2010-June 2016. Of the five purchasers that reported supply constraints, one cited the effects of the antidumping duty orders, one reported that it has been unable to shift purchases of some products from nonsubject import sources to domestic producers because of a lack of capacity, and one reported a lack of U.S. capacity to produce one certain SRC tube product.³

Several importers, including some domestic producers of SRC tubular products, reported that imports were of tube products that are produced in low volume or not produced at all by domestic mills. *** reported that imports from China and Mexico were of specific

² Responses of *** to Commission producer questionnaire, question IV-21.

³ Questionnaire responses of *** to question III-13 of the Commission purchaser questionnaire.

products that domestic mills do not normally produce. ***.⁴ Domestic producer *** reported imports of nonsubject SRC tubular products *** Domestic producer *** reported that it imports SRC tubular products that it is unable to produce or in response to "competitive pricing."⁵ ***, an importer of SRC tubular products from Mexico, reported that its imports were for "niche opportunities" that "U.S. producers and other imports do not supply."⁶ ***, reported that it ***.⁷

Subject imports from China⁸

Based on available information, responding producers of SRC tubular products from China have the ability to respond to changes in demand with large changes in the quantity of shipments of SRC tubular products to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity and the existence of alternate markets. Moreover, responding producers are believed to account for a small share of overall SRC tubular products capacity in China. As reported in Part I, U.S. imports of SRC tubular products from China declined by 97.3 percent during 2010-15.

Industry capacity

Responding producers in China reported declining capacity utilization, from *** percent in 2010, to *** percent in 2015; capacity utilization was *** percent in interim 2016 compared to *** percent in interim 2015. Reported unused capacity for responding producers in China was *** pounds in 2015, equivalent to about *** percent of apparent U.S. consumption.

Alternative markets

Reported home market shipments increased from *** percent of total shipments in 2010 to *** percent in 2015, and were *** percent of total shipments in interim 2016, compared to *** percent in interim 2015. Exports to the United States by reporting foreign producers accounted for *** of total shipments in 2010, declined to *** in 2015, ***. Most Chinese exports of refined copper pipes and tubes since 2010 have been to other countries in Asia; with Thailand, Taiwan, and Malaysia the largest export markets in 2015.⁹ Certain SRC

⁴ ***.

⁵ Questionnaire responses of ***, respectively to question II-6 of the Commission importer questionnaire.

⁶ Questionnaire response of *** to question II-4 of the Commission importer questionnaire.

⁷ Questionnaire response of *** to questions II-2 and II-3 of the Commission purchaser questionnaire.

⁸ For data on the number of responding foreign firms and their share of U.S. imports from China, please refer to Part I, "Summary Data and Data Sources."

⁹ Export data are for HS 7411.10, "Refined copper pipes and tubes," including both seamless and welded.

tubular products from China are subject to antidumping and countervailing duties in Canada and in Brazil.¹⁰

Inventory levels

Reported inventory levels of responding producers in China were a small share of production, and increased *** since 2010. Relative to total shipments, inventories were *** percent in 2010, *** percent in 2015, and were *** percent in both interim 2015 and interim 2016.

Production alternatives

Responding producers in China reported *** production of alternative products using the same workers and equipment used to produce SRC tubular products.

Subject imports from Mexico¹¹

Based on available information, producers of SRC tubular products from Mexico have the ability to respond to changes in demand with large changes in the quantity of shipments of SRC tubular products to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity, availability of shipments to alternate markets, and some ability to produce alternate products. As reported in Part I, U.S. imports of SRC tubular products from Mexico declined by nearly 95 percent during 2010-13, before increasing to a little over half the 2010 volume in 2015.

Industry capacity

Responding producers in Mexico reported consistently low capacity utilization, from *** percent in 2010, to *** percent in 2015, and *** percent in interim 2016 compared to *** percent in interim 2015. Reported unused capacity for responding producers in Mexico was *** pounds in 2015, equivalent to about *** percent of apparent U.S. consumption.

¹⁰ Brazilian orders cover inner-grooved refined copper tube with a diameter between 5 mm and 15.87 mm; Assalve, Danielle, *Metal Bulletin*, "Brazil sets Antidumping duties for Refined Copper Tube from China, Mexico," September 29, 2016. Canadian orders cover copper tube with an outer diameter of 0.2 inch to 4.25 inches but exclude industrial and coated or insulated tube; Canada Border Services Agency, Measures in Force, <u>http://www.cbsa-asfc.gc.ca/sima-lmsi/mif-mev-eng.html</u>, (accessed October 27, 2016).

¹¹ For data on the number of responding foreign firms and their share of U.S. imports from Mexico, please refer to Part I, "Summary Data and Data Sources."

Alternative markets

Reported shipments to the Mexican home market as a share of total shipments increased in 2011 and has since declined; the ratio was *** percent in 2010 and *** percent in 2015; it was *** percent in interim 2016 compared to *** percent in interim 2015. Reported shipments to the U.S. market declined from *** percent of total shipments in 2010 to *** percent in 2011, after imposition of the antidumping orders. Exports to the United States increased in 2014 and 2015, both in quantity and as a share of total shipments. Reported exports to the United States were *** percent of total shipments in 2015 and were *** percent of total shipments in 2015. Mexican producers' largest export markets for refined copper pipes and tubes in 2015 were the United States states, Colombia, Chile, Italy, and Canada.¹² Certain SRC tubular products from Mexico are subject to antidumping duties in Canada and in Brazil.¹³

Inventory levels

Relative to total shipments, inventory levels for responding Mexican producers were low: *** percent in 2010 and *** percent in 2015. Inventories were *** percent relative to total shipments in interim 2016 compared to *** percent in interim 2015.

Production alternatives

Responding producers in Mexico reported some production of alternative products using the same workers and equipment used to produce SRC tubular products. Production of these alternative products accounted for *** percent of all such production in 2010, *** percent in 2015, and *** percent in interim 2016 compared to *** percent in interim 2015.

Nonsubject imports

The largest sources of nonsubject imports during 2010-15 were Canada and Korea. Combined, these countries accounted for approximately two-thirds of imports of SRC tubular products from nonsubject countries in 2015.

Some firms reported a preference for SRC tubular products produced domestically or produced in a country with which the United States has a free trade agreement ***.

¹² Export data are for HS 7411.10, "Refined copper pipes and tubes," including both seamless and welded.

¹³ Brazilian orders cover inner-grooved refined copper tube with a diameter between 5 mm and 15.87 mm; Assalve, Danielle, *Metal Bulletin*, "Brazil sets Antidumping duties for Refined Copper Tube from China, Mexico," September 29, 2016. Canadian orders cover copper tube with an outer diameter of 0.2 inch to 4.25 inches but exclude industrial and coated or insulated tube; Canada Border Services Agency, Measures in Force, <u>http://www.cbsa-asfc.gc.ca/sima-lmsi/mif-mev-eng.html</u>, (accessed October 27, 2016).

***, for instance, reported that ***.

New suppliers

Half of responding purchasers (12) reported no change in domestic availability. Of 24 responding purchasers, seven indicated that new suppliers have entered the U.S. market since January 1, 2010, and five purchasers reported that domestic capacity had increased. However, four purchasers reported that U.S. mills had closed or merged, and two purchasers reported decreased availability of U.S. product or increasing lead times. Three purchasers noted that the startup of GD Copper USA had increased the availability of domestic SRC tubular products since 2010, and one other purchaser noted that capacity had been added by "Chinese companies."

U.S. demand

Based on available information, overall U.S. consumption of SRC tubular products is likely to experience moderate changes in quantity in response to changes in price. The main contributing factor is the small cost share of SRC tubular products in most of its end-use products, partly offset by the availability of substitute products. Fourteen of 25 responding purchasers reported that U.S. demand for SRC tubular products had declined since 2010, six reported that demand was unchanged, three that demand had fluctuated, and only two reported that demand had increased.

End uses

U.S. demand for SRC tubular products depends on the demand for U.S.-produced downstream products. Reported end uses include HVAC equipment, boilers and water heaters, and electrical connectors. Of purchasers that are end-users, four firms noted an increase in demand for the end-use product, one firm reported no change, four reported a decrease in demand, and two firms reported fluctuations in demand with no clear trend. ***, reported an increase in demand for SRC tubing products. ***, producers of HVAC equipment, reported decreased demand for SRC tubing products *** while ***, also a producer of HVAC equipment, reported increased demand.¹⁴

Cost share

SRC tubular products accounts for a large share of component parts such as coils, but a small share of the cost of most end-use products in which it is used. Reported cost shares for

¹⁴ Counsel for Respondent Nacobre testified that U.S. demand in the industrial sector is declining as air conditioner and refrigerator manufacturers move to Mexico. Hearing transcript, pp. 12, 167-168 (Winton). A domestic industry representative testified that there had been some shift of HVAC production to Mexico, but that U.S. demand in the sector is "still growing some." (Hearing transcript, pp. 67-68 (Baker).

some end uses were as follows: 60 percent of coax coils and 95 percent of some HVAC parts, but 3 percent to 4 percent of HVAC units and 7 percent of HVAC condenser units.

Business cycles

Of responding domestic producers, importers, and purchasers, 5 of 10 domestic producers, 2 of 20 importers, and 6 of 24 purchasers reported that demand for SRC tubular products was seasonal. The most commonly reported reason was the seasonal nature of HVAC demand. In addition, two purchasers reported that demand for SRC tubular products was influenced by changes in overall economic growth.

Demand trends

Most responding firms reported a decrease in U.S. demand for SRC tubular products since January 1, 2010 (table II-3). Firms expect demand to decrease over the next two years, or to fluctuate with no clear trend.

	Number of firms reporting						
ltem	Increase	No change	Decrease	Fluctuate			
Demand in the United States:							
U.S. producers	0	0	6	4			
Importers	0	5	9	6			
Purchasers	2	6	14	3			
Foreign producers	0	3	3	1			
Anticipated future demand in the United States:							
U.S. producers	0	0	3	6			
Importers	0	5	7	7			
Purchasers	0	9	12	3			
Foreign producers	1	3	2	1			
Demand for purchasers' final products:		1	4	0			
Purchasers	4	1	4	2			

Table II-3

SRC tubular products: Fire	ms' responses regarding U.S. demand

Source: Compiled from data submitted in response to Commission questionnaires.

Substitute products

Substitutes for SRC tubular products include aluminum tubing, welded tubing, and various types of plastic tubing including PEX and PVC. Aluminum tubing and welded tubing were reported to be substitutes for SRC tubular products in HVAC and heat exchange applications, and plastic pipe was reported to be a substitute in various plumbing applications. Of nine responding U.S. producers, seven reported substitutes for SRC tubular products. Produces *** reported that declining prices for aluminum tubing were forcing down prices for SRC tubing products, and *** reported that the availability of substitute products has reduced growth in

demand for SRC tubular products.¹⁵ Of 18 responding importers, 11 reported the existence of substitutes for SRC tubular products. Importer *** reported that prices for PEX tubing were both lower and less volatile than prices for SRC tubing products. Importer *** reported that lower-priced aluminum tubing had not yet affected the demand for SRC tubing products, but that an increase in copper prices could lead to more substitution with aluminum tubing.

SUBSTITUTABILITY ISSUES

The degree of substitution between domestic and imported SRC tubular products depends upon such factors as relative prices, quality (e.g., grade standards, reliability of supply, defect rates, etc.), and conditions of sale (e.g., price discounts/rebates, lead times between order and delivery dates, payment terms, product services, etc.). Based on available data, staff believes that there is high degree of substitutability between domestically produced SRC tubular products and product imported from subject sources.

Lead times

SRC tubular products from domestic producers are primarily sold from inventory, while importers overwhelmingly sell SRC tubular products produced to order (table II-4). U.S. producers reported that 65.9 percent of their commercial shipments were shipped from inventory, with lead times averaging 7.4 days. The remaining 34.1 percent of their commercial shipments were produced to order, with lead times averaging 20.3 days. Importers reported that 99 percent of U.S. sales were of product produced to order, with an average of 11.2 days lead time.¹⁶

Table II-4

SRC tubular products: U.S. producers' and U.S. importers' lead times, 2015

Manner order met	U.S. producers	Subject U.S. importers
Produced to order	34.1	99.0
From U.S. inventories	65.9	1.0
From foreign inventories		0.0

Source: Compiled from data submitted in response to Commission questionnaires.

¹⁵ In addition, some HVAC applications are reportedly shifting to smaller diameter SRC tubular products, which would tend to decrease the volume demanded when measured by weight. Hearing transcript, p. 85 (Baker.)

¹⁶ Importers generally make SRC tubular products to order because commercial (industrial) customers typically each have different specifications, and given the volatility of copper prices, producers do not want to hold inventory. Hearing transcript, pp. 135-36 (Elorriaga). As noted, all reported imports of SRC tubular products from Mexico and *** imports from China in 2015 were for industrial applications.

KNOWLEDGE OF COUNTRY SOURCES

Of responding purchasers, 24 indicated they had marketing/pricing knowledge of domestic product, nine had knowledge of Chinese SRC tubular products, 10 of Mexican SRC tubular products, and 12 of nonsubject sources.

As shown in table II-5, more than half of responding purchasers and their customers at least sometimes make purchasing decisions based on the producer or country of origin. Of the 13 purchasers that reported that they always or usually make decisions based on the manufacturer, cost, delivery, and the need to qualify a supplier were reported as reasons. Of the 13 purchasers that reported that they always or usually make decisions based on the country of origin, reasons include freight, lead time, an unwillingness of customers to accept Chinese product, and a general preference for domestic product.

Table II-5

SRC tubular products: Purchasing decisions based on producer and country of origin, number of reporting firms

Decision	Always	Usually	Sometimes	Never
Purchases based on producer: Purchaser's decision	8	5	4	6
Purchaser's customer's decision	0	4	6	10
Purchases based on country of origin:	7	6		
Purchaser's decision	1	6	5	5
Purchaser's customer's decision	1	6	8	6

Source: Compiled from data submitted in response to Commission questionnaires.

Factors affecting purchasing decisions

The most often cited top three factors firms consider to be very important in their purchasing decisions for SRC tubular products were price or cost (21 firms), quality (16 firms), and availability (10 firms). Price/cost and quality were the most frequently cited first-most important factor (cited by 9 firms each); price/cost was also the most frequently reported second-most important factor and third-most important factor as shown in table II-6.

Table II-6 SRC tubular products: Ranking of factors used in purchasing decisions as reported by U.S. purchasers, by factor

	First	Second	Third	Total				
Item		Number of firms (number)						
Price / cost	9	6	6	21				
Quality	9	4	3	16				
Availability / supply	2	4	4	10				
Delivery	0	2	2	4				
All other factors ¹	4	8	8	NA				

¹ Other factors include supplier relationship and country of origin.

Source: Compiled from data submitted in response to Commission questionnaires.

The majority of purchasers (16 of 24) reported that they always or usually purchase the SRC tubular product that is offered at the lowest price.

When asked if they purchased SRC tubular products from one source although a comparable product was available at a lower price from another source, 15 purchasers reported reasons including customer preference, supplier relationship, antidumping duties, and buy-America provisions. Only 3 of 23 purchasers reported that certain types of product were only available from a single source. *** reported that some sizes are not produced in the United States. ***, and *** reported that some suppliers do not manufacture the full range of tubing products.

Importance of specified purchase factors

Purchasers were asked to rate the importance of 15 factors in their purchasing decisions (table II-7). The factors rated as "very important" by more than half of responding purchasers were availability and reliability of supply (23 each); price and product consistency, (22 each); quality meets industry standards (21 firms); delivery time (20 firms); delivery terms (15 firms); and discounts offered (14 firms).

· · ·	Number of firms reporting					
Factor	Very	Somewhat	Not			
Availability	23	1	0			
Delivery terms	15	8	1			
Delivery time	20	4	0			
Discounts offered	14	7	3			
Extension of credit	9	7	8			
Minimum quantity requirements	3	13	7			
Packaging	7	11	6			
Price	22	2	0			
Product consistency	22	2	0			
Product range	9	13	2			
Quality exceeds industry standards	6	13	4			
Quality meets industry standards	21	3	0			
Reliability of supply	23	1	0			
Technical support/service	9	12	3			
U.S. transportation costs	9	9	6			

Table II-7

SRC tubular products: Importance of purchase factors, as reported by U.S. purchasers, by factor

Source: Compiled from data submitted in response to Commission questionnaires.

Changes in purchasing patterns

Purchasers were asked about changes in their purchasing patterns from different sources since 2010 (table II-8). Of 23 responding purchasers, 11 reported purchasing SRC

tubular products from China and 10 reported purchasing such products from Mexico prior to January 1, 2010. Of these, four firms reported reducing or eliminating purchases from China and four firms reported reducing or eliminating purchases from Mexico since January 1, 2010. However, two firms reported that they had increased purchases from Mexico since January 1, 2010. In particular, *** reported that it began purchasing some products from Mexico since January 1, 2010 ***.

SRC tubular products: Changes in purchase patterns from U.S., subject, and nonsubject countries							
Factor	Did not purchase	Decreased	Increased	Constant	Fluctuated		
United States	0	3	13	7	1		
China	13	4	0	4	0		
Mexico	14	4	2	1	0		
All other countries	10	3	5	4	1		
Sources unknown	11	0	0	0	0		

Table II-8

Source: Compiled from data submitted in response to Commission questionnaires.

Importance of purchasing domestic product

Most purchasers reported that purchasing U.S.-produced product was not an important factor in their purchasing decisions. However, five firms reported that for some purchases, domestic product was required by law (7.4 percent of reported domestic purchases), seven reported it was required by their customers (14.6 percent of reported domestic purchases), and three firms reported other preferences for domestic product (2.7 percent of reported domestic purchases).¹⁷ Reasons cited for preferring domestic product included: a general preference for domestic product and ***.

Comparisons of domestic products, subject imports, and nonsubject imports

Purchasers were asked a number of questions comparing SRC tubular products produced in the United States, subject countries, and nonsubject countries. First, purchasers were asked for a country-by-country comparison on the same 15 factors (table II-9) for which they were asked to rate the importance.

Most purchasers reported that U.S. SRC tubular products and that produced in China were comparable on discounts offered, extension of credit, packaging, product consistency, and product that meets industry standards. Most purchasers rated U.S. product superior in delivery terms and time, meeting minimum quantity requirements, exceeds industry standards, reliability of supply, technical support, and U.S. transportation cost. Most purchasers rated product from China as superior on price. Most purchasers reported that U.S. SRC tubular products and that produced in Mexico were comparable on almost all factors, with the

¹⁷ Legal requirements reported included Buy-America provision, DFARS (Defense Federal Acquisition Regulation), and (TAA) Trade Agreements Act provisions. Mexico is a TAA designated country but China is not. Neither subject country is a qualifying country under DFARS.

exception that most purchasers rated U.S. product superior in delivery time. Most purchasers rated U.S. SRC tubular products and that from nonsubject countries as comparable in extension of credit, minimum quantity requirements, packaging, product consistency, meets industry standards, exceeds industry standards, and reliability of supply. Most purchasers reported that U.S. product was superior in availability, delivery time, delivery terms, and product range.

	Number of firms reporting									
	United States vs. China			Unite	United States vs. Mexico			China vs. Mexico		
Factor	S	С	Ι	S	С	Ι	S	С	Ι	
Availability	6	7	2	8	10	0	4	5	2	
Delivery terms	10	4	1	7	11	0	2	8	2	
Delivery time	12	2	1	10	8	0	3	3	7	
Discounts offered	1	8	4	1	12	4	2	8	0	
Extension of credit	4	8	2	3	10	3	2	8	1	
Minimum quantity requirements	9	2	3	4	12	1	2	6	2	
Packaging	4	10	0	2	16	0	0	10	2	
Price ¹	1	5	8	1	8	8	2	9	0	
Product consistency	6	8	0	2	14	1	1	10	0	
Product range	6	7	1	5	10	1	0	11	0	
Quality exceeds industry standards	8	6	0	5	11	1	1	9	1	
Quality meets industry standards	6	9	0	3	14	0	1	9	1	
Reliability of supply	8	6	1	4	12	1	3	7	1	
Technical support/service	9	6	0	6	10	1	1	8	3	
U.S. transportation costs ¹	8	6	1	5	12	0	1	6	4	

Table II-9
SRC tubular products: Purchasers' comparisons between U.Sproduced and imported product
number of responding firms

Table II-9 -- Continued SRC tubular products: Purchasers' comparisons between U.S.-produced and imported product, number of responding firms

	Number of firms reporting									
	Unite No	United States vs. Nonsubject			China vs. Nonsubject			Mexico vs. Nonsubject		
Factor	S	С	-	S	С	-	s	С	I	
Availability	9	5	2	1	9	0	1	9	2	
Delivery terms	9	6	1	1	9	0	3	8	1	
Delivery time	11	4	1	1	8	1	3	7	2	
Discounts offered	0	7	7	2	6	0	1	7	2	
Extension of credit	3	8	3	1	6	2	0	8	2	
Minimum quantity requirements	6	8	1	1	7	1	1	8	2	
Packaging	3	12	0	1	8	0	0	11	0	
Price ¹	3	6	6	3	6	0	2	7	2	
Product consistency	4	10	1	1	7	1	0	9	2	
Product range	8	6	1	1	7	0	0	9	1	
Quality exceeds industry standards	6	8	1	1	8	0	0	10	1	
Quality meets industry standards	4	12	0	2	8	0	0	12	0	
Reliability of supply	6	9	1	1	6	3	1	8	3	
Technical support/service	8	8	0	1	7	2	1	9	2	
U.S. transportation costs ¹	8	6	2	1	8	1	3	8	1	

¹ A rating of superior means that price/U.S. transportation costs is generally lower. For example, if a firm reported "U.S. superior," it meant that the U.S. product was generally priced lower than the imported product.

Note.--S=first listed country's product is superior; C=both countries' products are comparable; I=first list country's product is inferior.

Source: Compiled from data submitted in response to Commission questionnaires.

Comparison of U.S.-produced and imported SRC tubular products

In order to determine whether U.S.-produced SRC tubular products can generally be used in the same applications as imports from China and Mexico, U.S. producers, importers, and purchasers were asked whether the products can "always," "frequently," "sometimes," or "never" be used interchangeably. As shown in table II-10, all responding domestic producers, most importers, and most purchasers reported that SRC tubular products from all sources can always or frequently be used interchangeably.

Table II-10

	U	U.S. producers				U.S. importers				U.S. purchasers			
Country pair	Α	F	S	Ν	Α	F	S	Ν	Α	F	S	Ν	
United States vs. China	4	4	0	0	12	3	1	0	7	6	0	1	
United States vs. Mexico	4	4	0	0	11	3	1	0	11	4	2	1	
China vs. Mexico	4	3	0	0	6	2	1	0	6	4	1	1	
United States vs. Other	3	5	0	0	10	5	1	1	9	6	2	0	
China vs. Other	3	4	0	0	5	4	1	0	6	5	1	0	
Mexico vs. Other	3	4	0	0	5	4	1	0	9	4	1	1	

SRC tubular products: Interchangeability between SRC tubular products produced in the United States and in other countries, by country pairs

Note.—A=Always, F=Frequently, S=Sometimes, N=Never.

Source: Compiled from data submitted in response to Commission questionnaires.

As can be seen from table II-11, most responding purchasers reported that domestically produced product and that from Mexico and nonsubject sources "always" met minimum quality specifications. Most responding purchasers reported that SRC tubular products from China "always" or "usually" met minimum quality specifications.

Table II-11

SRC tubular products: Ability to meet minimum quality specifications, by source¹

Factor	Always	Usually	Sometimes	Rarely or never
United States	18	6	0	0
China	5	7	1	0
Mexico	9	6	0	1
Other	8	3	0	0

¹ Purchasers were asked how often domestically produced or imported SRC tubular product meets minimum quality specifications for their own or their customers' uses.

Source: Compiled from data submitted in response to Commission questionnaires.

In addition, producers, importers, and purchasers were asked to assess how often differences other than price were significant in sales of SRC tubular products from the United States, subject, or nonsubject countries. As seen in table II-12, most domestic producers reported that differences other than price were "never" significant in sales of SRC tubular products from any source; and most importers reported that differences other than price were "sometimes" or "never" significant. However, purchasers' responses were mixed. A slim majority of purchasers reported that differences other than price between domestic SRC tubular products and those produced in China were "always" or "frequently" significant in their purchase decision; while a slim majority reported that differences other than price were "sometimes" or "never" significant in sales of SRC tubular products from Mexico.

Table II-12

	ι	U.S. producers				U.S. importers				U.S. purchasers			
Country pair	Α	F	S	Ν	Α	F	S	Ν	Α	F	S	Ν	
United States vs. China	0	2	2	5	2	3	5	4	6	2	4	2	
United States vs. Mexico	0	1	2	5	2	1	4	4	5	3	7	3	
China vs. Mexico	0	1	1	5	0	1	3	3	3	3	4	1	
United States vs. Other	0	2	2	4	2	3	6	4	7	1	7	2	
China vs. Other	0	0	2	4	0	0	5	2	2	2	5	1	
Mexico vs. Other	0	0	2	4	0	0	4	2	4	2	5	2	

SRC tubular products: Significance of differences other than price between SRC tubular product	cts
produced in the United States and in other countries, by country pairs	

Note.--A = Always, F = Frequently, S = Sometimes, N = Never.

Source: Compiled from data submitted in response to Commission questionnaires.

ELASTICITY ESTIMATES

This section discusses elasticity estimates; parties were encouraged to comment on these estimates as an attachment to their prehearing or posthearing brief, but no comments were received.

U.S. supply elasticity

The domestic supply elasticity for SRC tubular products measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price of SRC tubular products. The elasticity of domestic supply depends on several factors including the level of excess capacity, the ease with which producers can alter capacity, producers' ability to shift to production of other products, the existence of inventories, and the availability of alternate markets for U.S.-produced SRC tubular products. Analysis of these factors earlier indicates that while the U.S. industry could substantially increase shipments to the U.S. market in response to an increase in price, it is not likely to be able to substantially decrease shipments to the U.S. market in response to a decrease in price; an estimate in the range of 1 to 3 is suggested.

U.S. demand elasticity

The U.S. demand elasticity for SRC tubular products measures the sensitivity of the overall quantity demanded to a change in the U.S. market price of SRC tubular products. This estimate depends on factors discussed earlier such as the existence, availability, and commercial viability of substitute products, as well as the component share of the SRC tubular products in the production of any downstream products. Based on the available information, the aggregate demand for SRC tubular products is likely to be relatively inelastic over the short-run; a range of -0.75 to -1.0 is suggested. The main factor contributing to the low elasticity is the component share of SRC tubular products in downstream products such as air conditioning units. Sales and import data, for instance, indicate that U.S. apparent consumption of SRC tubular products declined only moderately during 2011, when the price of copper increased by

more than 50 percent, driving up the average unit value of SRC tubular products. However, there are a variety of substitute products available, and over a longer period of time, demand is more elastic.

Substitution elasticity

The elasticity of substitution depends upon the extent of product differentiation between the domestic and imported products.¹⁸ Product differentiation, in turn, depends upon such factors as quality (e.g., chemistry, appearance, etc.) and conditions of sale (e.g., availability, sales terms/ discounts/ promotions, etc.). Based on available information, the elasticity of substitution between U.S.-produced SRC tubular products and imported SRC tubular products is likely to be in the range of 3 to 5.

¹⁸ The substitution elasticity measures the responsiveness of the relative U.S. consumption levels of the subject imports and the domestic like products to changes in their relative prices. This reflects how easily purchasers switch from the U.S. product to the subject products (or vice versa) when prices change.

PART III: CONDITION OF THE U.S. INDUSTRY

OVERVIEW

The information in this section of the report was compiled from responses to the Commission's questionnaires plus additional sources. Eleven firms, which accounted for essentially all U.S. production of SRC tubular products during 2015, supplied information on their operations in these reviews on SRC tubular products. Table III-1 provides an overview of the important industry events since 2010.

Table III-1

SRC tubular p	roducts: Important industry events, since 2010
Firm	Important industry events
Cam-Lee	<u>June 2011</u> : Cam-Lee's parent company, Mexico City-based Industrials Unidas SA de CV ("IUSA") submitted a Chapter 11 exit plan, although Cam-Lee is not listed as a debtor in the case. In that same month, Mueller offered \$35-\$50 million to purchase IUSA's copper facility in Reading, Pennsylvania but did not specify Cam-Lee by name. ¹
Cam-Lee	<u>March 2012</u> : Cam-Lee announced plans to expand its Reading, Pennsylvania facility to produce thin-wall copper tubes for the air-conditioning market. The new facility would utilize "cast and roll" technology for more consistent wall thickness along the length of the tube than was possible with Cam-Lee's existing extruded tube products. A company executive reported in 2013 that the new developing facility could employ up to 250 workers. ²
***	*** 3
GD Copper USA	<u>March 2011</u> : Chinese producer GD China announced plans to establish a U.Sbased manufacturing facility. According to a representative of the Hong Kong firm who coordinated GD China's investment; its client sought a location close to its major downstream customer, Goodman Group, a manufacturer of air conditioners and heaters at its facilities in Houston, Texas, and in Fayetteville and Dayton, Tennessee. ⁴
GD Copper USA	August 2011: GD China selected Pine Hill, Alabama as the site for its new U.S. copper tubing mill, with its readily available utilities (water, sewer, natural gas, and electric power) and adjacent transport (railway) infrastructure. ⁵
***	***_6
GD Copper USA	May 2014: GD China's subsidiary, USGD, officially opened its new \$100 million facility in Pine Hill, Alabama. The mill employs about 150 workers with plans to employ 300 workers when the mill reaches full annual production capacity within one to two years. ⁷⁸
Mueller	January 2011: Among the facilities acquired by Mueller Industries in its \$6.9 million purchase of Tube Forming LP, Wolverine Tube Inc.'s ("Wolverine Tube") subsidiary, was the SRC tubular products facility in Carrollton, Texas. ⁹
***	*** 10

Table continued on next page.

Table III-1--ContinuedSRC tubular products: Important industry events, since 2010

Wolverine Tube	<u>November 2010</u> : Wolverine Tube filed for Chapter 11 bankruptcy protection, citing high raw- material costs and interest expenses that imperiled meeting its financial operations. Among Wolverine Tube's creditors are Henan-based GD China and Zjeijang-based Zheijan Jinghyi Pipe Fittings, as the marketer of Chinese copper tubular products in the United States. ¹¹
Wolverine Tube	<u>January 2011</u> : Wolverine Tube completed the sell-off of the production equipment from its former Boonville, Missouri facility while continuing the process of selling off the equipment from its former Decatur, Alabama facility. These facilities were closed in November 2007 when Wolverine Tube decided to discontinue its U.S. plumbing tube business operations, citing declining demand from the residential construction sector. ¹²
Wolverine Tube	<u>June 2011</u> : Wolverine Tube completed its emergence from Chapter 11 bankruptcy protection by converting senior secured debentures to equity and new debentures, and terminating its pension plan, which was assumed by the Pension Benefit Guaranty Corporation (PBGC) in exchange for equity shares and 11 years of payments. ^{13 14}

¹ "Mueller Eyes Two Copper Plant Buys," *AMM.com*, June 3, 2011.

² "Cambridge-Lee to Expand Pennsylvania Plant," Metal Bulletin, March 23, 2012.

³ *** U.S. producers' questionnaire response, section II-5.

⁴ A Golden Dragon (China) representative acknowledged that the antidumping duties imposed on imports of copper tubes from China also contributed to GD China's decision to start producing in the United States.

⁵ "Golden Dragon Copper Tube Plant to Create 300 Jobs in Thomasville," Jeff Amy, AL.com, March 28, 2014

6 ***

⁷ "May 2014 Column: How Alabama's Poorest County Landed Golden Dragon," Kay Ivey, Office of the Lieutenant Governor, State of Alabama, May 2014.

⁸ "Golden Dragon Opens Factory in Wilcox County, Alabama," Andy Nguyen, Asia Matters for America, July 8, 2014, *GD Copper USA reached 300 employees in 2015.

America, July 8, 2014. *GD Copper USA reached 300 employees in 2015. ⁹ "Mueller Industries Buys Tube Unit from Wolverine," *AMM.com*, January 5, 2011.

¹⁰ *** U.S. producers' questionnaire response, section II-5.

¹¹ "Wolverine Tube Terminating Pension Plan as Part of Cost-cutting Efforts," *AMM.com*, June 17, 2010.

¹² "Wolverine Files for Ch. 11, Čites Volatile Copper Tags," *AMM.com*, November 1, 2010.

¹³ Wolverine Still Seeks Buyers for Ala. Plant's Equipment," AMM.com, January 28, 2011.

¹⁴ ***. Staff telephone interview with ***, October 28, 2016.

Source: Compiled from data submitted in response to Commission questionnaires & Notice of Institution.

Changes experienced by the industry

Domestic producers were asked to indicate whether their firm had experienced any plant openings, relocations, expansions, acquisitions, consolidations, closures, or prolonged shutdowns because of strikes or equipment failure; curtailment of production because of shortages of materials or other reasons, including revision of labor agreements; or any other change in the character of their operations or organization relating to the production of SRC tubular products since 2010. Ten of the eleven domestic producers providing responses in these reviews indicated that they had experienced such changes; their responses are presented in table III-2.

Table III-2

SRC tubular products: Changes in the character of U.S. operations since January 1, 2010

* * * * * * *

Anticipated changes in operations

The Commission asked domestic producers to report anticipated changes in the character of their operations relating to the production of SRC tubular products. *** were the domestic producers identified that provided detail on their anticipated changes in operations. Their responses are presented in table III-3.

Table III-3 SRC tubular products: Anticipated changes in operations

Mueller	*** 12
Wieland	*** 34
1	

¹ Mueller's U.S. Producers' questionnaire response, section II-3. ² Mueller CEO Steffen Sigloch in his hearing testimony stated, "the orders have given the Domestic Industry the ability to reinvest tens of millions of dollars in American Manufacturing. Mueller for example has increased capital expenditures by many multiples since 2010 and we anticipate continuing to make these investments if the orders remain in effect but we need a level playing field to ensure that we can get a fair return on these investments." Hearing transcript, pp. 34 (Sigloch).

³ Wieland's U.S. Producers' questionnaire response, section II-3.

⁴ Wieland CEO Tom Baker in his hearing testimony stated, "these investments would not be possible without the orders. Assuming the orders are continued, we plan to make further investments in plant equipment in the future." Hearing transcript, pp. 28 (Baker).

Source: Compiled from data submitted in response to Commission guestionnaires and from hearing testimony.

U.S. production, capacity, and capacity utilization

Table III-4 presents U.S. producers' production, capacity, and capacity utilization. U.S. overall production capacity increased by 4.5 percent from 2010 to 2015. Capacity utilization remained relatively stable, with a slight decrease of 1.0 percent from 2010 to 2015. ***.¹ ***.² The production of SRC tubular products increased by 2.9 percent from 2010 to 2015. Production of SRC tubular products decreased from 2010 to 2013 by over 6.4 percent, however, production increased from 2013 to 2015 by 9.4 percent reflected in part by the start of production at GD Copper USA in 2014. ***.³ ***.⁴

¹***. *** U.S. Producers' questionnaire response, section II-2

² ***. *** U.S. Producers' questionnaire response, section II-2.

³ ***. *** U.S. Producers' questionnaire response, section II-2.

⁴ *** U.S. Producers' questionnaire response, section II-5a.

Table III-4 SRC tubular products: U.S. producers' overall production, capacity, and capacity utilization, 2010-15. January to June 2015, and January to June 2016

				January to June					
Item	2010 2011 2012 2013 2014 2015					2015	2016		
		Quantity (1,000 pounds)							
Overall capacity	1,019,293	941,793	943,233	983,841	1,032,501	1,065,571	528,140	540,738	
Production: SRC pipe and tube	522,313	519,852	490,260	488,225	516,811	537,684	277,366	296,654	
Other products	6,146	6,817	7,788	6,655	6,638	3,632	3,469	3,227	
Total production	528,459	526,669	498,048	494,880	523,449	541,316	280,835	299,881	
			F	Ratios and s	shares (perce	nt)			
Capacity utilization	51.8	55.9	52.8	50.3	50.7	50.8	53.2	55.5	
Share of production: SRC pipe and tube	98.8	98.7	98.4	98.7	98.7	99.3	98.8	98.9	
Other products	1.2	1.3	1.6	1.3	1.3	0.7	1.2	1.1	
Total production	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

Source: Compiled from data submitted in response to Commission questionnaires.

Table III-5 presents U.S. producers' capacity and production of SRC tubular products based on the 11 firms that responded to questionnaires. Most producers reported stable or declining capacity and capacity utilization, although production increased for several of the producers. *** had the largest reported increases in capacity utilization from 2010 to 2015, with *** at *** percent, *** at *** percent and *** at *** percent, respectively. *** had the largest decrease in capacity utilization with a *** percent decrease from 2010 to 2015. *** acquired *** and as of 2013, the reported data for *** reflects capacity and production for the combined entity. GD Copper USA did not produce until 2014.

Table III-5

SRC tubular products: U.S. products	cers' capacity,	capacity utilization,	and production, 2010-	15,
January to June 2015, and Januar	y to June 2016		-	

	Calendar year							to June
Item	2010	2011	2012	2013	2014	2015	2015	2016
				Capacity (1,000 pounds	5)		
Cam-Lee	***	***	***	***	***	***	***	***
Cerro	***	***	***	***	***	***	***	***
Freeport	***	***	***	***	***	***	***	***
GD Copper USA	***	***	***	***	***	***	***	***
H&H Tube	***	***	***	***	***	***	***	***
Howell Metal	***	***	***	***	***	***	***	***
Mueller	***	***	***	***	***	***	***	***
National Copper	***	***	***	***	***	***	***	***
Precision	***	***	***	***	***	***	***	***
ST Products	***	***	***	***	***	***	***	***
Wieland	***	***	***	***	***	***	***	***
Capacity	1,014,661	936,890	936,983	978,370	1,027,254	1,063,863	525,523	537,966
				Production	(1,000 pound	ls)		
Cam-Lee	***	***	***	***	***	***	***	***
Cerro	***	***	***	***	***	***	***	***
Freeport	***	***	***	***	***	***	***	***
GD Copper USA	***	***	***	***	***	***	***	***
H&H Tube	***	***	***	***	***	***	***	***
Howell Metal	***	***	***	***	***	***	***	***
Mueller	***	***	***	***	***	***	***	***
National Copper	***	***	***	***	***	***	***	***
Precision	***	***	***	***	***	***	***	***
ST Products	***	***	***	***	***	***	***	***
Wieland	***	***	***	***	***	***	***	***
Production	522,313	519,852	490,260	488,225	516,811	537,684	277,366	296,654
			Сар	acity utiliza	ation ratio (pe	rcent)		
Cam-Lee	***	***	***	***	***	***	***	***
Cerro	***	***	***	***	***	***	***	***
Freeport	***	***	***	***	***	***	***	***
GD Copper USA	***	***	***	***	***	***	***	***
H&H Tube	***	***	***	***	***	***	***	***
Howell Metal	***	***	***	***	***	***	***	***
Mueller	***	***	***	***	***	***	***	***
National Copper	***	***	***	***	***	***	***	***
Precision	***	***	***	***	***	***	***	***
ST Products	***	***	***	***	***	***	***	***
Wieland	***	***	***	***	***	***	***	***
Capacity utilization	51.5	55.5	52.3	49.9	50.3	50.5	52.8	55.1

Source: Compiled from data submitted in response to Commission questionnaires.

Figure III-1

SRC tubular products: U.S. producers' production, capacity, and capacity utilization, 2010-15, January to June 2015, and January to June 2016



CONSTRAINTS ON CAPACITY

Ten of the 11 responding U.S. producers reported constraints in the manufacturing process. The only U.S. producer that did not report constraints on capacity was ***. The primary capacity constrain for domestic producers was their equipment. All ten of the U.S producers that indicated capacity constraints mentioned that equipment was one of their primary constraints. Labor and workforce constraints were mentioned by *** and product mix was listed as a constraint by ***. *** provided the most detailed explanation of their constraints which included: ***.

U.S. PRODUCERS' U.S. SHIPMENTS AND EXPORTS

Table III-6 presents U.S. producers' U.S. shipments, export shipments, and total shipments. U.S. shipments of SRC tubular products increased by 1.1 percent from 2010 to 2015, while the quantity of exports shipments increased by *** over the same period. The value of U.S. shipments decreased by 16.5 percent from 2010 to 2015, while the value of exports shipments decreased by *** over the same period. Unit values decreased for U.S. shipments (17.3 percent) and export shipments *** from 2010 to 2015, while shares of quantity and value both shifted by less than one percent over the same period.

Table III- 6 SRC tubular products: U.S. producers' U.S. shipments, exports shipments, and total shipments, 2010-15, January to June 2015, and January to June 2016

		January to June						
Item	2010	2011	2012	2013	2014	2015	2015	2016
				Quantity (1,0	000 pounds)			
U.S. shipments	498,535	487,892	461,376	460,395	485,412	503,789	260,595	279,509
Export shipments	***	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***	***
				Value (1,0	00 dollars)			
U.S. shipments	2,095,318	2,437,610	2,095,584	1,972,524	1,976,755	1,750,506	949,605	848,760
Export shipments	***	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***	***
			Unit v	alue (dollars	per 1,000 pc	ounds)		
U.S. shipments	4,203	4,996	4,542	4,284	4,072	3,475	3,644	3,037
Export shipments	***	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***	***
			S	hare of quar	ntity (percent	t)		
U.S. shipments	***	***	***	***	***	***	***	***
Export shipments	***	***	***	***	***	***	***	***
Total shipments	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)							
U.S. shipments	***	***	***	***	***	***	***	***
Export shipments	***	***	***	***	***	***	***	***
Total shipments	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Compiled from data submitted in response to Commission questionnaires.

U.S. PRODUCERS' INVENTORIES

Table III-7 presents U.S. producers' end-of-period inventories and the ratio of these inventories to U.S. producers' production, U.S. shipments, and total shipments. The ratio of inventories to U.S. production, shipments, and total shipments all increased by less than *** from 2010 to 2015. The quantity of U.S. producers' end-of-period inventories increased by 17.2 percent from 2010 to 2015.⁵

⁵ U.S. Producers' questionnaire response, sections II-6 and II-8.

Table III- 7 SRC tubular products: U.S. producers' inventories, 2010-15, January to June 2015, and January to June 2016

	Calendar year						January to June		
ltem	2010	2011	2012	2013	2014	2015	2015	2016	
	Quantity (1,000 pounds)								
U.S. producers' end-of-period inventories	28,032	29,961	29,312	27,823	30,932	32,858	29,495	33,033	
	Ratio (percent)								
Ratio of inventories to U.S. production	5.4	5.8	6.0	5.7	6.0	6.1	5.3	5.6	
U.S. shipments	5.6	6.1	6.4	6.0	6.4	6.5	5.7	5.9	
Total shipments	***	***	***	***	***	***	***	***	

Source: Compiled from data submitted in response to Commission questionnaires.

U.S. PRODUCERS' IMPORTS AND PURCHASES

Table III-8 presents data on individual U.S. producers' U.S. production and U.S imports of SRC tubular products from subject sources.⁶⁷

Table III-8

SRC tubular products: U.S. producers' U.S. production, imports, and import ratios to U.S. production, 2010-15, January to June 2015, and January to June 2016

* * * * * * *

U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

Table III-9 shows U.S. producers' employment-related data. Employment reached 2,768 production and related workers in 2015.⁸ The U.S. producers added 247 production and related workers from 2010-15 (a 9.8 percent increase), consistent with new hiring at ***. Total hours worked increased by 10.1 percent, and the hours worked per PRW increased slightly from 2,100 in 2010 to 2,105 in 2015. Wages paid increased by 15.5 percent from 2010 (\$100.7 million) to \$116.3 million in 2015. Hourly wages also increased from \$19.02 in 2010 to \$19.95 in 2015. Productivity decreased by 6.4 percent from 98.6 pounds per hour in 2010 to 92.3 pounds per hour in 2015, while unit labor costs increased by 12.2 percent from \$192.77 per 1,000 pounds in 2010 to \$216.27 in 2015.

⁶*** U.S. Producers' questionnaire response, sections II-6 and II-8.

⁷ *** U.S. Importers' questionnaire response, sections II-6 and II-8.

⁸ Mueller CEO Steffen Sigloch in his hearing testimony stated, "I can tell you that many of those workers (at both Mueller and Wieland) owe their jobs to the existence of the antidumping orders." Hearing transcript, pp. 29 (Sigloch). "The orders created a more level playing field for Domestic Producers and the American worker is the beneficiary." Hearing transcript, pp. 31 (Sigloch).

Table III-9

SRC tubular products: Average number of production and related workers, hours worked, wages paid to such employees, hourly wages, productivity, and unit labor costs, 2010-15, January to June 2015, and January to June 2016

				January to June				
Item	2010	2011	2012	2013	2014	2015	2015	2016
Production and related workers(number)	2,521	2,609	2,501	2,423	2,648	2,768	2,816	2,869
Total hours worked (1,000 hours)	5,295	5,373	5,153	5,090	5,714	5,828	2,941	3,010
Hours worked per PRW (hours)	2,100	2,059	2,060	2,101	2,158	2,105	1,044	1,049
Wages paid (\$1,000)	100,688	102,108	99,121	100,330	108,703	116,286	58,351	58,837
Hourly wages (dollars per hour)	\$19.02	\$19.00	\$19.24	\$19.71	\$19.02	\$19.95	\$19.84	\$19.55
Productivity (pounds per hour)	98.6	96.8	95.1	95.9	90.4	92.3	94.3	98.6
Unit labor costs (dollars per 1,000 pounds)	\$192.77	\$196.42	\$202.18	\$205.50	\$210.33	\$216.27	\$210.38	\$198.34

Source: Compiled from data submitted in response to Commission questionnaires.

FINANCIAL EXPERIENCE OF U.S. PRODUCERS

Background

Eleven U.S. firms provided financial data for their operations on SRC tubular products.⁹ These data are believed to account for the large majority of U.S. operations on SRC tubular products. Internal consumption and transfers to related firms were reported by several firms, however because these non-commercial transactions accounted for only *** percent of total net sales value in 2015, they are not presented separately in this section.¹⁰ All firms reported financial data on a calendar year basis, except ***, which reported on a *** fiscal year-end basis.^{11 12 13}

In the final phase of the original investigations, 12 U.S. producers provided usable financial results, with the five largest U.S. producers (***) representing *** percent of reported net sales quantities in 2009. In the current five-year reviews, 11 U.S. producers provided usable financial results, with the *** five largest U.S. producers representing *** percent of reported net sales quantities in 2015.

While the largest U.S. producers ***, there have been some notable changes to the industry including the entrance of GD Copper USA, which began production of SRC tubular goods in 2014. GD Copper represented *** and *** percent of net sales quantities in 2015 and the first half of 2016, respectively.¹⁴ There has also been some consolidation in the industry including the acquisition of National Copper by ST Products in 2012 and the acquisition of Tube Forming LP (a subsidiary of Wolverine) and Howell Metal by Mueller in 2011 and 2013, respectively. The last notable change in the industry includes the status of Wolverine Tube. Wolverine was a ***. In a telephone interview with staff, ***.¹⁵

¹⁴ ***. ***.

¹⁵ Staff telephone interview with ***. ***. Since the original investigations, Wolverine filed for (November 2010) and emerged from (June 2011) Chapter 11 bankruptcy protection, by converting senior secured debentures to equity and new debentures, and terminating its pension plan, which was assumed by the PBGC in exchange for equity shares and 11 years of payments. "Wolverine Files for Ch. 11, Cites Volatile Copper Tags," *AMM.com*, November 1, 2010 and "Wolverine Tube's Chapter 11 Exit Complete," *AMM.com*, June 29, 2011. Wolverine also sold its subsidiary, Tube Forming LP, which included the SRC tubular products facility in Carrollton, Texas, to Mueller in 2011. "Mueller Industries Buys Tube Unit from Wolverine," *AMM.com*, January 5, 2011.

⁹ The U.S. producers are ***.

¹⁰ *** to report internal consumption, ***. ***. *** reported transfers to related firms.

¹¹ Howell Metal, Mueller, and Precision all have a fiscal year end of the last Saturday in December, which approximates the calendar year.

¹² As previously mentioned in this report, Howell was acquired by Mueller Group in 2013. Prior to the acquisition, ***. Similarly, ***.

¹³ All responding firms provided financial data on the basis of generally accepted accounting principles ("GAAP").

Operations on SRC pipe and tube

Table III-10 presents aggregated data on U.S. producers' operations in relation to SRC tubular products, while table III-11 presents selected company-specific financial data.^{16 17}

¹⁶ ***. ¹⁷ ***.

		January to June						
Item	2010	2011	2012	2013	2014	2015	2015	2016
				Quantity (1,0)00 pounds)			
Total net sales	521,774	517,989	489,091	487,925	509,329	535,125	278,066	296,438
				Value (1,00	00 dollars)			
Total net sales	2,157,718	2,593,346	2,216,732	2,090,351	2,075,752	1,873,704	1,015,185	899,534
Cost of goods sold								
Raw materials	1,739,228	2,120,336	1,797,853	1,686,921	1,641,252	1,444,540	793,022	667,330
Direct labor	66,871	62,549	57,446	55,896	62,078	67,955	33,678	38,456
Other factory costs	218,998	229,722	226,356	206,623	220,066	220,887	108,000	116,519
Total COGS	2,025,097	2,412,607	2,081,655	1,949,440	1,923,396	1,733,382	934,700	822,305
Gross profit	132,621	180,739	135,077	140,911	152,356	140,322	80,485	77,229
SG&A expense	71,424	82,434	81,378	75,742	88,403	82,717	43,146	40,962
Operating income or (loss)	61,197	98,305	53,699	65,169	63,953	57,605	37,339	36,267
Other expense or (income), net	***	***	***	***	***	***	***	***
Net income or (loss)	***	***	***	***	***	***	***	***
Depreciation/amortization	34,124	32,860	32,077	29,998	31,845	30,695	14,694	14,052
Cash flow	***	***	***	***	***	***	***	***
			R	atio to net s	ales (percen	t)		
Cost of goods sold								
Raw materials	80.6	81.8	81.1	80.7	79.1	77.1	78.1	74.2
Direct labor	3.1	2.4	2.6	2.7	3.0	3.6	3.3	4.3
Other factory costs	10.1	8.9	10.2	9.9	10.6	11.8	10.6	13.0
Total COGS	93.9	93.0	93.9	93.3	92.7	92.5	92.1	91.4
Gross profit	6.1	7.0	6.1	6.7	7.3	7.5	7.9	8.6
SG&A expense	3.3	3.2	3.7	3.6	4.3	4.4	4.3	4.6
Operating income or (loss)	2.8	3.8	2.4	3.1	3.1	3.1	3.7	4.0
Net income or (loss)	***	***	***	***	***	***	***	***
			Unit va	alue (dollars	per 1,000 pc	ounds)		
Total net sales	4,135	5,007	4,532	4,284	4,075	3,501	3,651	3,034
Cost of goods sold Raw materials	3,333	4,093	3,676	3,457	3,222	2,699	2,852	2,251
Direct labor	128	121	117	115	122	127	121	130
Other factory costs	420	443	463	423	432	413	388	393
Average COGS	3,881	4,658	4,256	3,995	3,776	3,239	3,361	2,774
Gross profit	254	349	276	289	299	262	289	261
SG&A expense	137	159	166	155	174	155	155	138
Operating income or (loss)	117	190	110	134	126	108	134	122
Net income or (loss)	***	***	***	***	***	***	***	***
			N	umber of fir	ms reporting	9		
Operating losses	1	1	2	2	3	3	3	3
Data	10	10	10	9	10	10	10	10

Source: Compiled from data submitted in response to Commission questionnaires.

	Fiscal year							January to June		
Item	2010	2011	2012	2013	2014	2015	2015	2016		
			Total ne	et sales quar	ntity (1,000 p	ounds)				
Cam-Lee	***	***	***	***	***	***	***	***		
Cerro	***	***	***	***	***	***	***	***		
Freeport	***	***	***	***	***	***	***	***		
GD Copper USA	***	***	***	***	***	***	***	***		
H&H Tube	***	***	***	***	***	***	***	***		
Howell Metal	***	***	***	***	***	***	***	***		
Mueller	***	***	***	***	***	***	***	***		
National Copper	***	***	***	***	***	***	***	***		
Precision	***	***	***	***	***	***	***	***		
ST Products	***	***	***	***	***	***	***	***		
Wieland	***	***	***	***	***	***	***	***		
Total net sales quantity	521,774	517,989	489,091	487,925	509,329	535,125	278,066	296,438		
	Total net sales value (1,000 dollars)									
Cam-Lee	***	***	***	***	***	***	***	***		
Cerro	***	***	***	***	***	***	***	***		
Freeport	***	***	***	***	***	***	***	***		
GD Copper USA	***	***	***	***	***	***	***	***		
H&H Tube	***	***	***	***	***	***	***	***		
Howell Metal	***	***	***	***	***	***	***	***		
Mueller	***	***	***	***	***	***	***	***		
National Copper	***	***	***	***	***	***	***	***		
Precision	***	***	***	***	***	***	***	***		
ST Products	***	***	***	***	***	***	***	***		
Wieland	***	***	***	***	***	***	***	***		
Total net sales value	2,157,718	2,593,346	2,216,732	2,090,351	2,075,752	1,873,704	1,015,185	899,534		
			Т	otal COGS (1,000 dollars	5)				
Cam-Lee	***	***	***	***	***	***	***	***		
Cerro	***	***	***	***	***	***	***	***		
Freeport	***	***	***	***	***	***	***	***		
GD Copper USA	***	***	***	***	***	***	***	***		
H&H Tube	***	***	***	***	***	***	***	***		
Howell Metal	***	***	***	***	***	***	***	***		
Mueller	***	***	***	***	***	***	***	***		
National Copper	***	***	***	***	***	***	***	***		
Precision	***	***	***	***	***	***	***	***		
ST Products	***	***	***	***	***	***	***	***		
Wieland	***	***	***	***	***	***	***	***		
Total COGS	2,025,097	2,412,607	2,081,655	1,949,440	1,923,396	1,733,382	934,700	822,305		

	Fiscal year						January to June	
Item	2010	2011	2012	2013	2014	2015	2015	2016
			Gross	profit or (lo	ss) (1,000 do	llars)		
Cam-Lee	***	***	***	***	***	***	***	***
Cerro	***	***	***	***	***	***	***	***
Freeport	***	***	***	***	***	***	***	***
GD Copper USA	***	***	***	***	***	***	***	***
H&H Tube	***	***	***	***	***	***	***	***
Howell Metal	***	***	***	***	***	***	***	***
Mueller	***	***	***	***	***	***	***	***
National Copper	***	***	***	***	***	***	***	***
Precision	***	***	***	***	***	***	***	***
ST Products	***	***	***	***	***	***	***	***
Wieland	***	***	***	***	***	***	***	***
Total gross profit or (loss)	132,621	180,739	135,077	140,911	152,356	140,322	80,485	77,229
			Operating	g income or	(loss) (1,000	dollars)		
Cam-Lee	***	***	***	***	***	***	***	***
Cerro	***	***	***	***	***	***	***	***
Freeport	***	***	***	***	***	***	***	***
GD Copper USA	***	***	***	***	***	***	***	***
H&H Tube	***	***	***	***	***	***	***	***
Howell Metal	***	***	***	***	***	***	***	***
Mueller	***	***	***	***	***	***	***	***
National Copper	***	***	***	***	***	***	***	***
Precision	***	***	***	***	***	***	***	***
ST Products	***	***	***	***	***	***	***	***
Wieland	***	***	***	***	***	***	***	***
Operating income or								
(loss)	61,197	98,305	53,699	65,169	63,953	57,605	37,339	36,267
			Net in	come or (lo	ss) (1,000 do	llars)		
Cam-Lee	***	***	***	***	***	***	***	***
Cerro	***	***	***	***	***	***	***	***
Freeport	***	***	***	***	***	***	***	***
GD Copper USA	***	***	***	***	***	***	***	***
H&H Tube	***	***	***	***	***	***	***	***
Howell Metal	***	***	***	***	***	***	***	***
Mueller	***	***	***	***	***	***	***	***
National Copper	***	***	***	***	***	***	***	***
Precision	***	***	***	***	***	***	***	***
ST Products	***	***	***	***	***	***	***	***
Wieland	***	***	***	***	***	***	***	***
Net income or (loss)	***	***	***	***	***	***	***	***

		January	to June					
Item	2010	2011	2012	2013	2014	2015	2015	2016
			CC	OGS to net s	ales (perce	nt)		
Cam-Lee	***	***	***	***	***	***	***	***
Cerro	***	***	***	***	***	***	***	***
Freeport	***	***	***	***	***	***	***	***
GD Copper USA	***	***	***	***	***	***	***	***
H&H Tube	***	***	***	***	***	***	***	***
Howell Metal	***	***	***	***	***	***	***	***
Mueller	***	***	***	***	***	***	***	***
National Copper	***	***	***	***	***	***	***	***
Precision	***	***	***	***	***	***	***	***
ST Products	***	***	***	***	***	***	***	***
Wieland	***	***	***	***	***	***	***	***
COGS to net sales	93.9	93.0	93.9	93.3	92.7	92.5	92.1	91.4
			Gross pro	fit or (loss)	to net sales	s (percent)		
Cam-Lee	***	***	***	***	***	***	***	***
Cerro	***	***	***	***	***	***	***	***
Freeport	***	***	***	***	***	***	***	***
GD Copper USA	***	***	***	***	***	***	***	***
H&H Tube	***	***	***	***	***	***	***	***
Howell Metal	***	***	***	***	***	***	***	***
Mueller	***	***	***	***	***	***	***	***
National Copper	***	***	***	***	***	***	***	***
Precision	***	***	***	***	***	***	***	***
ST Products	***	***	***	***	***	***	***	***
Wieland	***	***	***	***	***	***	***	***
Gross profit or (loss) to								
net sales	6.1	7.0	6.1	6.7	7.3	7.5	7.9	8.6
		Оре	rating incor	ne or (loss)	to net sales	s ratio (perco	ent)	
Cam-Lee	***	***	***	***	***	***	***	***
Cerro	***	***	***	***	***	***	***	***
Freeport	***	***	***	***	***	***	***	***
GD Copper USA	***	***	***	***	***	***	***	***
H&H Tube	***	***	***	***	***	***	***	***
Howell Metal	***	***	***	***	***	***	***	***
Mueller	***	***	***	***	***	***	***	***
National Copper	***	***	***	***	***	***	***	***
Precision	***	***	***	***	***	***	***	***
ST Products	***	***	***	***	***	***	***	***
Wieland	***	***	***	***	***	***	***	***
Operating income or (loss) to net sales	2.8	3.8	2.4	3.1	3.1	3.1	3.7	4.0

		Fiscal year								
Item	2010	2011	2012	2013	2014	2015	2015	2016		
		N	et income o	or (loss) to	net sales ra	atio (percent	t)			
Cam-Lee	***	***	***	***	***	***	***	***		
Cerro	***	***	***	***	***	***	***	***		
Freeport	***	***	***	***	***	***	***	***		
GD Copper USA	***	***	***	***	***	***	***	***		
H&H Tube	***	***	***	***	***	***	***	***		
Howell Metal	***	***	***	***	***	***	***	***		
Mueller	***	***	***	***	***	***	***	***		
National Copper	***	***	***	***	***	***	***	***		
Precision	***	***	***	***	***	***	***	***		
ST Products	***	***	***	***	***	***	***	***		
Wieland	***	***	***	***	***	***	***	***		
Net income or (loss) to net sales	***	***	***	***	***	***	***	***		
		Unit net sales value (dollars per 1.000 pounds)								
Cam-Lee	***	***	***	***	***	***	***	***		
Cerro	***	***	***	***	***	***	***	***		
Freeport	***	***	***	***	***	***	***	***		
GD Copper USA	***	***	***	***	***	***	***	***		
H&H Tube	***	***	***	***	***	***	***	***		
Howell Metal	***	***	***	***	***	***	***	***		
Mueller	***	***	***	***	***	***	***	***		
National Copper	***	***	***	***	***	***	***	***		
Precision	***	***	***	***	***	***	***	***		
ST Products	***	***	***	***	***	***	***	***		
Wieland	***	***	***	***	***	***	***	***		
Average unit net sales	4,135	5,007	4,532	4,284	4,075	3,501	3,651	3,034		
			Unit CO	GS (dollars	per 1,000	pounds)				
Cam-Lee	***	***	***	***	***	***	***	***		
Cerro	***	***	***	***	***	***	***	***		
Freeport	***	***	***	***	***	***	***	***		
GD Copper USA	***	***	***	***	***	***	***	***		
H&H Tube	***	***	***	***	***	***	***	***		
Howell Metal	***	***	***	***	***	***	***	***		
Mueller	***	***	***	***	***	***	***	***		
National Copper	***	***	***	***	***	***	***	***		
Precision	***	***	***	***	***	***	***	***		
ST Products	***	***	***	***	***	***	***	***		
Wieland	***	***	***	***	***	***	***	***		
Average unit COGS	3,881	4,658	4,256	3,995	3,776	3,239	3,361	2,774		

			January	to June					
Item	2010	2011	2012	2013	2014	2015	2015	2016	
		Unit gr	oss profit	or (loss)	(dollars pe	er 1,000 po	ounds)		
Cam-Lee	***	***	***	***	***	***	***	***	
Cerro	***	***	***	***	***	***	***	***	
Freeport	***	***	***	***	***	***	***	***	
GD Copper USA	***	***	***	***	***	***	***	***	
H&H Tube	***	***	***	***	***	***	***	***	
Howell Metal	***	***	***	***	***	***	***	***	
Mueller	***	***	***	***	***	***	***	***	
National Copper	***	***	***	***	***	***	***	***	
Precision	***	***	***	***	***	***	***	***	
ST Products	***	***	***	***	***	***	***	***	
Wieland	***	***	***	***	***	***	***	***	
Average unit gross profit or (loss)	254	349	276	289	299	262	289	261	
	Unit operating income or (loss) (dollars per 1,000 pounds)								
Cam-Lee	***	***	***	***	***	***	***	***	
Cerro	***	***	***	***	***	***	***	***	
Freeport	***	***	***	***	***	***	***	***	
GD Copper USA	***	***	***	***	***	***	***	***	
H&H Tube	***	***	***	***	***	***	***	***	
Howell Metal	***	***	***	***	***	***	***	***	
Mueller	***	***	***	***	***	***	***	***	
National Copper	***	***	***	***	***	***	***	***	
Precision	***	***	***	***	***	***	***	***	
ST Products	***	***	***	***	***	***	***	***	
Wieland	***	***	***	***	***	***	***	***	
Average unit operating income or									
(loss)	117	190	110	134	126	108	134	122	
		Unit n	et income	or (loss) (dollars pe	er 1,000 pc	ounds)		
Cam-Lee	***	***	***	***	***	***	***	***	
Cerro	***	***	***	***	***	***	***	***	
Freeport	***	***	***	***	***	***	***	***	
GD Copper USA	***	***	***	***	***	***	***	***	
H&H Tube	***	***	***	***	***	***	***	***	
Howell Metal	***	***	***	***	***	***	***	***	
Mueller	***	***	***	***	***	***	***	***	
National Copper	***	***	***	***	***	***	***	***	
Precision	***	***	***	***	***	***	***	***	
ST Products	***	***	***	***	***	***	***	***	
Wieland	***	***	***	***	***	***	***	***	
Average unit net income or (loss)	***	***	***	***	***	***	***	***	

Source: Compiled from data submitted in response to Commission questionnaires.

Net sales quantity and value

As shown in table III-10, aggregate net sales, by quantity, decreased from 2010 to 2013 and increased in 2014 and 2015, with an overall increase of 2.6 percent from 2010 to 2015. Net sales quantity in the first half of 2016 was 6.6 percent higher than the same period in 2015. Net sales, by value, increased from 2010 to 2011, due to a higher net sales unit value, but decreased in each subsequent year through 2015, and were lower in the first half of 2016 than in the first half of 2015. The net sales unit value (per 1,000 pounds) increased from \$4,135 in 2010 to a period high of \$5,007 in 2011, before decreasing to \$3,501 in 2015, for an overall decrease of 15.3 percent. The unit value was 16.9 percent lower in the first half of 2016 (\$3,034 per 1,000 pounds) than in the first half of 2015 (\$3,651 per 1,000 pounds). The directional trend of the individual firms' net sales unit values were uniform, with *** companies reporting increasing unit values from 2010 to 2011, decreasing unit values from 2011 to 2015, and lower unit values in the first half of 2016 than in the first half of 2016.

Cost of goods sold and gross profit or (loss)

Raw material costs represent the largest component of overall COGS. The total cost of raw materials as a share of COGS ranged from 81.2 percent (in interim 2016) to 87.9 percent (in 2011). On a unit basis (per-1,000 pounds), raw material costs increased from 2010 to 2011 and decreased in each subsequent year through 2015, for an overall decrease of 19.0 percent, and were 21.1 percent lower in January-June 2016 than in January-June 2015.

Several producers reported that they purchase inputs from related firms: ***.^{18 19}

Other factory costs was the second largest component of COGS and fluctuated throughout the reporting period on an absolute basis, on a per-unit basis, and as a share of total COGS. As a share of COGS, the smallest component, direct labor, moved within a relatively narrow range from 2.6 percent in 2011 to 4.7 percent in interim 2016.²⁰

In the final phase of the original investigations, the petitioners stated that the conversion revenues (per-1,000 pound net sales values less per-1,000 pounds raw material costs) provided a good measure of the industry's financial performance since the price of copper is essentially passed through to customers.²¹ The average conversion revenues increased from \$802 per 1,000 pounds in 2010 to a period high of \$913 in 2011 before

18 ***

¹⁹ The Commission's current practice requires that relevant cost information associated with input purchases from related suppliers correspond to the manner in which this information is reported in the U.S. producer's own accounting books and records. *See 1,1,1,2-Tetrafluorethane from China, Inv. Nos. 701-TA-509 and 731-TA-1244 (Final),* USITC Publication 4503, December 2014, pp. 23 and 37.

20 ***.

²¹ During the final phase of the original investigations, the per-1,000 pound conversion revenues for SRC tubular products were approximately \$900 in 2007, \$950 in 2008, \$830 in 2009, \$780 in January-June 2009, and \$810 in January-June 2010. *Investigation Nos.* 731-TA-1174-1175 (Final): Seamless

(continued...)
decreasing irregularly to \$802 in 2015. The average conversion revenue was lower in January-June 2016 (\$783) than in the comparable period in 2015 (\$799).²²

The aggregate gross profit of the industry fluctuated throughout the period and was 5.8 percent higher in 2015 (\$140.3 million) than in 2010 (\$132.6 million). Gross profit was 4.0 percent lower in interim 2016 (\$77.2 million) than in interim 2015 (\$80.5 million). *** of the U.S. producers reported gross profits throughout the reporting period except *** which reported gross losses in ***, and ***, which reported a gross loss in ***.

SG&A expenses and operating income or (loss)

As shown in table III-10, the industry's SG&A expense ratios (i.e., total SG&A expenses divided by total revenue) moved within a relatively narrow range during 2010-15: 3.2 percent (2011) and 4.6 percent (January-June 2016).²³ On an overall basis, operating income decreased irregularly by 5.9 percent from \$61.2 million in 2010 to \$57.6 million in 2015 and was 2.9 percent lower in 2016 than in 2015.

Other expenses and net income or (loss)

Classified below the operating income level are interest expense, other expense, and other income, which are usually allocated to the product line from high levels in the corporation. In table III-10, these items are aggregated and only the net amount is shown. The net amount of all other expenses shown in table III-10 decreased irregularly from \$*** in 2010 to \$*** in 2015. The *** in 2013 is indicating that there was \$*** in other income in this year. This was due to ***."^{24 25}

By definition, items classified at this level in the income statement only affect net income or (loss). Overall net income of the SRC tubular products industry fluctuated throughout the period. The *** translated to a much higher net income in 2013 (***) than in the rest of the period. Without this ***, net income would have peaked at *** in 2011 before decreasing irregularly to *** in 2015. Reported industry net income was *** in the first half of 2015 and *** in the first half of 2016.

(...continued)

²⁵ ***.

Refined Copper Pipe and Tube from China and Mexico—Staff Report, INV-HH-101, October 13, 2010, p. VI-6.

²² The entrance of GD Copper USA ***.

²³ ***.

²⁴ ***.

Variance analysis

A variance analysis for the operations of U.S. producers of SRC tubular products is presented in table III-12.²⁶ The information for this variance analysis is derived from table III-10. The analysis illustrates that from 2010 to 2015, the decrease in operating income is primarily attributable to a higher unfavorable price variance despite a favorable cost/expense variance (i.e., prices decreased more than costs and expenses).

years and between part	al year perio	oas					
			Between fi	scal years			January to June
Item	2010-15	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Net sales: Price variance	(339,225)	451.280	(231,934)	(121.096)	(106.297)	(307.179)	(182.725)
Volume variance	55,211	(15,652)	(144,680)	(5,285)	91,698	105,131	67,074
Net sales variance	(284,014)	435,628	(376,614)	(126,381)	(14,599)	(202,048)	(115,651)
Cost of sales: Cost/expense variance	343,533	(402,200)	196,355	127,252	111,561	287,428	174,151
Volume variance	(51,818)	14,690	134,597	4,963	(85,517)	(97,414)	(61,756)
Total cost of sales variance	291,715	(387,510)	330,952	132,215	26,044	190,014	112,395
Gross profit variance	7,701	48,118	(45,662)	5,834	11,445	(12,034)	(3,256)
SG&A expenses: Cost/expense variance	(9,465)	(11,528)	(3,543)	5,442	(9,338)	10,163	5,035
Volume variance	(1,828)	518	4,599	194	(3,323)	(4,477)	(2,851)
Total SG&A expense variance	(11,293)	(11,010)	1,056	5,636	(12,661)	5,686	2,184
Operating income variance	(3,592)	37,108	(44,606)	11,470	(1,216)	(6,348)	(1,072)
Summarized as: Price variance	(339,225)	451,280	(231,934)	(121,096)	(106,297)	(307,179)	(182,725)
Net cost/expense variance	334,067	(413,728)	192,813	132,694	102,222	297,592	179,186
Net volume variance	1,566	(444)	(5,484)	(128)	2,859	3,239	2,467

Table III-12

SRC tubular products: Variance analysis on the operations of U.S. producers, between fiscal years and between partial year periods

Source: Compiled from data submitted in response to Commission questionnaires.

²⁶ The Commission's variance analysis is calculated in three parts: Sales variance, cost of sales variance (COGS variance), and SG&A expense variance. Each part consists of a price variance (in the case of the sales variance) or a cost or expense variance (in the case of the COGS and SG&A expense variance), and a volume variance. The sales or cost/expense variance is calculated as the change in unit price or per-unit cost/expense times the new volume, while the volume variance is calculated as the change in volume times the old unit price or per-unit cost/expense. Summarized at the bottom of the table, the price variance is from sales; the cost/expense variance is the sum of those items from COGS and SG&A variances, respectively, and the volume variance is the sum of the volume components of the net sales, COGS, and SG&A expense variances. The overall volume component of the variance analysis is generally small.

Capital expenditures and research and development expenses

Table III-13 presents capital expenditures and research and development ("R&D") expenses by firm. Ten firms provided capital expenditure data, and *** firms provided data on R&D expenses. *** accounted for the large majority of capital expenditures reported during the period examined. ***. ***. In response to questions by staff, ***."²⁷ The R&D expenses were described as ***.²⁸

Table III-13

SRC tubular products: Capita	al expenditures and resear	rch and development expenses of U.S.
producers, 2010-15, January	to June 2015, and January	y to June 2016

		January to June						
	2010	2011	2012	2013	2014	2015	2015	2016
ltem		(Capital ex	penditure	es (1,000 d	of dollars))	
Cam-Lee	***	***	***	***	***	***	***	***
Cerro	***	***	***	***	***	***	***	***
Freeport	***	***	***	***	***	***	***	***
GD Copper USA	***	***	***	***	***	***	***	***
H&H Tube	***	***	***	***	***	***	***	***
Howell Metal	***	***	***	***	***	***	***	***
Mueller	***	***	***	***	***	***	***	***
National Copper	***	***	***	***	***	***	***	***
Precision	***	***	***	***	***	***	***	***
ST Products	***	***	***	***	***	***	***	***
Wieland	***	***	***	***	***	***	***	***
Total capital expenditure	11,895	14,724	56,553	38,406	57,099	27,911	13,584	10,807
		Research	n and dev	elopment	expenses	s (1,000 o	f dollars)	
Cam-Lee	***	***	***	***	***	***	***	***
Cerro	***	***	***	***	***	***	***	***
Freeport	***	***	***	***	***	***	***	***
GD Copper USA	***	***	***	***	***	***	***	***
H&H Tube	***	***	***	***	***	***	***	***
Howell Metal	***	***	***	***	***	***	***	***
Mueller	***	***	***	***	***	***	***	***
National Copper	***	***	***	***	***	***	***	***
Precision	***	***	***	***	***	***	***	***
ST Products	***	***	***	***	***	***	***	***
Wieland	***	***	***	***	***	***	***	***
Total research and development	***	***	***	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

²⁸ *** and ***.

^{27 ***}

Assets and return on assets

Table III-14 presents data on the U.S. producers' total assets and the ratio of operating income or (loss) to assets.²⁹ When examining the industry as a whole, total net assets decreased irregularly from \$1.0 billion in 2010 to \$929 million in 2015. Of the five largest firms, *** reported decreasing assets from 2010 to 2015.³⁰ These decreases were somewhat offset by the entrance of GD Copper USA, which began construction in 2012, and reported \$*** in net assets in 2015.

•••••			Calend	ar year		
Firm	2010	2011	2012	2013	2014	2015
		Tota	al net assets	(1,000 of doll	ars)	
Cam-Lee	***	***	***	***	***	***
Cerro	***	***	***	***	***	***
Freeport	***	***	***	***	***	***
GD Copper USA	***	***	***	***	***	***
H&H Tube	***	***	***	***	***	***
Howell Metal	***	***	***	***	***	***
Mueller	***	***	***	***	***	***
National Copper	***	***	***	***	***	***
Precision	***	***	***	***	***	***
ST Products	***	***	***	***	***	***
Wieland	***	***	***	***	***	***
Total assets	1,049,740	919,732	896,979	1,032,940	1,059,266	929,159
		Opera	ating return c	on assets (pe	rcent)	•
Cam-Lee	***	***	***	***	***	***
Cerro	***	***	***	***	***	***
Freeport	***	***	***	***	***	***
GD Copper USA	***	***	***	***	***	***
H&H Tube	***	***	***	***	***	***
Howell Metal	***	***	***	***	***	***
Mueller	***	***	***	***	***	***
National Copper	***	***	***	***	***	***
Precision	***	***	***	***	***	***
ST Products	***	***	***	***	***	***
Wieland	***	***	***	***	***	***
Average operating return on assets	5.8	10.7	6.0	6.3	6.0	6.2

Table III-14 SRC tubular products: U.S. producers' total net assets and return on assets, 2

Source: Compiled from data submitted in response to Commission questionnaires.

³⁰ *** *** ***.

²⁹ With respect to a company's overall operations, staff notes that a total asset value (i.e., the bottom line number on the asset side of a company's balance sheet) reflects an aggregation of a number of assets which are generally not product specific. Accordingly, high-level allocation factors were required in order to report a total asset value for SRC tubular products.

PART IV: U.S. IMPORTS AND THE FOREIGN INDUSTRIES

U.S. IMPORTS

Overview

The Commission issued questionnaires to 60 firms believed to have imported SRC tubular products since 2010. Twenty-one firms provided data and information in response to the questionnaires, while three firms indicated that they had not imported SRC tubular products during the interim period for which data were collected.¹ Firms responding to the Commission's questionnaire accounted for the following shares of U.S. imports of SRC tubular products (as a share of official import statistics, by quantity) during 2014 and 2015.

- 93 percent of the subject imports from China during 2014 and 21 percent in 2015.²
- 95 percent of the subject imports from Mexico during 2014 and 100 percent in 2015.
- 33 percent of the nonsubject imports from all other sources during 2014 and 32 percent in 2015.³

In light of the data coverage by the Commission's questionnaires, import data in this report are based on official Commerce statistics for SRC tubular products.⁴

Imports from subject and nonsubject countries

Table IV-I presents information on U.S. imports of SRC tubular products from China and Mexico and all other sources. From 2010 to 2015, the annual quantity of imports of SRC tubular products from China decreased by 97.3 percent from 41.6 million to 1.1 million pounds, and the value decreased by 97.0 percent from \$159.3 million to \$4.8 million. The unit value of imports of SRC tubular products from China increased by 11.1 percent from 2010 to 2015. From 2010 to 2015, the quantity of imports of SRC pipe tubular products from Mexico decreased by 48.6 percent and the value decreased by 50.2 percent. The unit value of imports of SRC tubular products from Mexico decreased by 3.0 percent from 2010 to 2015.

(continued...)

¹ The Commission issued questionnaires to those firms identified in responses to the notice of institution, along with firms that, based on data provided by U.S. Customs and Border Protection ("Customs"), may have imported greater than one percent of total imports under HTS subheadings 7411.10.1030 or 7411.10.1090 in any one year since 2010.

² ***.

³ According to Customs data, ***.

⁴ Official U.S import statistics under HTS statistical reporting numbers 7411.10.1030 and 7411.10.1090, accessed August 29, 2016.

⁵ The decrease in U.S. imports from China from 2014 to 2015 largely coincided with the exit of *** as a U.S. importer of SRC tubular products from China. *** accounted for over *** percent of subject

imports from nonsubject countries increased by 41.8 percent and by 19.9 percent, respectively from 2010 to 2015. The unit value of imports of SRC tubular products from nonsubject sources decreased by 15.5 percent from 2010 to 2015.

Based on official Commerce statistics, imports of SRC tubular products from all other sources comprised 88.8 percent of all imports that entered the United States in 2015. Canada was the largest single source, accounting for 32.2 percent of all imports to the United States in 2015. Korea was the second largest source, accounting for 27.8 percent. Imports of SRC tubular products from Korea increased by 135 percent from 2010 to 2015, and imports from Canada increased by approximately 50 percent during the same period. Imports from Vietnam more than doubled from 2010 to 2015, accounting for 9.8 percent of all imports to the United States in 2015. Imports of SRC tubular products from Greece increased by more than 400 percent from 2010 to 2015, accounting for 8.4 percent of all imports in 2015. Imports from Malaysia, in contrast, decreased to less than one quarter of their 2010 level in 2015. Imports from Malaysia accounted for 15.3 percent of imports in 2010, but only accounted for 4.0 percent of all imports of SRC tubular products in 2015.

^{(...}continued)

imports from China in 2014. *** began to import from its affiliate in *** After a steep decline between 2010 and 2013, U.S. imports from Mexico nearly tripled from 2014 to 2015. *** accounted for *** percent of imports of SRC tubular products in 2015.

Table IV-I SRC tubular products: U.S. imports by source, 2010-15, January to June 2015, and January to June 2016

			Calend	ar year			January to June			
Item	2010	2011	2012	2013	2014	2015	2015	2016		
	Quantity (1,000 pounds)									
U.S. imports from China	41,565	20,044	19,643	19,473	21,772	1,138	633	301		
Mexico	25,983	3,962	1,929	1,393	4,547	13,347	7,858	5,966		
Subject sources	67,548	24,006	21,572	20,866	26,319	14,485	8,491	6,267		
U.S. imports from other major sources Canada	27,781	32,215	36,229	38,860	41,305	41,733	22,532	19,653		
Korea	15,311	23,783	24,001	35,807	40,773	35,991	21,909	13,468		
Vietnam	5,898	11,718	10,873	10,630	12,965	12,689	7,592	14,711		
Greece	2,049	4,989	7,217	6,987	8,364	10,849	5,497	5,927		
Malaysia	22,800	19,359	13,608	6,506	5,621	5,122	1,467	1,384		
All other sources	7,361	8,557	10,298	12,009	9,810	8,774	4,456	7,185		
Subtotal, nonsubject sources	81,201	100,622	102,225	110,798	118,837	115,158	63,453	62,327		
Total U.S. imports	148,749	124,628	123,797	131,664	145,156	129,643	71,944	68,594		
				Value (1,00	00 dollars)					
U.S. imports from China	159,289	95,572	84,257	77,041	83,664	4,849	2,818	1,286		
Mexico	97,276	18,039	9,408	6,226	18,569	48,445	29,083	19,493		
Subject sources	256,565	113,611	93,665	83,268	102,233	53,294	31,902	20,779		
U.S. imports from other major sources Canada	116,445	164,064	169,693	171,857	173,604	149,851	85,147	61,952		
Korea	58,739	113,513	99,191	139,749	151,374	115,521	72,642	36,741		
Vietnam	24,168	56,173	46,147	41,028	46,706	39,469	24,207	38,899		
Greece	8,199	23,332	29,929	27,845	31,153	34,460	18,503	15,730		
Malaysia	87,903	92,602	61,578	28,147	22,228	17,374	5,467	4,234		
All other sources	32,857	47,119	51,195	56,772	45,682	36,920	19,549	24,313		
Subtotal, nonsubject sources	328,311	496,803	457,733	465,399	470,746	393,595	225,515	181,868		
Total U.S. imports	584,876	610,414	551,397	548,666	572,980	446,889	257,417	202,648		

Table continued on next page.

Table IV-I--Continued SRC tubular products: U.S. imports by source, 2010-15, January to June 2015, and January to June 2016

				January to June				
ltem	2010	2011	2012	2013	2014	2015	2015	2016
		ι	Jnit value	e (dollars	per 1,00	0 pounds	5)	
U.S. imports from								
China	3,832	4,768	4,289	3,956	3,843	4,259	4,452	4,273
Mexico	3,744	4,553	4,877	4,470	4,084	3,630	3,701	3,267
Subject sources	3,798	4,733	4,342	3,991	3,884	3,679	3,757	3,316
U.S. imports from other major								
Canada	4,191	5,093	4,684	4,422	4,203	3,591	3,779	3,152
Korea	3,836	4,773	4,133	3,903	3,713	3,210	3,316	2,728
Vietnam	4,097	4,794	4,244	3,860	3,603	3,110	3,189	2,644
Greece	4,000	4,676	4,147	3,986	3,725	3,176	3,366	2,654
Malaysia	3,855	4,783	4,525	4,326	3,955	3,392	3,726	3,059
All other sources	4,464	5,506	4,971	4,728	4,657	4,208	4,387	3,384
Subtotal, nonsubject sources	4,043	4,937	4,478	4,200	3,961	3,418	3,554	2,918
Total U.S. imports	3,932	4,898	4,454	4,167	3,947	3,447	3,578	2,954
			Shar	e of quar	tity (per	cent)		
U.S. imports from								
China	27.9	16.1	15.9	14.8	15.0	0.9	0.9	0.4
Mexico	17.5	3.2	1.6	1.1	3.1	10.3	10.9	8.7
Subject sources	45.4	19.3	17.4	15.8	18.1	11.2	11.8	9.1
U.S. imports from other major sources	10 7	25.0	20.2	20.5	29 5	22.2	21.2	20 7
Koroo	10.7	20.0	29.3	29.0	20.0	32.2 27.0	20.5	20.7
Vietnom	10.3	19.1	19.4	27.2	20.1	27.0	30.5	19.0
	4.0	9.4	0.0	0.1	0.9	9.0	10.6	21.4
Greece	1.4	4.0	5.8	5.3	5.8	8.4	7.6	8.6
Malaysia	15.3	15.5	11.0	4.9	3.9	4.0	2.0	2.0
All other sources	4.9	6.9	8.3	9.1	6.8	6.8	6.2	10.5
Subtotal, nonsubject sources	54.6	80.7	82.6	84.2	81.9	88.8	88.2	90.9
Total U.S. imports	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table continued on next page.

Table IV-I--Continued SRC tubular products: U.S. imports by source, 2010-15, January to June 2015, and January to June 2016

				January to June				
ltem	2010	2011	2012	2013	2014	2015	2015	2016
			Sha	re of val	ue (perce	ent)		
U.S. imports from								
China	27.2	15.7	15.3	14.0	14.6	1.1	1.1	0.6
Mexico	16.6	3.0	1.7	1.1	3.2	10.8	11.3	9.6
Subject sources	43.9	18.6	17.0	15.2	17.8	11.9	12.4	10.3
U.S. imports from other major								
sources	10.0					~ ~ ~		
Canada	19.9	26.9	30.8	31.3	30.3	33.5	33.1	30.6
Korea	10.0	18.6	18.0	25.5	26.4	25.8	28.2	18.1
Vietnam	4.1	9.2	8.4	7.5	8.2	8.8	9.4	19.2
Greece	1.4	3.8	5.4	5.1	5.4	7.7	7.2	7.8
Malaysia	15.0	15.2	11.2	5.1	3.9	3.9	2.1	2.1
All other sources	5.6	7.7	9.3	10.3	8.0	8.3	7.6	12.0
Subtotal, nonsubject sources	56.1	81.4	83.0	84.8	82.2	88.1	87.6	89.7
Total U.S. imports	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
			Ratio to	U.S. prod	duction (percent)		
U.S. imports from								
China	8.0	3.9	4.0	4.0	4.2	0.2	0.2	0.1
Mexico	5.0	0.8	0.4	0.3	0.9	2.5	2.8	2.0
Subject sources	12.9	4.6	4.4	4.3	5.1	2.7	3.1	2.1
U.S. imports from other major								
sources								
Canada	5.3	6.2	7.4	8.0	8.0	7.8	8.1	6.6
Korea	2.9	4.6	4.9	7.3	7.9	6.7	7.9	4.5
Vietnam	1.1	2.3	2.2	2.2	2.5	2.4	2.7	5.0
Greece	0.4	1.0	1.5	1.4	1.6	2.0	2.0	2.0
Malaysia	4.4	3.7	2.8	1.3	1.1	1.0	0.5	0.5
All other sources	1.4	1.6	2.1	2.5	1.9	1.6	1.6	2.4
Subtotal, nonsubject sources	15.5	19.4	20.9	22.7	23.0	21.4	22.9	21.0
Total U.S. imports	28.5	24.0	25.3	27.0	28.1	24.1	25.9	23.1

Source: Official U.S import statistics under HTS statistical reporting numbers 7411.10.1030 and 7411.10.1090, accessed August 29, 2016.

Figure IV-I SRC tubular products: U.S. import quantities and unit values, 2010-15, January to June 2015, and January to June 2016



Source: Official U.S. import statistics under HTS statistical reporting numbers 7411.10.1030 and 7411.10.0090, accessed August 29, 2016.

CUMULATION CONSIDERATIONS

In assessing whether U.S. imports from the subject countries are likely to compete with each other and with the domestic like SRC tubular products, the Commission has generally considered four factors: (1) fungibility, (2) presence of sales or offers to sell in the same geographical markets, (3) common or similar channels of distribution, and (4) simultaneous presence in the market. Additional information concerning fungibility, geographical markets, and simultaneous presence in the market is presented below. Channels of distribution and fungibility (interchangeability) are discussed in Part II of this report.

Fungibility

As discussed in Part II, SRC tubular products were sold for industrial applications or plumbing applications. Table IV-2 presents shipments by applications/end-use for U.S. producers and U.S. importers.

Table IV-2 SRC tubular products: U.S. producers' and importers' commercial U.S. shipments by application, January 2010-June 2016

* * * * * * *

Geographical markets

Table IV-3 presents imports from China and Mexico by U.S. Customs districts for 2015. Houston-Galveston, Texas was the largest district for entry for imports from China, accounting for 27.0 percent of total subject imports during 2015. Los Angeles, California was the second largest district, with 15.2 percent of imports from China. Laredo, Texas was the largest district of entry for imports from Mexico, accounting for 99.3 percent of total subject imports during 2015. San Diego, California was the second largest district, with 0.7 percent of subject imports from Mexico. Detroit, Michigan was the largest district of entry for all other source imports, accounting for 25.6 percent of total nonsubject imports during 2015. Chicago, Illinois was the second largest district, with 14.6 percent of nonsubject imports during 2015.⁶

	Calendar year 2015						
ltem	Quantity (1,000 pounds)	Share of quantity (percent)					
U.S. imports from China							
Houston-Galveston, TX	306	27.0					
Los Angeles, CA	173	15.2					
Savannah, GA	125	11.0					
Miami, FL	119	10.5					
Chicago, IL	71	6.3					
All other districts	339	29.9					
Total U.S. imports from China	1,134	100.0					
U.S. imports from Mexico							
Laredo, TX	13,252	99.3					
San Diego, CA	90	0.7					
Nogales, AZ	3						
Cleveland, OH	1						
Total U.S. imports from Mexico	13,345	100.0					
U.S. imports from all other sources							
Detroit, MI	29,538	25.6					
Chicago, IL	16,878	14.6					
Buffalo, NY	13,036	11.3					
Los Angeles, CA	11,976	10.4					
New York, NY	6,747	5.9					
All other districts	37,068	32.2					
Total U.S. imports from all other							
sources	115,242	100.0					

Table IV-3

SRC tubular products: U.S. imports by customs districts, 2015

Source: Official U.S import statistics under HTS statistical reporting numbers 7411.10.1030 and 7411.10.1090, accessed August 29, 2016.

Presence in the market

SRC tubular products from China and Mexico were present in every month between January 2010 and August 2016. Table IV-4 and Figure IV-2 present monthly imports into the United States by sources.

⁶ In 2014, U.S. imports from China were higher compared to 2015 (21.8 million pounds in 2014 compared to 1.1 million in 2015). The volume of imports entering the United States through Houston-Galveston, Texas decreased from 2014 to 2015 by more than 90%. Laredo, Texas saw the largest increase from 2014 to 2015, largely due to imports by ***.

	Calendar year							
Item	2010	2011	2012	2013	2014	2015	2016	
			Quanti	ity (1,000 pc	ounds)			
U.S. imports from China								
January	7,974	602	1,797	1,660	1,193	383	32	
February	6,515	469	2,132	1,105	1,642	23	25	
March	4,025	1,668	2,198	2,047	2,972	104	64	
April	7,100	1,792	1,219	2,689	2,821	35	30	
Мау	1,975	2,807	2,965	2,011	2,479	33	70	
June	1,126	3,142	3,444	1,989	2,129	52	81	
July	2,825	3,215	1,705	2,575	1,144	65	36	
August	2,092	1,972	1,112	940	1,746	50	123	
September	2,449	1,179	895	1,561	3,796	97		
October	1,864	1,074	1,286	1,002	1,448	202		
November	1,577	927	389	640	427	69		
December	2,044	1,210	502	1,254	65	22		
Total for year, China	41,565	20,057	19,643	19,473	21,861	1,134	460	
U.S. imports from Mexico								
January	1,381	425	108	51	214	611	1,097	
February	2,265	319	170	48	77	1,358	986	
March	2,295	296	148	19	172	1,438	969	
April	5,624	387	197	67	164	1,484	1,006	
Мау	3,340	1,026	648	124	685	1,698	895	
June	2,352	703	105	367	515	1,268	1,013	
July	2,312	59	139	356	602	1,356	848	
August	1,479	134	132	66	1,006	1,384	914	
September	990	71	112	104	358	916		
October	934	93	113	91	311	834		
November	2,854	82	26	57	201	604		
December	157	66	25	41	268	396		
Total for year, Mexico	25,983	3,660	1,922	1,393	4,573	13,345	7,728	
U.S. imports from all other sources								
January	4,487	8,483	7,438	8,334	9,169	8,517	9,687	
February	2,703	7,409	6,756	7,841	8,489	8,814	10,060	
March	4,865	8,591	7,560	9,333	9,578	11,171	10,457	
April	5,908	8,989	8,621	9,901	11,150	13,045	11,290	
Мау	5,286	9,009	9,529	10,071	12,413	11,075	10,665	
June	7,608	8,780	9,450	10,344	11,621	10,826	10,169	
July	7,051	9,072	10,913	10,882	11,133	10,678	11,168	
August	8,737	10,188	9,097	9,995	9,900	8,205	10,199	
September	9,383	8,099	8,820	10,052	9,739	8,326		
October	7,352	7,778	8,672	8,695	8,591	8,532		
November	9,068	8,476	7,885	7,611	9,426	7,710		
December	8,753	5,747	7,485	7,740	7,628	8,344		
Total for year, all other sources	81,201	100,622	102,225	110,799	118,839	115,242	83,694	

Table IV-4 SRC tubular products: Monthly U.S. imports by source, January 2010 through August 2016

Source: Official U.S import statistics under HTS statistical reporting numbers 7411.10.1030 and 7411.10.1090, accessed October 18, 2016.





Source: Official U.S import statistics under HTS statistical reporting numbers 7411.10.1030 and 7411.10.1090, accessed October 18, 2016.

U.S. IMPORTERS' IMPORTS SUBSEQUENT TO JUNE 30, 2016

The Commission requested importers to indicate whether they had imported or arranged for the importation of SRC tubular products from China and Mexico for delivery after June 30, 2016. Table IV-5 presents U.S. importers' responses regarding arranged imports.

Table IV-5SRC tubular products: U.S. importers' arranged imports, July 2016 to June 2017

* * * * * *

U.S. IMPORTERS' INVENTORIES

Table IV-6 presents data for inventories of U.S. imports of SRC tubular products from China and Mexico and all other sources held in the United States. The ratio of inventories to U.S. imports from China was substantially higher than the ratio of inventories to U.S. imports from all other sources from 2010 to 2015.

Table IV-6

SRC tubular products: U.S. importers' end-of-period inventories of imports, by source, 2010-15, January to June 2015, January to June 2016

* * * * * * *

SUBJECT COUNTRY PRODUCERS

The Commission issued questionnaires to 25 firms identified as possible SRC tubular products producers from the original investigation and information provided by domestic interested parties. Seven foreign producers (three Chinese and four Mexican) completed and returned the Commission's foreign producer questionnaire for their production operations in China and Mexico. The Chinese producers (Jiangsu Mueller, Golden Dragon Precise Copper Tube Group, and Luvata Zhongston), did not report exports to the United States in 2015 and accounted for approximately *** percent of all reported production in China. ***. Based on the foreign producer questionnaires, the Mexican producers (Nacobre, GD Affiliates, IUSA, and Luvata Monterrey) exported *** pounds of SRC tubular products to the United States in 2015, a substantial decline from 2010, when *** pounds were exported to the United States. These four firms reportedly accounted for all of the Mexican production of SRC tubular products.⁷

THE INDUSTRY IN CHINA

Overview

Table IV-7 presents data for the responding Chinese producers. Of the three Chinese producers that responded to Commission questionnaires, *** was the largest producer of SRC tubular products in 2015.

Table IV-7SRC tubular products: Summary data on firms in China, 2015

* * * * * * *

In March 2015, Zhejiang Hailiang (Hailiang) announced plans to invest 200 million yuan to construct a new copper tubing plant in Taishan, Guangdong Province. The new facility would operate as a new subsidiary, Guangdong Hailang Copper Co., with planned production capacity of 25,000 metric tons (28,000 short tons) of refined copper tubing per year, and production anticipated to commence in May 2016. The new production facility is being located closer to the firm's downstream air-condition manufacturing customers, to not only reduce transportation costs, but also to shorten the production cycle and reduce inventories.⁸

In June 2015, a representative of Hailiang (316,000 metric tons (348,000 short tons) of annual production capacity), confirmed reports that the firm had entered into negotiations in the previous month to take over Golden Dragon, the country's largest refined copper tubing producer (more than 600,000 metric tons (661,000 short tons) of annual production capacity).⁹

⁷ ***.

⁸ "Hailiang to Build 25,000-tyy Copper Tube Plant in Guangdong," Kiki Kang, *Metal Bulletin*, March 19, 2015.

⁹ Zhejiang Hailiang Targets Copper Tube Consolidation, Talks to Take Over Golden Dragon," Kiki Kang, *Metal Bulletin*, June 11, 2015.

However, in May 2016, Hailiang announced that they would not buy Golden Dragon due to "non-operating capital used by affiliates."¹⁰

In September 2016, Hailiang indicated that it will invest \$276 million to build 606 million pounds of copper tube production capacity in the next three years.¹¹

*** 12

SRC tubular products operations in China

Table IV-8 presents the production, capacity, and capacity utilization of responding manufacturers in China. Reported production capacity quantity of SRC tubular products increased by less than 1 percent, while production and capacity utilization decreased by more than 20 percent between 2010 and 2015, respectively. Reported quantities of home market shipments and export shipments both declined during this period.¹³ The ratio of inventory levels to production and the ratio of inventory levels to total shipments of SRC tubular products remained relatively stable from 2010 to 2015, equivalent to 2 percent or less of production and shipments.

Table IV-8

SRC tubular products: Data on the industry in China, 2010-15, January to June 2015, and January to June 2016 *

Table IV-9 presents China's share of production of other products on the same machinery utilized for production of SRC tubular products. ***.

Table IV-9

SRC tubular products: Chinese producers' overall capacity and production of products on the same machinery, 2010-15, January to June 2015, and January to June 2016

*

Exports from China

Table IV-10 presents exports of refined copper tubes and pipes from China by destination. Overall, the quantities of exports to the United States are less than one tenth of

¹⁰ "Why did Hailiang-Golden Dragon copper tube buyout fail?" Kiki Kang, *Metal Bulletin*, May 20, 2016.

¹¹ Domestic Producers' Hearing Exhibits at 16. "Hailiang Will Invest \$276 million to Expand Copper Tube Capacity; Eves Global Market," Metal Bulletin, September 21, 2016.

¹² Commission sent three foreign producer questionnaires to Hailiang and their affiliates (Zhejiang Hailiang, Shanghai Hailiang Copper, and Hong Kong Hailiang Metal Trading) but received no responses.

¹³ China's major export markets are mainly comprised of countries in Asia, which account for more than 85 percent of all other markets' export shipments in 2015.

what they were in 2010. Despite these decreases, total exports from China increased by 1.8 percent since 2010.

Table IV-10

Refined copper tubes and pipes: Exports from China by destination market, 2010-15

	Calendar year							
Item	2010	2011	2012	2013	2014	2015		
		Q	uantity (1,0	00 pounds)				
Exports from China to the United								
States	37,800	21,361	20,587	20,917	22,917	3,267		
Exports from China to other major								
Thailand	18,082	23,197	29,815	35,922	38,462	45,772		
Taiwan	28,766	31,228	32,792	32,895	38,396	39,194		
Malaysia	18,552	21,616	23,768	28,481	29,791	30,532		
Japan	9,376	16,158	17,342	20,212	24,017	17,472		
Saudi Arabia	13,761	19,273	16,398	15,593	13,810	16,601		
Indonesia	5,179	7,551	9,006	10,979	12,346	12,317		
South Korea	15,450	13,695	8,466	12,425	12,161	9,916		
India	23,598	21,138	15,792	12,463	10,320	9,908		
All other destination markets	129,784	131,437	110,985	114,695	118,796	120,826		
Total China exports	300,349	306,654	284,949	304,584	321,015	305,805		
			Value (1,00	0 dollars)				
Exports from China to the United States	140,827	100,214	89,031	84,868	88,880	15,779		
Exports from China to other major destination markets								
Thailand	65,703	106,237	121,079	140,353	140,274	146,655		
Taiwan	103,737	132,538	129,836	124,372	137,128	119,856		
Malaysia	67,345	98,637	97,766	110,362	108,222	96,271		
Japan	34,860	70,890	72,205	79,958	90,465	57,878		
Saudi Arabia	51,052	87,862	66,550	60,817	49,461	52,599		
Indonesia	19,412	33,789	36,809	42,763	45,295	39,348		
South Korea	58,084	61,321	35,808	49,639	45,871	34,244		
India	86,834	96,890	65,829	50,014	39,604	32,999		
All other destination markets	479,929	598,067	456,150	446,897	437,417	387,021		
Total China exports	1,107,782	1,386,445	1,171,063	1,190,043	1,182,616	982,648		

Table continued on next page.

Table IV-10--ContinuedRefined copper tubes and pipes: Exports from China by destination market, 2010-15

	Calendar year								
ltem	2010	2011	2012	2013	2014	2015			
		Unit val	ue (dollars	per 1,000	pounds)				
Exports from China to the United									
States	3,726	4,692	4,325	4,057	3,878	4,829			
Exports from China to other major									
destination markets	3 634	4 580	4 061	3 007	3 647	3 204			
	3,004	4,000	2 050	2 791	2 571	2 059			
Melovojo	3,000	4,244	3,909	2 975	2,571	2,000			
Ivialaysia	3,030	4,003	4,113	3,075	3,033	3,103			
Japan	3,718	4,387	4,164	3,956	3,767	3,313			
Saudi Arabia	3,710	4,559	4,058	3,900	3,582	3,168			
Indonesia	3,748	4,475	4,087	3,895	3,669	3,195			
South Korea	3,759	4,478	4,230	3,995	3,772	3,453			
India	3,680	4,584	4,169	4,013	3,838	3,331			
All other destination markets	3,698	4,550	4,110	3,896	3,682	3,203			
Total China exports	3,688	4,521	4,110	3,907	3,684	3,213			
		Sh	are of quar	ntity (perce	nt)				
Exports from China to the United									
States	12.6	7.0	7.2	6.9	7.1	1.1			
Exports from China to other major									
destination markets	6.0	76	10 5	11 0	12.0	15.0			
	0.0	1.0	10.5	11.0	12.0	10.0			
Taiwan Malaysia	9.6	10.2	11.5	10.8	12.0	12.8			
Malaysia	6.2	7.0	8.3	9.4	9.3	10.0			
Japan	3.1	5.3	6.1	6.6	7.5	5.7			
Saudi Arabia	4.6	6.3	5.8	5.1	4.3	5.4			
Indonesia	1.7	2.5	3.2	3.6	3.8	4.0			
South Korea	5.1	4.5	3.0	4.1	3.8	3.2			
India	7.9	6.9	5.5	4.1	3.2	3.2			
All other destination markets	43.2	42.9	38.9	37.7	37.0	39.5			
Total China exports	100.0	100.0	100.0	100.0	100.0	100.0			

Note.--Exports under HS subheading number 7411.10 include both seamless and welded refined copper pipes and tubes.

Source: Official export statistics under HS subheading 7411.10 as reported in the GTIS/GTA database, accessed August 22, 2016.

THE INDUSTRY IN MEXICO

Overview

Table IV-11 presents data for the responding Mexican producers. Of the four Mexican producers that responded to Commission questionnaires, *** was the largest producer and

exporter of SRC tubular products in 2015. *** was second largest producer and exporter, but their exports accounted for *** percent of subject exports to the United States in 2015. *** did not export to the United States, while *** exported very little.

Table IV-11SRC tubular products: Summary data on firms in Mexico, 2015

* * * * * * *

As shown in table IV-12, capacity for Mexican producers decreased after 2010, while production of SRC tubular products increased, by *** percent particularly during 2014-15. Capacity utilization increased but remained below *** percent. Mexican producers' total shipments increased from 2010 to 2015, reflecting higher levels of home market and non-U.S. export shipments. The Mexican producers (***), exported *** pounds of SRC tubular products to the U.S. and accounted for all reported production. Mexican producers' total shipments increased by *** percent from 2010 to 2015, even though export shipments to the United States decreased more than *** percent.

In January 2008, Luvata Monterrey broke ground on its new \$40 million copper tubing mill in Guadalupe (near Monterrey) in the northeastern Mexican state of Nuevo Leon. Production capacity was anticipated to be 50,000 metric tons (55,000 short tons) to meet Luvata's anticipated increasing demand for high-precision copper tubing by the downstream heating, ventilation, air-conditioning, and refrigeration ("HVACR") industry in North America.¹⁴

In November 2009, Luvata Monterrey officially opened its new facility in Guadalupe, Nueva Leon, which utilizes state-of-the art "cast and roll" technology to produce copper tubing for both large original equipment manufacturers and smaller local customers.¹⁵ ***.¹⁶

In November 2014, Mexico's Elementia (parent company to Nacobre) said it invested \$40 million to upgrade its plant, which markets its products under Nacobre brand.¹⁷

Counsel for Nacobre contends that since the original investigations, six major U.S. companies (Carrier Corporation, Daikan, Johnson Controls, Lennox International, Rheem and most recently Whirlpool) have relocated to Mexico to reduce production and manufacturing costs.¹⁸ At the Commission's hearing, Nacobre asserted that a shortage for skilled labor in the

¹⁴ Luvata Breaks Ground on Multi-Million Dollar Copper Tube Facility," Luvata, January 29, 2008.

¹⁵ "Luvata Announces Official Opening of Multi-Million Dollar Copper Tube Manufacturing Plant," Luvata, November 3, 2009.

¹⁶ ***.

¹⁷ Domestic Producers' Hearing Exhibits at 16. "*Mexico's Elementia invests \$40 million in its Metallurgical Unit,*" Fox News Latino (November 26, 2014).

¹⁸ Respondent parties' posthearing brief, "Imports from Mexico Are Not Likely to Harm the U.S. Copper Tubing Producers in the Industrial Segment of the Market, Because Their Customers Have Largely Moved to Mexico," p. 6.

Central Mexico region is attributable to the rising number of companies moving their operations from the U.S. and into Central Mexico.¹⁹

SRC tubular products operations in Mexico

Table IV-12 presents the production, capacity, and capacity utilization of the responding manufacturers in Mexico.²⁰ Producers' capacity of SRC tubular products decreased by *** percent, while production and capacity utilization increased *** percent and *** percent respectively, from 2010 to 2015. Quantities of home market shipments and export shipments also increased by *** percent and *** percent, respectively, over the same reporting period. From 2010 to 2015, internal consumption increased in both quantity and value (***). The quantity of exports from Mexico increased during this time, shifting from the United States to other markets.²¹ Exports to the European Union increased noticeably from a relatively low base. Ratios of inventory to production and ratios to inventory to total shipments of SRC tubular products remained consistent from 2010 to 2015 at approximately *** percent, respectively.

Table IV-12

SRC tubular products: Data on industry in Mexico, 2010-15, January to June 2015, and January to June 2016

* * * * * * *

Table IV-13 presents the share of production of other products on the same machinery utilized for production of SRC tubular products. Mexican producers indicated that their machinery was utilized for production of SRC tubular products and other products (unspecified). Production remained consistent for the other products produced on the same machinery accounting for *** percent of total production in 2010 and *** percent in 2015.

Table IV-13

SRC tubular products: Overall capacity and production of products on the same machinery as SRC tubular in Mexico, 2010-15, January to June 2015, and January to June 2016

* * * * * * *

¹⁹ Respondent parties' Hearing Exhibit. *"U.S. Copper Tubing Consumers Increasing Mexican Production,"* list provided at hearing by Nacobre.

²⁰ Production of other products (other than SRC tubular products) account for a small percent (less than ten percent) of total production in Mexico. The quantity and values did not fluctuate much from 2010 to 2015.

²¹ Mexico's non-U.S. export markets include Latin America and the European Union.

Exports from Mexico

Table IV-14 presents exports from Mexico by destination. Overall, since 2010, exports to the United States decreased by 47.4 percent through June 2016, while Mexican producers' total exports by quantity increased by 23.8 percent since 2010.

	Calendar year									
Item	2010	2011	2012	2013	2014	2015				
		Q	uantity (1,0	00 pounds	3)					
Exports from Mexico to the United States	29,048	4,493	4,257	3,446	4,971	15,265				
Exports from Mexico to other major destination markets										
Colombia	5,064	6,305	6,001	6,215	7,588	7,866				
Chile	1,301	2,200	1,922	1,792	5,146	5,805				
Italy	22	1,398	5,174	5,871	5,448	4,429				
Canada	864	1,226	1,909	1,642	2,511	4,023				
Brazil	492	2,474	4,511	3,885	3,468	2,152				
Ecuador	287	425	459	474	1,788	1,618				
Czech Republic		170	1,398	1,391	1,179	1,190				
Spain	315	860	558	489	633	985				
All other destination markets	3,468	6,005	6,338	7,945	8,618	7,236				
Total Mexico exports	40,860	25,556	32,527	33,151	41,350	50,570				
			Value (1,00	00 dollars)						
Exports from Mexico to the United States	111,550	20,550	20,126	14,955	20,791	55,747				
Exports from Mexico to other major destination markets										
Colombia	20,247	30,069	25,634	24,273	27,797	22,608				
Chile	4,973	10,173	7,914	7,275	18,910	18,985				
Italy	89	5,936	20,634	23,590	21,299	14,622				
Canada	3,209	5,064	7,251	6,115	9,489	13,140				
Brazil	2,015	11,404	16,841	14,946	12,822	7,189				
Ecuador	1,147	2,198	2,032	1,957	6,842	5,213				
Czech Republic	4	723	5,890	5,601	4,365	3,922				
Spain	1,212	3,877	2,194	1,866	2,412	3,199				
All other destination markets	13,984	29,139	27,213	32,842	33,407	23,221				
Total Mexico exports	158,430	119,134	135,729	133,420	158,133	167,846				

Table IV-14 Refined copper tubes and pipes: Exports from Mexico by destination market, 2010-15

Table continued on next page.

Table IV-14Continued	
Refined copper tubes and pipes: Exports from Mexico by destination market, 201	0-15

	Calendar year					
Item	2010	2011	2012	2013	2014	2015
		Unit val	ue (dollars	per 1,000 p	ounds)	
Exports from Mexico to the United						
States	3,840	4,574	4,728	4,340	4,182	3,652
Exports from Mexico to other major						
destination markets						
Colombia	3,998	4,769	4,272	3,906	3,663	2,874
Chile	3,823	4,624	4,116	4,059	3,675	3,271
Italy	4,031	4,247	3,988	4,018	3,910	3,301
Canada	3,714	4,132	3,798	3,723	3,779	3,266
Brazil	4,099	4,610	3,734	3,848	3,697	3,341
Ecuador	4,001	5,167	4,431	4,128	3,827	3,222
Czech Republic	0	4,259	4,214	4,026	3,700	3,294
Spain	3,844	4,509	3,934	3,812	3,812	3,246
All other destination markets	4,032	4,852	4,293	4,133	3,876	3,209
Total Mexico exports	3,877	4,662	4,173	4,025	3,824	3,319
		Sh	are of quar	ntity (perce	nt)	
Exports from Mexico to the United						
States	71.1	17.6	13.1	10.4	12.0	30.2
Exports from Mexico to other major						
destination markets						
Colombia	12.4	24.7	18.4	18.7	18.4	15.6
Chile	3.2	8.6	5.9	5.4	12.4	11.5
Italy	0.1	5.5	15.9	17.7	13.2	8.8
Canada	2.1	4.8	5.9	5.0	6.1	8.0
Brazil	1.2	9.7	13.9	11.7	8.4	4.3
Ecuador	0.7	1.7	1.4	1.4	4.3	3.2
Czech Republic	0.0	0.7	4.3	4.2	2.9	2.4
Spain	0.8	3.4	1.7	1.5	1.5	1.9
All other destination markets	8.5	23.5	19.5	24.0	20.8	14.3
Total Mexico exports	100.0	100.0	100.0	100.0	100.0	100.0

Note.--Exports under HS subheading number 7411.10 include both seamless and welded refined copper pipes and tubes.

Source: Official export statistics under HS subheading 7411.10 as reported in the GTIS/GTA database, accessed August 22, 2016.

COMBINED SUBJECT INDUSTRIES

Table IV-15 presents data for the combined subject industries in China and Mexico. The combined subject industries' overall production capacity quantity decreased by 2.5 percent from 2010 to 2015, and the production of SRC tubular products decreased by 14.5 percent during the same period. Capacity utilization decreased by 8.0 percent from 2010 to 2015, while total shipments decreased by 13.9 percent during the same time period.

Table IV-15SRC tubular products: Data on the industries in China and Mexico, 2010-15, January to June 2015,and January to June 2016

	Calendar year							January to June		
Item	2010	2011	2012	2013	2014	2015	2015	2016		
			G	uantity (1,0	000 pounds	5)				
Capacity	820,047	799,280	780,430	774,368	798,618	799,280	479,006	479,006		
Production	535,272	504,345	455,091	493,260	539,527	457,647	262,837	229,213		
End-of-period inventories	***	***	***	***	***	***	***	***		
Shipments: Internal consumption/ transfers	***	***	***	***	***	***	***	***		
Commercial shipments in home market	***	***	***	***	***	***	***	***		
Home market shipments	***	***	***	***	***	***	***	***		
Export shipments to: United States	***	***	***	***	***	***	***	***		
European Union	***	***	***	***	***	***	***	***		
Asia	***	***	***	***	***	***	***	***		
All other markets	***	***	***	***	***	***	***	***		
Total exports	***	***	***	***	***	***	***	***		
Total shipments	536,720	502,579	455,197	489,528	536,759	461,865	265,579	230,379		
				Value (1,0	00 dollars)					
Shipments: Internal consumption/ transfers	***	***	***	***	***	***	***	***		
Commercial shipments in home market	***	***	***	***	***	***	***	***		
Home market shipments	***	***	***	***	***	***	***	***		
Export shipments to: United States	***	***	***	***	***	***	***	***		
European Union	***	***	***	***	***	***	***	***		
Asia	***	***	***	***	***	***	***	***		
All other markets	***	***	***	***	***	***	***	***		
Total exports	***	***	***	***	***	***	***	***		
Total shipments	1,988,527	2,205,773	1,748,025	1,565,482	1,727,025	1,442,612	829,955	615,611		

Table continued on next page.

Table IV-15--Continued SRC tubular products: Data on the industries in China and Mexico, 2010-15, January to June 2015, and January to June 2016

	Calendar vear						January to June		
Item	2010	2011	2012	2013	2014	2015	2015	2016	
		ι	Jnit value	(dollars	per 1,00	0 pounds	s)		
Shipments: Internal consumption/ transfers	***	***	***	***	***	***	***	***	
Commercial shipments in home market	***	***	***	***	***	***	***	***	
Home market shipments	***	***	***	***	***	***	***	***	
Export shipments to: United States	***	***	***	***	***	***	***	***	
European Union	***	***	***	***	***	***	***	***	
Asia	***	***	***	***	***	***	***	***	
All other markets	***	***	***	***	***	***	***	***	
Total exports	***	***	***	***	***	***	***	***	
Total shipments	3,705	4,389	3,840	3,198	3,218	3,123	3,125	2,672	
			Ratio	s and sh	ares (per	cent)			
Capacity utilization	65.3	63.1	58.3	63.7	67.6	57.3	54.9	47.9	
Inventories/production	***	***	***	***	***	***	***	***	
Inventories/total shipments	***	***	***	***	***	***	***	***	
Share of total shipments: Internal consumption/ transfers	***	***	***	***	***	***	***	***	
Commercial shipments in home market	***	***	***	***	***	***	***	***	
Home market shipments	***	***	***	***	***	***	***	***	
Export shipments to: United States	***	***	***	***	***	***	***	***	
European Union	***	***	***	***	***	***	***	***	
Asia	***	***	***	***	***	***	***	***	
All other markets	***	***	***	***	***	***	***	***	
Total exports	***	***	***	***	***	***	***	***	
Total shipments	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

Source: Compiled from data submitted in response to Commission questionnaires.

ANTIDUMPING OR COUNTERVAILING DUTY ORDERS IN THIRD-COUNTRY MARKETS

Since the original investigations, Canada and Brazil have issued antidumping orders on Chinese and Mexican SRC tubular products producers. In March 2015, Brazil issued antidumping duty orders covering inner grooved copper tubes from China and Mexico.^{22 23} In January 2014, Canada issued antidumping duty orders (China and Mexico) and a countervailing duty order (China).^{24 25} The orders cover "circular copper tube with an outer diameter of 0.2 inch to 4.25 inches (0.502 centimeter 10.795 centimeters) excluding industrial and coated or insulated copper tube."

GLOBAL MARKET

Three domestic producers (***) and four importers (***) reported that demand outside the United States had been impacted by a shift towards substitutes to SRC tubular products. Importers *** reported that global demand for SRC tubular products fluctuated with general economic conditions and importer *** reported that the SRC tubular products markets it serves outside the United States are mature markets. Only three purchasers were able to provide information on the global market for SRC tubular products. *** reported that global demand had been impacted by the global economic downturn, *** reported that some OEM production had relocated outside the United States, and *** reported that it expected global demand for SRC tubular products to decrease as HVAC manufacturers shifted to substitute products. Only one importer was able to provide information on prices outside the United States. *** reported that foreign copper prices were lower than domestic prices because there are more suppliers outside the United States.

As shown in table IV-16, China has consistently been the largest source of exports of refined copper tubes and pipes over 2010-15, followed by nonsubject countries Germany, Greece, and Korea. Exports from China increased slightly in volume and as a share of total exports over 2010-15. Exports from Mexico declined in 2011, but have since increased. In 2014

²² "Semi-Annual Report Under Article 16.4 of the Agreement, Brazil," Committee on Anti-Dumping Practices, World Trade Organization, G/ADP/N/272./BRA, October 2, 2015, pp. 3 and 7; *Domestic Producers' Response to the Commission's Notice of Institution*, p. 10; and exhibit 1, "Orders Against Seamless Refined Copper Pipe and Tube in Other Jurisdictions."

²³ According to the GTIS/GTA database, Brazilian imports of refined copper pipe and tube (both seamless and welded) from China and Mexico were 19.6 million pounds in 2014, up from 15.9 million pounds in 2010.

²⁴ "Circular Copper Tube Inquiry No. NQ-2013-004," The inquiry was conducted pursuant to section 42 of the *Special Import Measures Act*, R.S.C., 1985, c. S-15 ***. Wednesday, December 18, 2013.

²⁵ According to the GTIS/GTA database, Canadian imports of refined copper pipe and tube (both seamless and welded) from China and Mexico were 6.8 million pounds in 2012, up from 6.7 million pounds in 2010, before declining to 4.5 million pounds in 2013.

and 2015, exports from Mexico of refined copper tubes and pipes exceeded the level observed in 2010.

Refined copper tubes and pipes.	Calendar year						
ltem	2010	2011	2012	2013	201/	2015	
	2010	2011	LUIZ	2013 00 nounds	2017	2013	
United States	41 024	47 889	44 536	39 423	32 443	33 557	
China	300 3/0	306 654	28/ 0/0	30/ 58/	321 015	305 805	
Mexico	40.860	25 556	204,343	33 151	/1 350	50 570	
Subtotal subject countries	3/1 200	23,000	317 /76	337 735	362 365	356 375	
All other major experting	341,203	332,210	517,470	557,755	302,303	550,575	
countries							
Germany	201,575	174,381	166,991	159,562	152,672	158,490	
Greece	98,992	105,890	106,706	111,417	117,473	134,458	
South Korea	83,630	94,893	96,496	104,129	107,136	108,712	
Italy	92,914	90,799	82,876	81,267	86,161	96,412	
Malaysia	83,771	79,582	83,588	87,376	89,713	88,127	
Thailand	32,340	34,796	37,265	41,436	58,237	66,048	
Canada	27,933	32,459	36,407	39,125	41,714	42,463	
Japan	70,704	53,652	41,861	40,490	35,924	34,787	
Austria	45,702	45,713	40,552	38,449	33,825	32,015	
Finland	40,199	41,500	34,771	27,139	27,428	30,525	
All other exporting countries	243,218	255,134	194,271	226,985	213,641	165,567	
Total global exports	1,362,186	1,341,009	1,239,261	1,295,108	1,326,288	1,313,980	
		I	Value (1,0	00 dollars)			
United States	167,549	227,227	200,298	179,252	138,859	129,251	
China	1,107,782	1,386,445	1,171,063	1,190,043	1,182,616	982,648	
Mexico	158,430	119,134	135,729	133,420	158,133	167,846	
Subtotal, subject countries	1,266,213	1,505,579	1,306,793	1,323,463	1,340,749	1,150,494	
All other major exporting							
countries							
Germany	830,740	886,926	765,079	699,676	630,956	530,772	
Greece	377,901	482,607	425,068	422,083	410,647	388,165	
South Korea	317,479	432,247	395,090	401,449	388,179	333,255	
Italy	391,847	470,634	388,372	365,678	374,495	340,968	
Malaysia	312,367	358,443	344,707	340,506	331,566	284,019	
Thailand	144,493	186,138	184,524	192,703	246,280	234,300	
Canada	117,053	165,465	170,769	173,194	176,639	153,507	
Japan	276,012	255,546	184,913	160,480	136,798	117,751	
Austria	183,638	223,316	181,781	164,169	137,428	105,648	
Finland	174,263	225,174	167,977	132,561	121,702	109,318	
All other exporting countries.	993,330	1,209,657	955,406	938,015	897,699	591,770	
Total global exports	5,385,336	6,401,733	5,470,478	5,313,977	5,193,138	4,339,968	

Table IV-16 Refined conner tubes and pines: Global exports by source, 2010-15

Table continued on next page.

Table IV-16Continued	
Refined copper tubes and pipes: Global exports by source,	2010-15

	Calendar year					
ltem	2010	2011	2012	2013	2014	2015
		Unit val	ue (dollars	per 1,000	pounds)	
United States	4,084	4,745	4,497	4,547	4,280	3,852
China	3,688	4,521	4,110	3,907	3,684	3,213
Mexico	3,877	4,662	4,173	4,025	3,824	3,319
Subtotal, subject countries	3,711	4,532	4,116	3,919	3,700	3,228
All other major exporting						
countries	4 4 0 4	F 000	4 500	4 005	4 4 9 9	2.240
Germany	4,121	5,086	4,582	4,385	4,133	3,349
Greece	3,817	4,558	3,984	3,788	3,496	2,887
South Korea	3,796	4,555	4,094	3,855	3,623	3,065
Italy	4,217	5,183	4,686	4,500	4,346	3,537
Malaysia	3,729	4,504	4,124	3,897	3,696	3,223
Thailand	4,468	5,349	4,952	4,651	4,229	3,547
Canada	4,191	5,098	4,691	4,427	4,235	3,615
Japan	3,904	4,763	4,417	3,963	3,808	3,385
Austria	4,018	4,885	4,483	4,270	4,063	3,300
Finland	4,335	5,426	4,831	4,885	4,437	3,581
All other exporting countries	4,084	4,741	4,918	4,132	4,202	3,574
Total global exports	3,953	4,774	4,414	4,103	3,916	3,303
		Sh	are of quar	ntity (perce	nt)	
United States	3.0	3.6	3.6	3.0	2.4	2.6
China	22.0	22.9	23.0	23.5	24.2	23.3
Mexico	3.0	1.9	2.6	2.6	3.1	3.8
Subtotal, subject countries	25.0	24.8	25.6	26.1	27.3	27.1
All other major exporting						
countries						
Germany	14.8	13.0	13.5	12.3	11.5	12.1
Greece	7.3	7.9	8.6	8.6	8.9	10.2
South Korea	6.1	7.1	7.8	8.0	8.1	8.3
Italy	3.0	1.9	2.6	2.6	3.1	3.8
Malaysia	6.1	5.9	6.7	6.7	6.8	6.7
Thailand	2.4	2.6	3.0	3.2	4.4	5.0
Canada	2.1	2.4	2.9	3.0	3.1	3.2
Japan	5.2	4.0	3.4	3.1	2.7	2.6
Austria	3.4	3.4	3.3	3.0	2.6	2.4
Finland	3.0	3.1	2.8	2.1	2.1	2.3
All other exporting countries	17.9	19.0	15.7	17.5	16.1	12.6
Total global exports	100.0	100.0	100.0	100.0	100.0	100.0

Note.--Exports under HS subheading number 7411.10 include both seamless and welded refined copper pipes and tubes.

Source: Official export statistics under HS subheading 7411.10 as reported in the GTIS/GTA database, accessed August 22, 2016.

PART V: PRICING DATA

FACTORS AFFECTING PRICES

Raw material costs

The primary raw material used in the production of SRC tubular products is metallic copper, either in the form of copper cathodes ("primary copper") or scrap. Raw materials accounted for *** percent of the cost of goods sold by U.S. producers of SRC tubular products in 2015. Primary copper is purchased from copper producers that electrolytically refine copper from smelting furnaces into plate-shaped copper cathodes of at least 99.95 percent purity. Scrap copper may include primary scrap returned from downstream production steps within the SRC tubular products mill and secondary scrap purchased from outside sources. Secondary scrap may include copper wire and tubing recovered from demolished or renovated structures and scrap from other copper industries. The mix of raw materials used may vary from 100 percent copper cathode to a mix of copper cathode, primary scrap, and secondary scrap. The input mix may vary by producer and by purchaser.¹

The price of scrap follows the price of copper cathode closely. As shown in Figure V-1, copper prices are volatile, but generally have declined since January 1, 2010. Since January 2010, the price of copper cathode on the COMEX exchange has ranged from *** to ***.² Prices for copper cathode and scrap declined by *** between January 2010 and June 2016, but were generally stable during July-September 2016.

Figure V-1 SRC tubular products: U.S. copper cathode and scrap monthly prices, January 2010-September 2016

* * * * * * *

¹ For example, ***. ***. In the original investigations, two OEM purchasers, Goodman and Johnson Controls, reported that they require that the industrial tubing they purchase be of high-purity copper or even be manufactured solely from cathode copper. *Seamless Refined Copper Pipe and Tube from China and Mexico, Inv. Nos.* 731-TA-1174-1175 (Final), USITC Publication 4193, November 2010, p. I-10. In the current review, *** reported that some customers require that some SRC tubular products be manufactured solely from cathode copper.

² Two important sources for copper cathode and scrap prices are the COMEX and the London Metal Exchange (LME).

Transportation costs to the U.S. market

Transportation costs for SRC tubular products shipped from subject countries to the United States averaged 4.5 percent for China and 0.2 percent for Mexico during 2015. These estimates were derived from official import data and represent the transportation and other charges on imports.³ Of 19 responding U.S. importers, 13 reported that exporters typically arrange international transportation of SRC tubular products. Few responding importers were able to provide information on international transport costs. Reported international transportation costs from Mexico ranged from \$30 to \$52 per 1,000 pounds. Of responding importers, *** were able to provide information on internation on international transportation costs from China. They *** reported *** per 1,000 pounds. Three foreign producers of SRC tubular products in China provided information on international transportation. All reported that exporters typically arrange transportation. *** were able to provide transportation cost data— *** per 1,000 pounds.⁴ Importers *** were able to provide data on international transportation costs from Mexico—*** per 1,000 pounds, respectively. Foreign producers *** reported international transportation costs from Mexico—*** per 1,000 pounds, respectively. Foreign producers ***

U.S. inland transportation costs

Of 10 responding U.S. producers, six reported that the producer typically arranges for U.S. inland transportation to their customers. Of 15 responding importers, four reported that the importer usually arranged for U.S. transportation to their customers. Most producers reported that U.S. inland transportation costs accounted for 2 percent of the total delivered cost of SRC tubular products, and limited responses from importers indicate that U.S. inland transportation costs accounted for 1 percent to 6 percent of total delivered cost.

PRICING PRACTICES

Pricing methods

As noted, raw materials in the form of copper cathodes and copper scrap account for by far the largest share of the cost to produce SRC tubular products, and prices for SRC tubular products closely track copper prices. Published prices typically are updated when copper prices change substantially while contracts are based on publicly available prices for copper plus a negotiated fabrication charge.⁵

³ The estimated transportation costs were obtained by subtracting the customs value from the c.i.f. value of the imports for 2015 and then dividing by the customs value based on the HTS subheading 7411.10.10. Reported transportation costs from China in 2014 were 2.0 percent in 2014, when import volume was greater.

⁴ ***.

⁵ Industry representatives, ***.

Among responding U.S. producers and importers, transaction-by-transaction negotiations were the most often reported method of establishing sales prices, followed by contracts, price lists, and other methods (table V-1).

Table V-1 SRC tubular products: U.S. producers' and importers' reported price setting methods, by number of responding firms¹

<u> </u>		
Method	U.S. producers	U.S. importers
Transaction-by-transaction	10	13
Contract	6	5
Set price list	5	4
Other	0	4

¹ The sum of responses shown may not add up to the total number of responding firms as each firm was instructed to check all applicable price setting methods employed.

Source: Compiled from data submitted in response to Commission questionnaires.

Most U.S. producers and importers reported selling most or all of their SRC tubular products in the spot market. Of 10 responding domestic producers, eight reported that a majority of sales in 2015 were spot sales and two reported that a majority of sales were under annual contracts. Of 10 responding importers that responded to this question, *** reported that the majority of sales of SRC tubular products from China and Mexico in 2015 were under long-term contracts, *** reported that the majority of sales were under short-term contracts, *** reported that the majority of sales were under annual contracts, and the remaining *** reported that the majority of sales were spot sales.⁶ The share of U.S. commercial shipments of SRC tubular products reported by U.S. producers and importers of SRC tubular products from China and Mexico.

Table V-2

SRC tubular products: U.S. producers' and importers' shares of U.S. commercial shipments by type of sale, 2015

	Share of commercial U.S. shipments (percent)								
Type of sale	U.S. producers	Subject U.S. importers							
Long-term contracts	***	***							
Annual contracts	***	***							
Short-term contracts	***	***							
Spot sales	***	***							

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

Source: Compiled from data submitted in response to Commission questionnaires.

Seven purchasers reported that they purchase product daily, 10 purchase weekly, and 6 purchase monthly. All of 24 responding purchasers reported that they did not expect their

⁶ ***.

purchasing patterns to change in the next two years. Of responding purchasers, nine generally contact no more than two suppliers before making a purchase, and only seven generally contact more than three.

Sales terms and discounts

U.S. producers typically quote prices on an f.o.b. basis. Importers were split on this question, with six reporting prices quoted on a delivered basis and five reporting prices quoted f.o.b. importer's location or point of importation. Most producers and importers reported sales terms of net 30 days or net 60 days.

SRC tubular products for plumbing applications are typically priced using a publicly available price list, with negotiated discounts.⁷ Domestic producer *** reported that SRC tubular products prices for plumbing customers were based on a price sheet, with discounts negotiated for each order. ***. Prices for industrial customers typically consist of a copper price and a negotiated fabrication charge.⁸ *** reported that for each contract with an industrial customer, prices consist of a copper charge, plus negotiated fabrication charges for each different type and size of SRC tubular products. Each contract will specify the source of the copper price, whether LME or COMEX, either the previous month average or current price.⁹

Of the 11 domestic producers of SRC tubular products that provided responses to the Commission questionnaires, six reported selling SRC tubular products for plumbing applications. Five have publicly available list price sheets for the most common SRC tubular products used for plumbing applications.¹⁰ Updated price sheets are reportedly issued when copper prices or other market conditions change substantially.¹¹ Limited information indicates that importers of Chinese and Mexican SRC tubular products also establish prices for industrial customers based on copper prices plus a fabrication charge, and establish prices for plumbing customers through discounts from a standard price list.¹²

Price leadership

Most responding purchasers that identified a price leader (9 of 12) reported that Mueller exhibited price leadership. Cambridge-Lee, GD Copper USA, Luvata, and Wieland were

⁷ Hearing transcript, p. 26 (Baker).

⁸ Hearing transcript, pp. 26-27 (Baker).

⁹ Industry representatives, ***.

¹⁰ *** is the exception.

¹¹ Industry representatives, ***; Hearing transcript, p. 26 (Baker).

¹² For example, responses of ***.

each reported to be price leaders by one purchaser, and three firms reported that Cerro displayed price leadership.¹³

PRICE DATA

The Commission requested U.S. producers and importers to provide quarterly data for the total quantity and f.o.b. value of the following products shipped to unrelated U.S. customers during January 2010-June 2016. U.S. producers and importers were asked to provide data separately for SRC tubular products sold for plumbing applications and that sold for industrial applications.

Product 1.-- Seamless refined copper pipe and tube, 1/2" Type L, hard temper, 20' lengths

Product 2.-- Seamless refined copper pipe and tube, 3/8" OD, ACR/RST coil, 50'-100' lengths

Product 3.-- Seamless refined copper pipe and tube, 3/4" OD, ACR/RST coil, 50'-100' lengths

Product 4.-- Seamless refined copper pipe and tube, 3/8" OD, smooth bore LWC, 0.0249"- 0.0327" bottom wall thickness

Product 5.-- Seamless refined copper pipe and tube, 3/4" OD, smooth bore LWC, 0.0327"- 0.0430" bottom wall thickness

Product 6.-- Seamless refined copper pipe and tube, 3/8" OD, inner-grooved LWC, 0.0110"- 0.0144" bottom wall thickness

Seven U.S. producers and 4 importers provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.¹⁴ Pricing data reported by these firms accounted for approximately 9.8 percent of U.S. producers' shipments of SRC tubular products, 5.1 percent of U.S. shipments of subject imports from China, and 0.9 percent of U.S. shipments of subject imports from Mexico in 2015.¹⁵

Price data for products 1-6 are presented in tables V-3 to V-13 and figures V-2 to V-12.

¹³ Several purchasers reported more than one price leader. One purchaser reported that *** are jointly price leaders, and that if both move prices in the same direction, the rest of the industry will follow.

¹⁴ Per-unit pricing data are calculated from total quantity and total value data provided by U.S. producers and importers. The precision and variation of these figures may be affected by rounding, limited quantities, and producer or importer estimates.

¹⁵ Over the period January 2010-June 2016, the share of subject imports from Mexico accounted for by the pricing products increased from *** in 2010 to *** in 2013 and has since declined. The share was *** in interim 2015 and *** in interim 2016. The decline in the share of imports from Mexico accounted for by the pricing products coincides with ***.

SRC tubular products: Weighted-average f.o.b. prices and quantities of domestic and imported product 1¹ sold for plumbing applications, and margins of underselling/(overselling), by quarters, January 2010-June 2016

	United	States		China			Mexico	
	Price	-	Price			Price		
Period	(dollars per pound)	Quantity (pounds)	(dollars per pound)	Quantity (pounds)	Margin (percent)	(dollars per pound)	Quantity (pounds)	Margin (percent)
2010:								
JanMar.	3.64	2,785,137	***	***	***	***	***	***
AprJun.	3.55	2,839,440	***	***	***	***	***	***
JulSep.	3.60	2,963,656	***	***	***	***	***	***
OctDec.	4.20	2,875,199	***	***	***	***	***	***
2011: JanMar.	4.67	2.915.098	***	***	***	***	***	***
AprJun.	4.48	2.596.254	***	***	***	***	***	***
JulSep.	4.60	2,654,488	***	***	***	***	***	***
OctDec.	3.95	2,334,440	***	***	***	***	***	***
2012: JanMar.	4.17	2,788,997	***	***	***	***	***	***
AprJun.	4.04	2,971,475	***	***	***	***	***	***
JulSep.	3.86	3,094,877	***	***	***	***	***	***
OctDec.	4.12	2,649,513	***	***	***	***	***	***
2013:								
JanMar.	4.03	2,755,539	***	***	***	***	***	***
AprJun.	3.68	2,952,570	***	***	***	***	***	***
JulSep.	3.69	3,035,699	***	***	***	***	***	***
OctDec.	3.83	2,438,236	***	***	***	***	***	***
2014: JanMar.	3.72	2.641.151	***	***	***	***	***	***
AprJun.	3.56	2.961.971	***	***	***	***	***	***
JulSep.	3.69	2,955,039	***	***	***	***	***	***
OctDec.	3.57	2,534,384	***	***	***	***	***	***
2015: JanMar.	3.26	2.904.047	***	***	***	***	***	***
AprJun.	3.41	2.837.344	***	***	***	***	***	***
JulSep.	3.07	3,005,269	***	***	***	***	***	***
OctDec.	2.88	2,745,591	***	***	***	***	***	***
2016:	0.74	2 002 700	***	***	***	***	***	***
Janiviar.	2.71	2,882,788	***	***	***	***	***	***
AprJun.	2.75	2,785,067	***			***	***	

¹ Product 1: Seamless refined copper pipe and tube, 1/2" Type L, hard temper, 20' lengths

Source: Compiled from data submitted in response to Commission questionnaires.

Table V-4

SRC tubular products: Weighted-average f.o.b. prices and quantities of domestic and imported product 1¹ sold for industrial applications, and margins of underselling/(overselling), by quarters, January 2010-June 2016

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SRC tubular products: Weighted-average f.o.b. prices and quantities of domestic and imported product 2¹ sold for plumbing applications, and margins of underselling/(overselling), by quarters, January 2010-June 2016

	United States			China		Mexico			
	Price		Price			Price			
Period	(dollars per	Quantity (pounds)	(dollars per	Quantity (pounds)	Margin (percent)	(dollars per	Quantity (pounds)	Margin (percent)	
2010	pound)	(poundo)	poundy	(pounds)	(percent)	poundy	(pounds)	(percent)	
JanMar.	3.81	900,200	***	***	***	***	***	***	
AprJun.	4.10	989,027	***	***	***	***	***	***	
JulSep.	4.11	807,276	***	***	***	***	***	***	
OctDec.	5.11	697,098	***	***	***	***	***	***	
2011:									
JanMar.	5.88	784,423	***	***	***	***	***	***	
AprJun.	5.56	779,015	***	***	***	***	***	***	
JulSep.	5.41	837,658	***	***	***	***	***	***	
OctDec.	4.68	734,750	***	***	***	***	***	***	
2012: JanMar.	4.83	960,971	***	***	***	***	***	***	
AprJun.	4.70	1,153,465	***	***	***	***	***	***	
JulSep.	4.56	918,368	***	***	***	***	***	***	
OctDec.	4.90	841,652	***	***	***	***	***	***	
2013:									
JanMar.	4.75	997,303	***	***	***	***	***	***	
AprJun.	4.38	1,120,164	***	***	***	***	***	***	
JulSep.	4.35	999,067	***	***	***	***	***	***	
OctDec.	4.24	860,575	***	***	***	***	***	***	
2014:									
JanMar.	4.27	864,981	***	***	***	***	***	***	
AprJun.	4.11	988,699	***	***	***	***	***	***	
JulSep.	4.21	870,115	***	***	***	***	***	***	
OctDec.	3.89	788,777	***	***	***	***	***	***	
2015:	0.70	707 004	***	***	***	***	***	***	
	3.73	191,224	***	***	***	***	***	***	
AprJun.	3.86	891,423		 	 4.4.4	 		 	
JuiSep.	3.52	852,090							
OctDec.	3.17	715,181	***	***	***	***	***	***	
2016:	2 1 4	701 042	***	***	***	***	***	***	
	3.14	840.002	***	***	***	***	***	***	
AprJun.	3.13	840,003							

¹ Product 2: Seamless refined copper pipe and tube, 3/8" OD, ACR/RST coil, 50'-100' lengths

Source: Compiled from data submitted in response to Commission questionnaires.

SRC tubular products: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 sold for industrial applications, and margins of underselling/(overselling), by quarters, January 2010-June 2016

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Table V-7

SRC tubular products: Weighted-average f.o.b. prices and quantities of domestic and imported product 3¹ sold for plumbing applications, and margins of underselling/(overselling), by quarters, January 2010-June 2016

	United	United States					Mexico	
	Price	Quantity	Price	Quantity	Margin	Price	Quantity	Margin
Period	pound)	(pounds)	pound)	(pounds)	(percent)	pound)	(pounds)	(percent)
2010:								
JanMar.	4.21	609,296	***	***	***	***	***	***
AprJun.	4.18	881,377	***	***	***	***	***	***
JulSep.	4.27	497,998	***	***	***	***	***	***
OctDec.	5.30	334,954	***	***	***	***	***	***
2011:								
JanMar.	5.85	504,503	***	***	***	***	***	***
AprJun.	5.50	573,172	***	***	***	***	***	***
JulSep.	5.34	556,003	***	***	***	***	***	***
OctDec.	4.58	389,786	***	***	***	***	***	***
2012:								
JanMar.	4.77	643,074	***	***	***	***	***	***
AprJun.	4.61	867,000	***	***	***	***	***	***
JulSep.	4.45	594,762	***	***	***	***	***	***
OctDec.	4.73	554,120	***	***	***	***	***	***
2013:								
JanMar.	4.65	761,913	***	***	***	***	***	***
AprJun.	4.34	787,590	***	***	***	***	***	***
JulSep.	4.22	806,383	***	***	***	***	***	***
OctDec.	4.11	528,672	***	***	***	***	***	***
2014:	1.00	004004		***		***	***	***
JanMar.	4.29	624,234	***			***	***	
AprJun.	4.08	726,568	***	***	***	***	***	***
JulSep.	4.15	602,858	***	***	***	***	***	***
OctDec.	3.97	437,500	***	***	***	***	***	***
2015:	0.00	500 470	***	***	***	***	***	***
JanIviar.	3.09	582,476	***	***	***	***	***	+++
AprJun.	3.85	675,315						
JulSep.	3.54	590,316	***	***	***	***	***	***
OctDec.	3.25	367,962	***	***	***	***	***	***
2016: JanMar.	3.15	471.846	***	***	***	***	***	***
AprJun.	3.12	545.029	***	***	***	***	***	***

¹ Product 3: Seamless refined copper pipe and tube, 3/4" OD, ACR/RST coil, 50'-100' lengths

Source: Compiled from data submitted in response to Commission questionnaires.

SRC tubular products: Weighted-average f.o.b. prices and quantities of domestic and imported product 3 sold for industrial applications and margins of underselling/(overselling), by quarters, January 2010-June 2016

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Table V-9

SRC tubular products: Weighted-average f.o.b. prices and quantities of domestic and imported product 4 sold for plumbing applications and margins of underselling/(overselling), by quarters, January 2010-June 2016

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SRC tubular products: Weighted-average f.o.b. prices and quantities of domestic and imported product 4¹ sold for industrial applications and margins of underselling/(overselling), by quarters, January 2010-June 2016

	United States		China			Mexico		
	Price		Price			Price		
Pariod	(dollars per	Quantity	(dollars per	Quantity (nounda)	Margin	(dollars per	Quantity (nounda)	Margin
Periou	pound)	(pounds)	pound)	(pounds)	(percent)	pound)	(pounds)	(percent)
JanMar.	***	***	***	***	***	***	***	***
AprJun.	3.21	2,097,144	***	***	***	***	***	***
JulSep.	3.19	1,683,305	***	***	***	***	***	***
OctDec.	3.35	1,204,499	***	***	***	***	***	***
2011:	5.07	1 596 521	***	***	***	***	***	***
Apr - Jup	4 85	1,000,021	***	***	***	***	***	***
JulSep.	4.76	1,456,371	***	***	***	***	***	***
OctDec.	4.21	959.121	***	***	***	***	***	***
2012:		,						
JanMar.	4.35	1,402,322	***	***	***	***	***	***
AprJun.	4.36	1,560,351	***	***	***	***	***	***
JulSep.	4.20	1,743,633	***	***	***	***	***	***
OctDec.	4.33	1,147,982	***	***	***	***	***	***
2013:								
JanMar.	4.35	1,854,583	***	***	***	***	***	***
AprJun.	4.08	2,382,816	***	***	***	***	***	***
JulSep.	4.02	1,867,726	***	***	***	***	***	***
OctDec.	4.01	1,505,525	***	***	***	***	***	***
2014:								
JanMar.	4.02	1,918,303	***	***	***	***	***	***
AprJun.	3.84	2,313,559	***	***	***	***	***	***
JulSep.	3.91	2,495,779	***	***	***	***	***	***
OctDec.	3.80	1,571,279	***	***	***	***	***	***
2015: JanMar.	3.47	2,281,835	***	***	***	***	***	***
AprJun.	3.57	1,893,585	***	***	***	***	***	***
JulSep.	3.33	1,809,146	***	***	***	***	***	***
OctDec.	3.10	1,560,145	***	***	***	***	***	***
2016:								
JanMar.	2.89	1,967,658	***	***	***	***	***	***
AprJun.	2.97	2,047,396	***	***	***	***	***	***

¹ Product 4: Seamless refined copper pipe and tube, 3/8" OD, smooth bore LWC, 0.0249"- 0.0327" bottom wall thickness

Source: Compiled from data submitted in response to Commission questionnaires.

Table V-11

SRC tubular products: Weighted-average f.o.b. prices and quantities of domestic and imported product 5 sold for plumbing applications and margins of underselling/(overselling), by quarters, January 2010-June 2016

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Table V-12

SRC tubular products: Weighted-average f.o.b. prices and quantities of domestic and imported product 5¹ sold for industrial applications and margins of underselling/(overselling), by quarters, January 2010-June 2016

2	United States			China		Mexico			
Period	Price (dollars per pound)	Quantity (pounds)	Price (dollars per pound)	Quantity (pounds)	Margin (percent)	Price (dollars per pound)	Quantity (pounds)	Margin (percent)	
2010:									
JanMar.	***	***	***	***	***	***	***	***	
AprJun.	***	***	***	***	***	***	***	***	
JulSep.	***	***	***	***	***	***	***	***	
OctDec.	***	***	***	***	***	***	***	***	
2011: JanMar.	***	***	***	***	***	***	***	***	
AprJun.	***	***	***	***	***	***	***	***	
JulSep.	***	***	***	***	***	***	***	***	
OctDec.	***	***	***	***	***	***	***	***	
2012: JanMar.	***	***	***	***	***	***	***	***	
AprJun.	***	***	***	***	***	***	***	***	
JulSep.	***	***	***	***	***	***	***	***	
OctDec.	***	***	***	***	***	***	***	***	
2013: JanMar.	***	***	***	***	***	***	***	***	
AprJun.	***	***	***	***	***	***	***	***	
JulSep.	***	***	***	***	***	***	***	***	
OctDec.	***	***	***	***	***	***	***	***	
2014:									
JanMar.	***	***	***	***	***	***	***	***	
AprJun.	***	***	***	***	***	***	***	***	
JulSep.	***	***	***	***	***	***	***	***	
OctDec.	***	***	***	***	***	***	***	***	
2015: JanMar.	***	***	***	***	***	***	***	***	
AprJun.	3.57	342,451	***	***	***	***	***	***	
JulSep.	3.35	367,111	***	***	***	***	***	***	
OctDec.	3.20	323,470	***	***	***	***	***	***	
2016:									
JanMar.	***	***	***	***	***	***	***	***	
AprJun.	3.02	400,376	***	***	***	***	***	***	

¹ Product 5: Seamless refined copper pipe and tube, 3/4" OD, smooth bore LWC, 0.0327"- 0.0430" bottom wall thickness

Source: Compiled from data submitted in response to Commission questionnaires.

Table V-13

SRC tubular products: Weighted-average f.o.b. prices and quantities of domestic and imported product 6¹ sold for industrial applications and margins of underselling/(overselling), by quarters, January 2010-June 2016

	United States			China		Mexico			
	Price		Price		Price				
Period	(dollars per pound)	Quantity (pounds)	(dollars per pound)	Quantity (pounds)	Margin (percent)	(dollars per pound)	Quantity (pounds)	Margin (percent)	
2010:									
JanMar.	***	***	***	***	***	***	***	***	
AprJun.	***	***	***	***	***	***	***	***	
JulSep.	***	***	***	***	***	***	***	***	
OctDec.	***	***	***	***	***	***	***	***	
2011: JanMar.	***	***	***	***	***	***	***	***	
AprJun.	***	***	***	***	***	***	***	***	
JulSep.	***	***	***	***	***	***	***	***	
OctDec.	***	***	***	***	***	***	***	***	
2012:	***	***	***	***	***	***	***	***	
Apr - lup	***	***	***	***	***	***	***	***	
AprSun.	***	***	***	***	***	***	***	***	
Oct -Dec	***	***	***	***	***	***	***	***	
2013.									
JanMar.	***	***	***	***	***	***	***	***	
AprJun.	***	***	***	***	***	***	***	***	
JulSep.	***	***	***	***	***	***	***	***	
OctDec.	***	***	***	***	***	***	***	***	
2014:									
JanMar.	***	***	***	***	***	***	***	***	
AprJun.	***	***	***	***	***	***	***	***	
JulSep.	***	***	***	***	***	***	***	***	
OctDec.	3.86	3,417,294	***	***	***	***	***	***	
2015: JanMar.	***	***	***	***	***	***	***	***	
AprJun.	***	***	***	***	***	***	***	***	
JulSep.	***	***	***	***	***	***	***	***	
OctDec.	***	***	***	***	***	***	***	***	
2016:									
JanMar.	***	***	***	***	***	***	***	***	
AprJun.	***	***	***	***	***	***	***	***	

¹ Product 6: Seamless refined copper pipe and tube, 3/8" OD, inner-grooved LWC, 0.0110"- 0.0144" bottom wall thickness

Source: Compiled from data submitted in response to Commission questionnaires.

Note: There were no reported sales of product 6 for plumbing applications.

Figure V-2

SRC tubular products: Weighted-average prices and quantities of domestic and imported product 1 sold for plumbing applications, by quarters, January 2010-June 2016

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Figure V-3

SRC tubular products: Weighted-average prices and quantities of domestic and imported product 1 sold for industrial applications, by quarters, January 2010-June 2016

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Figure V-4

SRC tubular products: Weighted-average prices and quantities of domestic and imported product 2 sold for plumbing applications, by quarters, January 2010-June 2016

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Figure V-5

SRC tubular products: Weighted-average prices and quantities of domestic and imported product 2 sold for industrial applications, by quarters, January 2010-June 2016

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Figure V-6

SRC tubular products: Weighted-average prices and quantities of domestic and imported product 3 sold for plumbing applications, by quarters, January 2010-June 2016

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Figure V-7

SRC tubular products: Weighted-average prices and quantities of domestic and imported product 3 sold for industrial applications, by quarters, January 2010-June 2016

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Figure V-8

SRC tubular products: Weighted-average prices and quantities of domestic and imported product 4 sold for plumbing applications, by quarters, January 2010-June 2016

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Figure V-9

SRC tubular products: Weighted-average prices and quantities of domestic and imported product 4 sold for industrial applications, by quarters, January 2010-June 2016

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Figure V-10

SRC tubular products: Weighted-average prices and quantities of domestic and imported product 5 sold for plumbing applications, by quarters, January 2010-June 2016

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Figure V-11

SRC tubular products: Weighted-average prices and quantities of domestic and imported product 5 sold for industrial applications, by quarters, January 2010-June 2016

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Figure V-12

SRC tubular products: Weighted-average prices and quantities of domestic and imported product 6 sold for industrial applications, by quarters, January 2010-June 2016

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PRICE TRENDS

Prices generally decreased during 2010-15, following copper prices that peaked in 2011. Domestic prices for all products decreased between first quarter 2010 and second quarter 2016, by 10.9 percent to 27.3 percent. Subject import prices also generally declined, but subject import sales were observed in relatively few quarters.

Price comparisons

As shown in table V-14, prices for SRC tubular products imported from China were below those for U.S.-produced product in 22 of 50 instances totaling 15.6 million pounds; margins of underselling ranged from 0.0 to 22.0 percent. In the remaining 28 instances totaling 6.6 million pounds, prices for SRC tubular products from China were between 0.0 and 27.9 percent above prices for the domestic product. Prices for SRC tubular products imported from Mexico were below those for U.S.-produced product in 19 of 38 instances (0.7 million pounds); margins of underselling ranged from 0.9 to 24.8 percent. In the remaining 19 instances, prices for SRC tubular products from Mexico were between 0.0 and 64.6 percent above prices for the domestic product (1.8 million pounds).

Purchasers' perceptions of relative price trends

Purchasers were asked how the prices of SRC tubular products from the United States had changed relative to the prices of product from China and Mexico since 2010. A majority of purchasers reported that prices in the United States and subject countries had not changed or had changed by the same amount. Of responding purchasers, eight reported that U.S. prices were now higher than prices in China and two reported that U.S. prices are lower; nine reported that U.S. prices are higher than prices in Mexico and four reported that U.S. prices are lower.

Table V-14

SRC tubular products: Instances of underselling/overselling and the range and average of margins, by country, January 2010-June 2016¹

	Underselling									
			Average margin	Margin Range (percent)						
Source	Number of quarters	Quantity (pounds)	(percent)	Min	Max					
China plumbing applications	7	***	8.3		22.0					
Mexico plumbing applications	10	***	5.9	0.9	24.8					
Subject plumbing applications	17	***	6.9		24.8					
China industrial applications	15	***	3.1	0.5	6.7					
Mexico industrial applications	9	***	5.3	1.0	7.9					
Subject industrial applications	24	***	3.9	0.5	7.9					
China	22	15,626,079	4.8		22.0					
Mexico	19	714,559	5.6	0.9	24.8					
Subject	41	16,340,638	5.1		24.8					
		(Overselli	ng)							
			Margin Range							
			Average margin	(per	cent)					
Source	Number of quarters	Quantity (pounds)	(percent)	Min	Max					
China plumbing applications	14	***	(13.0)	(0.6)	(27.9)					
Mexico plumbing applications	0	***								
Subject plumbing applications	14	***	(13.0)	(0.6)	(27.9)					
China industrial applications	14	***	(2.6)	()	(10.1)					
Mexico industrial applications	19	***	(16.1)	(1.8)	(64.6)					
Subject industrial applications	33	***	(10.4)	()	(64.6)					
China	28	6,623,025	(7.8)	()	(27.9)					
China Mexico	28 19	6,623,025 1,729,741	(7.8) (16.1)	() 	(27.9) (64.6)					

¹ In the original investigations, subject imports from China used in plumbing applications were priced lower than domestic product in 24 of 53 comparisons, with underselling margins ranging from 1.5 to 26.5 percent; such imports from Mexico were priced lower than domestic product in 51 of 55 comparisons, with underselling margins ranging from 0.2 to 11.0 percent. Subject imports from China used in industrial applications were priced lower than domestic product in 50 of 81 comparisons, with underselling margins ranging from 1.2 to 55.1 percent; such imports from Mexico were priced lower than domestic product in 24 of 59 comparisons, with underselling margins ranging from 0.2 to 59.0 percent. *Seamless Refined Copper Pipe and Tube from China and Mexico, Inv. Nos. 731-TA-1174-1175 (Final)*, USITC Publication 4193, November 2010, p. V-13.

Source: Compiled from data submitted in response to Commission questionnaires.

APPENDIX A

FEDERAL REGISTER NOTICES

The Commission makes available notices relevant to its investigations and reviews on its website, <u>www.usitc.gov</u>. In addition, the following tabulation presents, in chronological order, *Federal Register* notices issued by the Commission and Commerce during the current proceeding.

Citation	Title	Link		
80 FR 59186 October 1, 2015	Commission's Institution of five- year review	https://federalregister.gov/a/2015- 24647		
80 FR 59186 October 1, 2015	Commerce's Initiation of five- year review	https://federalregister.gov/a/2015- 24647		
81 FR 1967 January 14, 2016	Commission's determination to conduct a full five-year review reviews	https://federalregister.gov/a/2016- 00597		
81 FR 38134 June 13, 2016	<i>Commerce's final results of the full sunset reviews of the antidumping duty orders</i>	https://www.federalregister.gov/d/2016- 13956		
81 FR 40922 June 23, 2016	Commission's scheduling of full five-year review	https://federalregister.gov/a/2016- 14891		

APPENDIX B

LIST OF HEARING WITNESSES

CALENDAR OF PUBLIC HEARING

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

Subject:Seamless Refined Copper Pipe and Tube from China and
MexicoInv. Nos.:731-TA-1174 and 1175 (Review)Date and Time:October 11, 2016 - 9:30 a.m.

Sessions were held in connection with these investigations in the Main Hearing Room (room 101), 500 E Street, SW, Washington, DC.

OPENING REMARKS:

In Support of Continuation of Orders (Jack A. Levy, Cassidy Levy Kent (USA) LLP) In Opposition to Continuation of Orders (Jeffrey M. Winton, Law Office of Jeffrey M. Winton)

In Support of the Continuation of <u>Antidumping Duty Orders:</u>

Cassidy Levy Kent (USA) LLP Washington, DC on behalf of

Cerro Flow Products, LLC Wieland Copper Products, LLC Howell Metal Company Mueller Copper Tube Products, Inc. Mueller Copper Tube Company, Inc.

> Michael Pfeiffenberger, General Manager, Precision Tube Comparry, LLC

Steffen Sigloch, President - Extruded Products, Mueller Industries, Inc.

Thomas G. Baker, Chief Executive Officer, Wieland Copper Products, LLC

> Jack A. Levy Jonathan M. Zielinski Ulrika K. Swanson

) – OF COUNSEL

In Opposition to the Continuation of <u>Antidumping Duty Orders:</u>

Law Office of Jeffrey M. Winton Washington, DC <u>on behalf of</u>

Nacional de Cobre, S.A. de C.V. ("Nacobre")

Ramon Elorriaga, Commercial Director, Metals Division, Nacobre

Jeffrey M. Winton

Daniel E. Parga

)) – OF COUNSEL

REBUTTAL/CLOSING REMARKS:

In Support of Continuation of Orders (Jack A. Levy, Cassidy Levy Kent (USA) LLP) In Opposition to Continuation of Orders (Jeffrey M. Winton, Law Office of Jeffrey M. Winton PLLC)

-END-

APPENDIX C

SUMMARY DATA

Table C-1 SRC pipe and tube: Summary data concerning the U.S. market, 2010-15, January to June 2015, and January to June 2016

(Quantity=1,000 pounds; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per 1,000 pounds; Period changes=percent-exceptions noted)

	Reported data								
	2010	2011	Calendar y 2012	ear 2013	2014	2015	January to 2015	June 2016	
U.S. consumption quantity:	647 094	612 520	E0E 170	E02.0E0	620 569	633 433	220 190	251 452	
Producers' share (fn1)	647,284 77.0	612,520	78.8	592,059	630,568 77.0	633,432 79.5	329,189	351,453	
Importers' share (fn1):									
China	6.4	3.3	3.4	3.3	3.5	0.2	0.1	0.2	
Mexico	4.0	0.6	0.3	0.2	0.7	2.1	1.8	2.2	
Subject sources	10.4	3.9	3.7	3.5	4.2	2.3	1.9	2.4	
All sources	12.5	20.3	21.2	18.7	18.8	18.2	20.8	20.5	
	20.0	20.0	21.2	22.2	20.0	20.0	20.0	20.0	
U.S. consumption value:									
Amount	2,680,194	3,048,024	2,646,981	2,521,190	2,549,735	2,197,395	1,152,253	1,106,177	
Producers' share (fn1)	78.2	80.0	79.2	78.2	77.5	79.7	82.4	76.7	
China	59	31	32	31	33	0.2	0.1	0.3	
Mexico	3.6	0.6	0.4	0.2	0.7	2.2	1.7	2.6	
Subject sources	9.6	3.7	3.5	3.3	4.0	2.4	1.8	2.9	
Nonsubject sources	12.2	16.3	17.3	18.5	18.5	17.9	15.8	20.4	
All sources	21.8	20.0	20.8	21.8	22.5	20.3	17.6	23.3	
U.S. imports from:									
China:									
Quantity	41,565	20,044	19,643	19,473	21,772	1,138	301	633	
Value	159,289	95,572	84,257	77,041	83,664	4,849	1,286	2,818	
Ending inventory quantity	\$3,83Z ***	\$4,768	\$4,289 ***	\$3,950	\$3,843	\$4,259 ***	\$4,273	\$4,45Z	
Mexico:									
Quantity	25,983	3,962	1,929	1,393	4,547	13,347	5,966	7,858	
Value	97,276	18,039	9,408	6,226	18,569	48,445	19,493	29,083	
Unit value	\$3,744	\$4,553	\$4,877	\$4,470	\$4,084	\$3,630	\$3,267	\$3,701	
Ending inventory quantity	***	***	***	***	***	***	***		
Subject sources:	67 548	24.006	21 572	20.866	26 319	14 485	6 267	8 491	
Value	256,565	113.611	93.665	83,268	102.233	53.294	20,779	31,902	
Unit value	\$3,798	\$4,733	\$4,342	\$3,991	\$3,884	\$3,679	\$3,316	\$3,757	
Ending inventory quantity	***	***	***	***	***	***	***	***	
Nonsubject sources:									
Quantity	81,201	100,622	102,225	110,798	118,837	115,158	62,327	63,453	
Value	\$4 043	496,803	457,733 \$4.478	465,399 \$4,200	\$3.961	393,595 \$3,418	\$2 918	\$3,554	
Ending inventory quantity.	***	ψ 1 ,001 ***	φ+,+70 ***	ψ 1 ,200 ***	\$0,501	φ0,+10 ***	\$2,010	ψ0,004 ***	
All sources:									
Quantity	148,749	124,628	123,797	131,664	145,156	129,643	68,594	71,944	
Value	584,876	610,414	551,397	548,666	572,980	446,889	202,648	257,417	
Unit value	\$3,932	\$4,898	\$4,454	\$4,167	\$3,947	\$3,447	\$2,954	\$3,578	
Ending inventory quantity									
U.S. producers':									
Average capacity quantity	1,014,661	936,890	936,983	978,370	1,027,254	1,063,863	525,523	537,966	
Production quantity	522,313	519,852	490,260	488,225	516,811	537,684	277,366	296,654	
Capacity utilization (fn1)	51.5	55.5	52.3	49.9	50.3	50.5	52.8	55.1	
Quantity	498 535	487 892	461 376	460.395	485 412	503 789	260 595	279 509	
Value	2.095.318	2.437.610	2.095.584	1.972.524	1.976.755	1.750.506	949.605	848,760	
Unit value	\$4,203	\$4,996	\$4,542	\$4,284	\$4,072	\$3,475	\$3,644	\$3,037	
Export shipments:									
Quantity	***		***		***		***		
Value	***		***		***	***	***		
Ending inventory quantity	***	***	***	***	***	***	***		
Inventories/total shipments (fn1)	***	***	***	***	***	***	***	***	
Production workers	2,521	2,609	2,501	2,423	2,648	2,768	2,816	2,869	
Hours worked (1,000s)	5,295	5,373	5,153	5,090	5,714	5,828	2,941	3,010	
Wages paid (\$1,000)	100,688	102,108	99,121	100,330	108,703	116,286	58,351	58,837	
Hourly wages Productivity (pounds per hour)	\$19.02	\$19.00	\$19.24	\$19.71	\$19.02	\$19.95	\$19.84	\$19.55	
Unit labor costs	\$193	\$196	\$202	\$205	\$210	\$216	\$210	\$198	
Net Sales:			+		*=	+=	*= · ·		
Quantity	521,774	517,989	489,091	487,925	509,329	535,125	278,066	296,438	
Value	2,157,718	2,593,346	2,216,732	2,090,351	2,075,752	1,873,704	1,015,185	899,534	
Unit value	\$4,135	\$5,007	\$4,532	\$4,284	\$4,075	\$3,501	\$3,651	\$3,034	
Cross profit of (loss)	2,025,097	2,412,607	2,081,655	1,949,440	1,923,396	1,733,382	934,700	822,305	
SG&A expenses	71 424	82 434	81 378	75 749	102,000	82 717	00,480 43 146	11,229	
Operating income or (loss)	61.197	98.305	53.699	65.169	63.953	57.605	37.339	36.267	
Capital expenditures	11,895	14,724	56,553	38,406	57,099	27,911	13,584	10,807	
Unit COGS	\$3,881	\$4,658	\$4,256	\$3,995	\$3,776	\$3,239	\$3,361	\$2,774	
Unit SG&A expenses	\$137	\$159	\$166	\$155	\$174	\$155	\$155	\$138	
Unit operating income or (loss)	\$117	\$190	\$110	\$134	\$126	\$108	\$134	\$122	
Operating income or (loss)/colos (fn1)	93.9	93.0	93.9	93.3	92.7	92.5	92.1	91.4	
operating moorne or (1000/sales (111)	2.0	0.0	2.4	0.1	0.1	0.1	3.1	4.0	

Table continued next page.

Table C-1--Continued SRC pipe and tube: Summary data concerning the U.S. market, 2010-15, January to June 2015, and January to June 2016

(Quantity=1,000 pounds; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per 1,000 pounds; Period changes=percent-exceptions noted)

=	Period changes						
	2010 15	0040.44	Calendar	year	2042.44	2011.15	Jan-Jun
U.S. consumption quantity:	2010-15	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Amount	(2.1)	(5.4)	(4.5)	1.2	6.5	0.5	6.8
Producers' share (fn1)	2.5	2.6	(0.8)	(1.1)	(0.8)	2.6	0.4
Importers' share (fn1):							
China	(6.2)	(3.1)	0.1	(0.1)	0.2	(3.3)	0.1
Subject sources	(1.9)	(3.4)	(0.3)	(0.1)	0.5	(1.0)	0.4
Nonsubject sources	5.6	3.9	1.0	1.2	0.0	(0.7)	(0.9)
All sources	(2.5)	(2.6)	0.8	1.1	0.8	(2.6)	(0.4)
U.S. consumption value:	((= =)		(1.5.5)	(((= =)	
Amount.	(18.0)	13.7	(13.2)	(4.8)	1.1	(13.8)	(4.0)
Producers share (In1)	1.5	1.8	(0.8)	(0.9)	(0.7)	2.1	(5.7)
China	(5.7)	(2.8)	0.0	(0,1)	0.2	(3.1)	0.1
Mexico	(1.4)	(3.0)	(0.2)	(0.1)	0.5	1.5	0.9
Subject sources	(7.1)	(5.8)	(0.2)	(0.2)	0.7	(1.6)	1.1
Nonsubject sources	5.7	4.0	1.0	1.2	0.0	(0.6)	4.6
All sources	(1.5)	(1.8)	0.8	0.9	0.7	(2.1)	5.7
LLS imports from:							
China:							
Quantity	(97.3)	(51.8)	(2.0)	(0.9)	11.8	(94.8)	110.3
Value	(97.0)	(40.0)	(11.8)	(8.6)	8.6	(94.2)	119.1
Unit value	11.1	24.4	(10.0)	(7.8)	(2.9)	10.8	4.2
Ending inventory quantity	***	***	***	***	***	***	
Mexico:	(48.6)	(84.8)	(51.3)	(27.8)	226.4	103.5	31.7
Value	(50.2)	(81.5)	(47.8)	(33.8)	198.2	160.9	49.2
Unit value	(3.0)	21.6	7.1	(8.3)	(8.6)	(11.1)	13.3
Ending inventory quantity	***	***	***	***	***	***	***
Subject sources:							
Quantity	(78.6)	(64.5)	(10.1)	(3.3)	26.1	(45.0)	35.5
Value	(79.2)	(00.7)	(17.0)	(11.1)	(2.7)	(47.9)	23.2
Ending inventory quantity	(3.1)	24.0	(0.3)	(0.1)	(2.7)	(0.0)	***
Nonsubject sources:							
Quantity	41.8	23.9	1.6	8.4	7.3	(3.1)	1.8
Value	19.9	51.3	(7.9)	1.7	1.1	(16.4)	24.0
Unit value	(15.5)	22.1	(9.3)	(6.2)	(5.7)	(13.7)	21.8
All sources:							
Quantity	(12.8)	(16.2)	(0.7)	6.4	10.2	(10.7)	49
Value	(23.6)	4.4	(9.7)	(0.5)	4.4	(22.0)	27.0
Unit value	(12.3)	24.6	(9.1)	(6.4)	(5.3)	(12.7)	21.1
Ending inventory quantity	***	***	***	***	***	***	***
U.S. producers: Average capacity quantity	4.9	(77)	0.0	4.4	5.0	2.6	2.4
Production quantity	2.9	(0.5)	(5.7)	(0.4)	5.9	4.0	2.4
Capacity utilization (fn1)	(0.9)	4.0	(3.2)	(2.4)	0.4	0.2	2.4
U.S. shipments:							
Quantity	1.1	(2.1)	(5.4)	(0.2)	5.4	3.8	7.3
Value	(16.5)	16.3	(14.0)	(5.9)	0.2	(11.4)	(10.6)
Unit value	(17.3)	18.9	(9.1)	(5.7)	(5.0)	(14.7)	(16.7)
Ouantity	***		***		***		***
Value	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***
Inventories/total shipments (fn1)	***	***	***	***	***	***	***
Production workers	9.8	3.5	(4.1)	(3.1)	9.3	4.5	1.9
Hours worked (1,000s)	10.1	1.5	(4.1)	(1.2)	12.3	2.0	2.3
Hourly wages	15.5	(0.1)	(2.9)	1.2	(3.5)	7.0	(1.5)
Productivity (1.000 pounds per hour)	(6.5)	(1.9)	(1.7)	0.8	(5.7)	2.0	4.5
Unit labor costs	12.2	1.9	2.9	1.6	2.4	2.8	(5.7)
Net Sales:							
Quantity	2.6	(0.7)	(5.6)	(0.2)	4.4	5.1	6.6
Value	(13.2)	20.2	(14.5)	(5.7)	(0.7)	(9.7)	(11.4)
Unit Value	(15.3)	21.1	(9.5)	(5.5)	(4.9)	(14.1)	(16.9)
Gross profit of (loss)	(14.4)	36.3	(13.7) (25.3)	(0.4)	(1.3) 8.1	(9.9) (7 9)	(12.0) (4.0)
SG&A expenses	15.8	15.4	(1.3)	(6.9)	16.7	(6.4)	(5.1)
Operating income or (loss)	(5.9)	60.6	(45.4)	21.4	(1.9)	(9.9)	(2.9)
Capital expenditures	134.6	23.8	284.1	(32.1)	48.7	(51.1)	(20.4)
Unit COGS	(16.5)	20.0	(8.6)	(6.1)	(5.5)	(14.2)	(17.5)
Unit SG&A expenses.	12.9	16.3	4.6	(6.7)	11.8	(10.9)	(10.9)
Unit operating income or (loss)	(8.2)	61.8	(42.1)	21.6	(6.0)	(14.3)	(8.9)
Operating income or (loss)/sales (fn1)	0.2	(0.0)	(1.4)	0.7	(0.0)	(0.1)	0.4
	0.2		()	0	(0.0)	(0.0)	0.4

Notes: fn1.--Reported data are in percent and period changes are in percentage points. fn2.--Undefined.

Source: Compiled from data submitted in response to Commission questionnaires and official U.S. import statistics (see part Part IV for details).

APPENDIX D

COMMENTS REGARDING THE EFFECTS OF THE ORDERS AND THE LIKELY EFFECTS OF REVOCATION

U.S. producers', and U.S. importers', foreign producers, and U.S. purchasers' comments regarding the effects of the orders and the likely effects of revocation.

Table D-1

SRC tubular products: U.S. producers', U.S. importers', and foreign producers' narrative responses to the impact of the orders

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Table D-2

SRC tubular products: U.S. producers', U.S. importers', and foreign producers' narrative responses to the likely impact of the revocation of the orders

* * * * * * *