Seamless Refined Copper Pipe and Tube from Vietnam

Investigation No. 731-TA-1528 (Preliminary)

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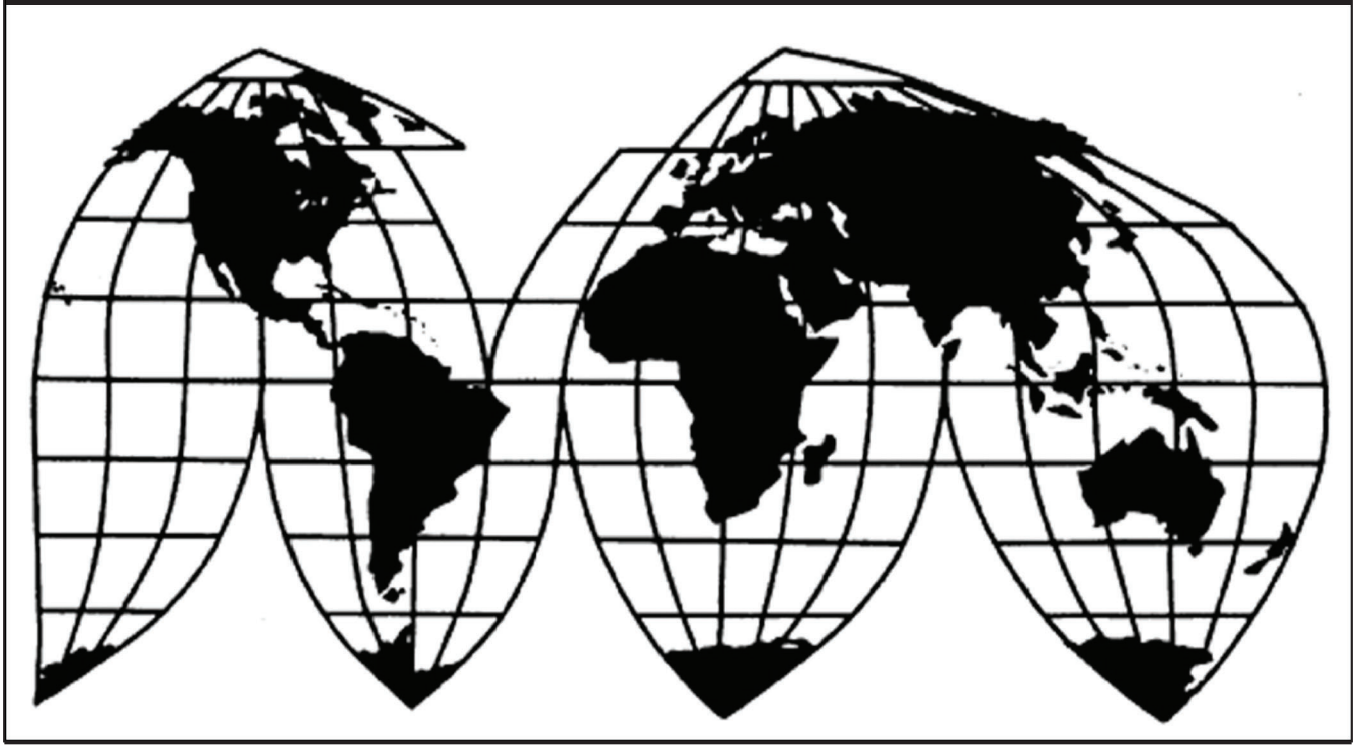
U.S. International Trade Commission



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Douglas Corkran, Supervisory Investigator

Special assistance from

Christopher Robinson, Investigator

Address all communications to
Secretary to the Commission
United States International Trade Commission
Washington, DC 20436

U.S. International Trade Commission

Washington, DC 20436
www.usitc.gov

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UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation No. 731-TA-1528 (Preliminary)

Seamless Refined Copper Pipe and Tube from Vietnam

DETERMINATION

On the basis of the record[1] developed in the subject investigation, the United States International Trade Commission ("Commission") determines, pursuant to the Tariff Act of 1930 ("the Act"), that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of seamless refined copper pipe and tube from Vietnam, provided for in subheading 7411.10.10 of the Harmonized Tariff Schedule of the United States, that are alleged to be sold in the United States at less than fair value ("LTFV").[2]

COMMENCEMENT OF FINAL PHASE INVESTIGATION

Pursuant to section 207.18 of the Commission's rules, the Commission also gives notice of the commencement of the final phase of its investigation. The Commission will issue a final phase notice of scheduling, which will be published in the *Federal Register* as provided in section 207.21 of the Commission's rules, upon notice from the U.S. Department of Commerce ("Commerce") of an affirmative preliminary determination in the investigation under § 733(b) of the Act, or, if the preliminary determination is negative, upon notice of an affirmative final determination in that investigation under § 735(a) of the Act. Parties that filed entries of appearance in the preliminary phase of the investigation need not enter a separate appearance for the final phase of the investigation. Industrial users, and, if the merchandise under investigation is sold at the retail level, representative consumer organizations have the right to appear as parties in Commission antidumping investigations. The Secretary will prepare a public service list containing the names and addresses of all persons, or their representatives, who are parties to the investigation.

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

[2] 85 FR 47181 (August 4, 2020).

BACKGROUND

On June 30, 2020, the American Copper Tube Coalition, consisting of Mueller Group, Collierville, Tennessee, and Cerro Flow Products, LLC, Sauget, Illinois, filed a petition with the Commission and Commerce, alleging that an industry in the United States is materially injured or threatened with material injury by reason of LTFV imports of seamless refined copper pipe and tube from Vietnam. Accordingly, effective June 30, 2020, the Commission instituted antidumping duty investigation No. 731-TA-1528 (Preliminary).

Notice of the institution of the Commission's investigation and of a public conference to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* of July 7, 2020 (85 FR 40680). In light of the restrictions on access to the Commission building due to the COVID–19 pandemic, the Commission conducted its conference through written questions, submissions of opening remarks and written testimony, written responses to questions, and postconference briefs. All persons who requested the opportunity were permitted to participate.

Views of the Commission

Based on the record in the preliminary phase of this investigation, we determine that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of seamless refined copper ("SRC") pipe and tube from Vietnam that are allegedly sold in the United States at less than fair value.

I. The Legal Standard for Preliminary Determinations

The legal standard for preliminary antidumping duty determinations requires the Commission to determine, based upon the information available at the time of the preliminary determinations, whether there is a reasonable indication that a domestic industry is materially injured or threatened with material injury, or that the establishment of an industry is materially retarded, by reason of the allegedly unfairly traded imports.[1] In applying this standard, the Commission weighs the evidence before it and determines whether "(1) the record as a whole contains clear and convincing evidence that there is no material injury or threat of such injury; and (2) no likelihood exists that contrary evidence will arise in a final investigation."[2]

II. Background

The American Copper Tube Coalition ("Petitioner" or "Coalition"), a coalition of domestic copper pipe producers, filed the petition in this investigation on June 30, 2020.[3] The Coalition submitted a written opening statement, written witness testimony, written responses to questions, and a postconference brief.[4] No respondent entities participated in this investigation.

Data Coverage. Except as noted, U.S. producer data are based on the questionnaire responses of four firms, believed to account for the vast majority of U.S. production of SRC pipe

[1] 19 U.S.C. §§ 1671b(a), 1673b(a) (2000); *see also American Lamb Co. v. United States*, 785 F.2d 994, 1001-04 (Fed. Cir. 1986); *Aristech Chem. Corp. v. United States, 2*0 CIT 353, 354-55 (1996). No party argues that the establishment of an industry in the United States is materially retarded by the allegedly unfairly traded imports.

[2] *American Lamb Co.*, 785 F.2d at 1001; *see also Texas Crushed Stone Co. v. United States*, 35 F.3d 1535, 1543 (Fed. Cir. 1994).

[3] The members of the American Copper Tube Coalition are Mueller Copper Tube Products, Inc., Mueller Copper Tube West Co., Mueller Copper Tube Company, Inc., Howell Metal Company, and Linesets, Inc. (collectively, "Mueller Group"), and Cerro Flow Products, LLC ("Cerro").

[4] In light of the restrictions on access to the Commission building due to the COVID-19 pandemic, the Commission conducted its conference in this investigation through written opening statements, submissions of written testimony, written questions and responses, as well as postconference briefs as set forth in procedures provided to the parties.

and tube in 2019.[5] U.S. import data are based on official Commerce statistics.[6] The Commission did not receive any responses to its questionnaires from foreign producers of the subject merchandise in Vietnam.[7]

III. Domestic Like Product

In determining whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of imports of the subject merchandise, the Commission first defines the "domestic like product" and the "industry."[8] Section 771(4)(A) of the Tariff Act of 1930, as amended ("the Tariff Act"), defines the relevant domestic industry as the "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."[9] In turn, the Tariff Act defines "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."[10]

By statute, the Commission's "domestic like product" analysis begins with the "article subject to an investigation," *i.e.*, the subject merchandise as determined by Commerce.[11] Therefore, Commerce's determination as to the scope of the imported merchandise that is subsidized and/or sold at less than fair value is "necessarily the starting point of the Commission's like product analysis."[12] The Commission then defines the domestic like product in light of the imported articles Commerce has identified.[13] The decision regarding the appropriate domestic like product(s) in an investigation is a factual determination, and the

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[5] Confidential Report, Memorandum INV-SS-090 (August 6, 2020) ("CR"), Public Report ("PR") at I-4.

[6] CR/PR at I-4. Although the Commission received questionnaire responses from 21 importers of copper pipe and tube, these firms represented only *** percent of subject imports from Vietnam in 2019. CR/PR at I-5 n.9.

[7] CR/PR at VII-3.

[8] 19 U.S.C. § 1677(4)(A).

[9] 19 U.S.C. § 1677(4)(A).

[10] 19 U.S.C. § 1677(10).

[11] 19 U.S.C. § 1677(10). The Commission must accept Commerce's determination as to the scope of the imported merchandise that is subsidized and/or sold at less than fair value. *See*, *e.g.*, *USEC, Inc. v. United States*, 34 Fed. App'x 725, 730 (Fed. Cir. 2002) ("The ITC may not modify the class or kind of imported merchandise examined by Commerce."); *Algoma Steel Corp. v. United States,* 688 F. Supp. 639, 644 (Ct. Int'l Trade 1988), *aff'd*, 865 F.3d 240 (Fed. Cir.), *cert. denied*, 492 U.S. 919 (1989).

[12] *Cleo Inc. v. United States*, 501 F.3d 1291, 1298 (Fed. Cir. 2007); *see also Hitachi Metals, Ltd. v. United States*, Case No. 19-1289, slip op. at 8-9 (Fed. Cir. Feb. 7, 2020) (the statute requires the Commission to start with Commerce's subject merchandise in reaching its own like product determination).

[13] *Cleo*, 501 F.3d at 1298 n.1 ("Commerce's {scope} finding does not control the Commission's {like product} determination."); *Hosiden Corp. v. Advanced Display Mfrs.,* 85 F.3d 1561, 1568 (Fed. Cir. 1996) (the Commission may find a single like product corresponding to several different classes or kinds defined by Commerce); *Torrington*, 747 F. Supp. at 748–52 (affirming the Commission's determination defining six like products in investigations where Commerce found five classes or kinds).

Commission has applied the statutory standard of "like" or "most similar in characteristics and uses" on a case-by-case basis.[14] No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.[15] The Commission looks for clear dividing lines among possible like products and disregards minor variations.[16] The Commission may, where appropriate, include domestic articles in the domestic like product in addition to those described in the scope.[17]

A. Product Description

In its notice of initiation, Commerce defined the imported merchandise within the scope of this investigation as:

> … all seamless circular refined copper pipes and tubes, including redraw hollows, greater than or equal to 6 inches (152.4 mm) in actual length and measuring less than 12.130 inches (308.102 mm) in actual outside diameter (OD), regardless of wall thickness, bore (*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, or 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 this investigation 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–B359, ASTM–B743, ASTM–B819,

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[14] *See*, *e.g.*, *Cleo*, 501 F.3d at 1299; *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); *Torrington Co. v. United States*, 747 F. Supp. 744, 749 n.3 (Ct. Int'l Trade 1990), *aff'd*, 938 F.2d 1278 (Fed. Cir. 1991) ("every like product determination 'must be made on the particular record at issue' and the 'unique facts of each case'"). The Commission generally considers a number of factors including the following: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) customer and producer perceptions of the products; (5) common manufacturing facilities, production processes, and production employees; and, where appropriate, (6) price. *See Nippon*, 19 CIT at 455 n.4; *Timken Co. v. United States*, 913 F. Supp. 580, 584 (Ct. Int'l Trade 1996).

[15] *See*, *e.g.*, S. Rep. No. 96-249 at 90–91 (1979).

[16] *See*, *e.g.*, *Nippon*, 19 CIT at 455; *Torrington*, 747 F. Supp. at 748–49*; see also* S. Rep. No. 96-249 at 90–91 (Congress has indicated that the like product standard should not be interpreted in "such a narrow fashion as to permit minor differences in physical characteristics or uses to lead to the conclusion that the product and article are not 'like' each other, nor should the definition of 'like product' be interpreted in such a fashion as to prevent consideration of an industry adversely affected by the imports under consideration.").

[17] *See*, *e.g.*, *Pure Magnesium from China and Israel*, Inv. Nos. 701-TA-403 and 731-TA-895-96 (Final), USITC Pub. 3467 at 8 n.34 (Nov. 2001); *Torrington,* 747 F. Supp. at 748-49 (holding that the Commission is not legally required to limit the domestic like product to the product advocated by the petitioner, co-extensive with the scope).

and ASTM–B903 specifications and meeting the physical parameters described therein. Also included within the scope of this investigation 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 actual weight of copper; or (2) metal containing at least 97.5 percent by actual weight of copper, provided that the content by actual 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 this investigation are all seamless circular hollows of refined copper less than 12 inches in actual length whose actual OD exceeds its actual length.

The products subject to this investigation 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 the investigation 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 the investigation is dispositive.[18]

SRC pipe and tube are fabricated products of refined copper with a circular cross section of varying nominal outside diameter sizes and wall thicknesses.[19] The tubing surfaces are either smooth, internally enhanced with grooves or ridges, or externally enhanced with fins or gills. SRC pipe and tube are available in straight lengths, bent to shape, coiled flat without spools, or coiled onto spools.[20] The variety of physical dimensions and characteristics available for SRC pipe and tube reflects the range of end-use applications that take advantage of copper's strength, malleability, ductility, thermal conductivity, corrosion resistance, and chemical purity. Plumbing or "standard" tubing is commonly produced to various ASTM International (formerly, the American Society for Testing and Materials) ("ASTM") standards that 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. Commercial tubing (also referred to as "industrial" tubing) is produced to either industry standard specifications or customer nonstandard specifications, including any surface enhancements designed to improve thermal transfer capabilities.[21]

B. Analysis

Based on the record, we define a single domestic like product consisting of SRC pipe and tube.[22]

Physical Characteristics and Uses. All SRC pipe and tube share the same basic physical characteristics and uses in that all SRC pipe and tube are seamless products, have a circular cross section, consist of refined copper, and are commonly used to transport fluids, either in conveyance applications or in closed loops for 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, institutional, and industrial heating systems; commercial refrigeration systems; and combined or split-unit air-conditioning systems. Standard (or "plumbing") pipe

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[18] *Seamless Refined Copper Pipe and Tube From the Socialist Republic of Vietnam: Initiation of Less-Than-Fair-Value Investigation*, 85 Fed. Reg. 47181, 47185 (Aug. 4, 2020) ("*Commerce Initiation Notice*").

[19] Although there is no standard definition of SRC "pipe" in the SRC pipe and tube industry, the term "pipe" typically denotes a larger outside diameter or wall thickness of a straight length of copper tube. Petitioner considers all the merchandise in the scope to be "copper tube," although it acknowledges that the industry generally refers to a subset of copper tube as being "copper pipe." Petitioner Postconference Brief at II-3 and CR/PR at I-7 n.18.

[20] CR/PR at I-7.

[21] CR/PR at I-8.

[22] Petitioner requested that the Commission define a single domestic like product coextensive with the scope, consistent with prior Commission proceedings. *See* Petitioner Postconference Brief at I-7 to I-8, *citing Seamless Refined Copper Pipe and Tube from China and Mexico*, Inv. Nos. 731-TA-1174 - 1175 (Final), USITC Pub. 4193 (Nov. 2010) at 12.

and tube are used for conveyance applications, and commercial (or "industrial") pipe and tube are used in thermal transfer applications.

SRC pipe and tube are made to ASTM standards or original equipment manufacturer ("OEM") specifications. Plumbing applications use ASTM standards; commercial SRC pipe and tube are made to ASTM standards as well as OEM specifications, and include grooves, ridges, fins, or gills designed to enhance the efficiency of thermal transfer.[23] OEMs may specify custom dimensions, tempers, and packaging. SRC pipe and tube can be used in the construction industry, in a variety of locations from single residences to large commercial buildings, and for heating, ventilation, and air conditioning ("HVAC") purposes, in a range of applications from residential air conditioning units to large offices.[24]

Manufacturing Facilities, Production Processes, and Employees. According to Petitioner, domestic producers manufacture all SRC pipe and tube in the same production facilities, using common production processes, and the same production employees.[25] All SRC pipe and tube begin with a prefabrication stage in which raw copper material is melted and then formed, by either a high-ratio extrusion or a cast-and-roll method, into a so-called "mother tube." The mother tube then undergoes an intermediate step of cold drawing. Cold drawing is followed by a combination of finishing steps, depending on the application. The cast-and-roll method or the extrusion method can be used to produce both plumbing and commercial tube products.[26]

Channels of Distribution. According to the Petitioner, there are distinct channels of distribution for plumbing and commercial SRC pipe and tube, although these channels may overlap depending on the operations of the end user.[27] Plumbing pipe and tube are mainly sold to distributors, wholesalers, or retailers, with some sales directly to OEMs. Commercial SRC pipe and tube are mainly sold directly to OEMs, with a smaller number of sales to distributors.[28] During the period of investigation, domestic producers sold the majority of their SRC pipe and tube to distributors, and a majority of their sales were for plumbing applications.[29]

Interchangeability. OEM specifications for commercial SRC pipe and tube can mirror ASTM specifications or can be stated in terms of ASTM specifications with minor adjustments or additions; Petitioner contends that this demonstrates that plumbing and commercial tube are interchangeable.[30]

Producer and Customer Perceptions. According to Petitioner, customers generally perceive all SRC pipe and tube as a single product category, with a broad mix of variations across a continuum. Petitioner asserts that, although some OEM customers may perceive commercial tube meeting a custom specification as distinct from plumbing tube meeting

[23] CR/PR at II-1.

[24] CR/PR at II-1 to II-2 and n.10.

[25] Petitioner Postconference Brief at I-8.

[26] CR/PR at I-11 to I-15 and nn.20-32; *see also* Petitioner Postconference Brief at I-8.

[27] Petitioner Postconference Brief at I-8.

[28] CR/PR at II-1.

[29] CR/PR at II-2 and Tables II-1 and II-2.

[30] Petitioner Postconference Brief at I-8 and Tables I-1 and I-2.

standard ASTM specifications, these differences are minor from the perspective of SRC pipe and tube producers.[31]

Price. Plumbing and commercial SRC pipe and tube are typically sold under different price structures. Plumbing pipe and tube are sold on the spot market off price lists published by producers, which are adjusted to account for changes in copper cost. Commercial pipe and tube are typically sold pursuant to annual contracts with prices set on a fabrication charge and the copper metal cost, where the metal cost is considered a pass-through to the customers.[32] U.S. producers and subject importers reportedly sold the vast majority of their SRC pipe and tube in the spot market.[33] Notwithstanding the different pricing structures, prices for SRC pipe and tube overall may fall generally on a continuum of prices determined primarily by the prevailing market price for copper, variations in finishing costs, and relative demand for different SRC pipe and tube products.

Conclusion. All SRC pipe and tube share the same basic physical characteristics and uses and are generally interchangeable (as OEM specifications can mirror ASTM specifications), and the same production facilities, production processes, and production employees are used to manufacture both plumbing and commercial pipe and tube products. Moreover, there is some overlap in channels of distribution between plumbing and commercial pipe and tube. Generally, the record indicates that customers perceive SRC pipe and tube as a single product category, with a broad mix of variations across a continuum, and that despite different pricing structures, there are not large actual price differences between plumbing and commercial pipe and tube with similar characteristics.

Accordingly, for the purposes of this preliminary phase investigation, we define a single domestic like product consisting of SRC pipe and tube, coextensive with the scope of the investigation.

IV. Domestic Industry

The domestic industry is defined 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."[34] 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.

Petitioner asserts that the Commission should define the domestic industry to include all domestic producers of SRC pipe and tube.[35] There are no related party or any other domestic industry issues presented in the preliminary phase of this investigation. Therefore,

[31] Petitioner Postconference Brief at I-8.
[32] CR/PR at V-3.
[33] CR/PR at V-4 and Table V-2.
[34] 19 U.S.C. § 1677(4)(A).
[35] Petitioner Postconference Brief at I-9 to I-10.

for the purposes of this preliminary phase investigation, we define the domestic industry to include all domestic producers of SRC pipe and tube.

V. Negligible Imports

Pursuant to Section 771(24) of the Tariff Act, imports from a subject country of merchandise corresponding to a domestic like product that account for less than 3 percent of all such merchandise imported into the United States during the most recent 12 months for which data are available preceding the filing of the petition shall be deemed negligible.[36] During the most recent 12-month period preceding the filing of the petition in this investigation (June 2019 through May 2020), imports of SRC pipe and tube from Vietnam accounted for 37.3 percent of total imports.[37] Because imports from Vietnam are above the statutory threshold, we find that subject imports from Vietnam are not negligible.

VI. Reasonable Indication of Material Injury by Reason of Subject Imports

A. Legal Standard

In the preliminary phase of antidumping and countervailing duty investigations, the Commission determines whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of the imports under investigation.[38] In making this determination, the Commission must consider the volume of subject imports, their effect on prices for the domestic like product, and their impact on domestic producers of the domestic like product, but only in the context of U.S. production operations.[39] The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant."[40] In assessing whether there is a reasonable indication that the domestic industry is materially injured by reason of subject imports, we consider all relevant economic factors that bear on the state of the industry in the United States.[41] No single factor is dispositive, and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[42]

Although the statute requires the Commission to determine whether there is a reasonable indication that the domestic industry is "materially injured or threatened with material injury by reason of" unfairly traded imports,[43] it does not define the phrase "by reason of," indicating that this aspect of the injury analysis is left to the Commission's reasonable

[36] 19 U.S.C. §§ 1671b(a), 1673b(a), 1677(24)(A)(i), 1677(24)(B); *see also* 15 C.F.R. § 2013.1 (developing countries for purposes of 19 U.S.C. § 1677(36)).

[37] CR/PR at Table IV-5.

[38] 19 U.S.C. §§ 1671b(a), 1673b(a).

[39] 19 U.S.C. § 1677(7)(B). The Commission "may consider such other economic factors as are relevant to the determination" but shall "identify each {such} factor ... and explain in full its relevance to the determination." 19 U.S.C. § 1677(7)(B).

[40] 19 U.S.C. § 1677(7)(A).

[41] 19 U.S.C. § 1677(7)(C)(iii).

[42] 19 U.S.C. § 1677(7)(C)(iii).

[43] 19 U.S.C. §§ 1671b(a), 1673b(a).

exercise of its discretion.[44] In identifying a causal link, if any, between subject imports and material injury to the domestic industry, the Commission examines the facts of record that relate to the significance of the volume and price effects of the subject imports and any impact of those imports on the condition of the domestic industry. This evaluation under the "by reason of" standard must ensure that subject imports are more than a minimal or tangential cause of injury and that there is a sufficient causal, not merely a temporal, nexus between subject imports and material injury.[45]

In many investigations, there are other economic factors at work, some or all of which may also be having adverse effects on the domestic industry. Such economic factors might include nonsubject imports; changes in technology, demand, or consumer tastes; competition among domestic producers; or management decisions by domestic producers. The legislative history explains that the Commission must examine factors other than subject imports to ensure that it is not attributing injury from other factors to the subject imports, thereby inflating an otherwise tangential cause of injury into one that satisfies the statutory material injury threshold.[46] In performing its examination, however, the Commission need not isolate the injury caused by other factors from injury caused by unfairly traded imports.[47] Nor does the

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[44] *Angus Chemical Co. v. United States*, 140 F.3d 1478, 1484-85 (Fed. Cir. 1998) ("{T}he statute does not 'compel the commissioners' to employ {a particular methodology}."), *aff'g,* 944 F. Supp. 943, 951 (Ct. Int'l Trade 1996).

[45] The Federal Circuit, in addressing the causation standard of the statute, observed that "{a}s long as its effects are not merely incidental, tangential, or trivial, the foreign product sold at less than fair value meets the causation requirement*." Nippon Steel Corp. v. USITC*, 345 F.3d 1379, 1384 (Fed. Cir. 2003). This was further ratified in *Mittal Steel Point Lisas Ltd. v. United States*, 542 F.3d 867, 873 (Fed. Cir. 2008), where the Federal Circuit, quoting *Gerald Metals, Inc. v. United States*, 132 F.3d 716, 722 (Fed. Cir. 1997), stated that "this court requires evidence in the record 'to show that the harm occurred "by reason of" the LTFV imports, not by reason of a minimal or tangential contribution to material harm caused by LTFV goods.'" *See also Nippon Steel Corp. v. United States*, 458 F.3d 1345, 1357 (Fed. Cir. 2006); *Taiwan Semiconductor Industry Ass'n v. USITC*, 266 F.3d 1339, 1345 (Fed. Cir. 2001).

[46] SAA at 851-52 ("{T}he Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports."); S. Rep. 96-249 at 75 (1979) (the Commission "will consider information which indicates that harm is caused by factors other than less-than-fair-value imports."); H.R. Rep. 96-317 at 47 (1979) ("in examining the overall injury being experienced by a domestic industry, the ITC will take into account evidence presented to it which demonstrates that the harm attributed by the petitioner to the subsidized or dumped imports is attributable to such other factors;" those factors include "the volume and prices of nonsubsidized imports or imports sold at fair value, contraction in demand or changes in patterns of consumption, trade restrictive practices of and competition between the foreign and domestic producers, developments in technology and the export performance and productivity of the domestic industry"); *accord Mittal Steel*, 542 F.3d at 877.

[47] SAA at 851-52 ("{T}he Commission need not isolate the injury caused by other factors from injury caused by unfair imports."); *Taiwan Semiconductor Industry Ass'n,* 266 F.3d at 1345 ("{T}he Commission need not isolate the injury caused by other factors from injury caused by unfair imports ... . Rather, the Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports." (emphasis in original)); *Asociacion de Productores de Salmon y Trucha*

"by reason of" standard require that unfairly traded imports be the "principal" cause of injury or contemplate that injury from unfairly traded imports be weighed against other factors, such as nonsubject imports, which may be contributing to overall injury to an industry.[48] It is clear that the existence of injury caused by other factors does not compel a negative determination.[49]

Assessment of whether material injury to the domestic industry is "by reason of" subject imports "does not require the Commission to address the causation issue in any particular way" as long as "the injury to the domestic industry can reasonably be attributed to the subject imports."[50] The Commission ensures that it has "evidence in the record" to "show that the harm occurred 'by reason of' the less than fair value ("LTFV") imports," and that it is "not attributing injury from other sources to the subject imports."[51] The Federal Circuit has examined and affirmed various Commission methodologies and has disavowed "rigid adherence to a specific formula."[52]

The question of whether the material injury threshold for subject imports is satisfied notwithstanding any injury from other factors is factual, subject to review under the substantial

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de Chile AG v. United States, 180 F. Supp. 2d 1360, 1375 (Ct. Int'l Trade 2002) ("{t}he Commission is not required to isolate the effects of subject imports from other factors contributing to injury" or make "bright-line distinctions" between the effects of subject imports and other causes.); *see also Softwood Lumber from Canada*, Inv. Nos. 701-TA-414 and 731-TA-928 (Remand), USITC Pub. 3658 at 100-01 (Dec. 2003) (Commission recognized that "{i}f an alleged other factor is found not to have or threaten to have injurious effects to the domestic industry, *i.e.*, it is not an 'other causal factor,' then there is nothing to further examine regarding attribution to injury"), *citing Gerald Metals,* 132 F.3d at 722 (the statute "does not suggest that an importer of LTFV goods can escape countervailing duties by finding some tangential or minor cause unrelated to the LTFV goods that contributed to the harmful effects on domestic market prices.").

[48] S. Rep. 96-249 at 74-75; H.R. Rep. 96-317 at 47.

[49] *See Nippon Steel Corp.*, 345 F.3d at 1381 ("an affirmative material-injury determination under the statute requires no more than a substantial-factor showing. That is, the 'dumping' need not be the sole or principal cause of injury.").

[50] *Mittal Steel*, 542 F.3d at 876 &78; *see also id.* at 873 ("While the Commission may not enter an affirmative determination unless it finds that a domestic industry is materially injured 'by reason of' subject imports, the Commission is not required to follow a single methodology for making that determination ... {and has} broad discretion with respect to its choice of methodology.") *citing United States Steel Group v. United States*, 96 F.3d 1352, 1362 (Fed. Cir. 1996) and S. Rep. 96-249 at 75. In its decision in *Swiff-Train v. United States*, 793 F.3d 1355 (Fed. Cir. 2015), the Federal Circuit affirmed the Commission's causation analysis as comporting with the Court's guidance in *Mittal*.

[51] *Mittal Steel*, 542 F.3d at 873 (quoting from *Gerald Metals*, 132 F.3d at 722), 877-79. We note that one relevant "other factor" may involve the presence of significant volumes of price-competitive nonsubject imports in the U.S. market, particularly when a commodity product is at issue. In appropriate cases, the Commission collects information regarding nonsubject imports and producers in nonsubject countries in order to conduct its analysis.

[52] *Nucor Corp. v. United States*, 414 F.3d 1331, 1336, 1341 (Fed. Cir. 2005); *see also Mittal Steel*, 542 F.3d at 879 ("*Bratsk* did not read into the antidumping statute a Procrustean formula for determining whether a domestic injury was 'by reason' of subject imports.").

evidence standard.[53] Congress has delegated this factual finding to the Commission because of the agency's institutional expertise in resolving injury issues.[54]

B. Conditions of Competition and the Business Cycle

The following conditions of competition inform our analysis of whether there is a reasonable indication of material injury by reason of subject imports.

1. Demand Conditions

U.S. demand for SRC pipe and tube is derived from demand for its end uses, including plumbing in residential and commercial construction and commercial uses such as the manufacture of air conditioning and refrigeration units. SRC pipe and tube for plumbing applications are sold principally to distributors, wholesalers, and retailers, while SRC pipe and tube for commercial applications are sold directly to the OEM end users.[55]

Demand for SRC pipe and tube in construction may be affected by competition from substitute products, such as plastic tubing for residential construction and aluminum and stainless steel pipe and tube for certain commercial applications.[56] Demand for SRC pipe and tube generally tracks overall economic activity in the United States.[57] Most market participants reported that demand for SRC pipe and tube in the U.S. market decreased or fluctuated during the period of investigation, although some reported that demand decreased due to increased use of substitutes and declines in construction.[58]

Apparent U.S. consumption of SRC pipe and tube was *** pounds in 2017, *** pounds in 2018, and *** pounds in 2019, for an overall increase of *** percent from 2017 to 2019. Apparent U.S. consumption was *** percent higher, at *** pounds, in interim 2020 compared to the level of *** pounds in interim 2019.[59]

2. Supply Conditions

The domestic industry accounted for the largest share of the U.S. SRC pipe and tube market, followed by nonsubject imports and subject imports during the period of investigation. The domestic industry's share of apparent U.S. consumption was *** percent in 2017, *** percent in 2018, and *** percent in 2019; it was *** percent in interim 2019 and *** percent in interim 2020.[60]

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[53] We provide in our discussion below a full analysis of other factors alleged to have caused any material injury experienced by the domestic industry.

[54] *Mittal Steel*, 542 F.3d at 873; *Nippon Steel Corp*., 458 F.3d at 1350, *citing U.S. Steel Group*, 96 F.3d at 1357; S. Rep. 96-249 at 75 ("The determination of the ITC with respect to causation is ... complex and difficult, and is a matter for the judgment of the ITC.").

[55] CR/PR at II-1.

[56] CR/PR at II-8 to II-9; Petitioner Postconference Brief at I-11.

[57] CR/PR at II-6.

[58] CR/PR at II-7 to II-8 and Table II-5.

[59] CR/PR at Table IV-7.

[60] CR/PR at Table IV-7.

Four firms are believed to account for the vast majority of U.S. production of SRC pipe and tube during the period of investigation.[61] Two firms opened new production facilities, one firm reported an expansion, and one firm closed a plant.[62] The domestic industry as a whole increased capacity during the period of investigation. Its capacity was *** pounds in 2017, *** pounds in 2018, and *** pounds in 2019; it was *** pounds in interim 2019 and *** pounds in interim 2020.[63]

Subject imports' share of the U.S. SRC pipe and tube market increased steadily throughout the period of investigation. Their market share increased from *** percent in 2017 to *** percent in 2018 and *** percent in 2019; it was *** percent in interim 2019 and *** percent in interim 2020.[64]

While nonsubject imports accounted for the second largest share of the U.S. SRC pipe and tube market, their share declined overall from 2017 to 2019. Nonsubject imports' market share was *** percent in 2017, *** percent in 2018, and *** percent in 2019; it was *** percent in interim 2019 and *** percent in interim 2020.[65] The largest sources of nonsubject imports were Canada, Korea, Mexico, and Greece.[66]

3. Substitutability and Other Conditions

For the purposes of this preliminary phase investigation, we find that there is a high degree of substitutability between subject imports and the domestic like product for similar applications.[67] The vast majority of U.S. producers and importers reported that SRC pipe and tube from each subject source are always or frequently interchangeable with each other and the domestic like product.[68]

We also find price to be an important factor in purchasing decisions. Most U.S. producers reported that factors other than price are only sometimes significant in comparing the domestic like product with SRC pipe and tube from Vietnam.[69] In addition, a majority of U.S. importers reported that factors other than price are only sometimes or never significant.[70] Factors other than price reported to be important include quality, availability, delivery, technical support, and customer specifications.[71]

SRC pipe and tube are principally made from copper, either in the form of copper cathodes ("primary copper") or scrap.[72] Raw material costs are the largest component of the

[61] CR/PR at III-1 and n.1.
[62] CR/PR at Table III-3.
[63] CR/PR at Table III-4.
[64] CR/PR at Table IV-7.
[65] CR/PR at Table IV-7.
[66] CR/PR at II-5 to II-6.
[67] CR/PR at II-9 to II-10.
[68] CR/PR at Table II-6.
[69] CR/PR at Table II-7.
[70] CR/PR at Table II-7.
[71] CR/PR at II-10.
[72] CR/PR at V-1.

total cost of goods sold ("COGS") for SRC pipe and tube, consistently accounting for more than *** percent of total COGS during the period of investigation.[73] The vast majority of responding U.S. producers and importers reported that raw material costs fluctuated over the period of investigation.[74]

U.S. producers reported selling the majority (*** percent) of their SRC pipe and tube in the spot market, with similar shares sold under annual or long-term contracts (*** percent and *** percent, respectively).[75] U.S. producers reported that contracts are not subject to price renegotiation and have a fixed price and quantity provision; two producers reported that prices are indexed to raw material prices, while one producer reported its prices are not indexed.[76] Similarly, the eight responding importers reported selling *** of their Vietnamese product in the spot market.[77]

C. Volume of Subject Imports

Section 771(7)(C)(i) of the Tariff Act provides that the "Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States, is significant."[78]

The volume of subject imports increased from 34.5 million pounds of SRC pipe and tube in 2017 to 40.4 million pounds in 2018 and 44.6 million pounds in 2019, for an overall increase of 29.5 percent; subject import volume was 53.1 percent higher in interim 2020, at 12.5 million pounds, than in interim 2019, at 8.2 million pounds.[79] The share of apparent U.S. consumption held by subject imports also increased steadily during the period of investigation, increasing from *** percent in 2017 to *** percent in 2018 and *** percent in 2019, for an overall increase of *** percentage points; it was *** percent in interim 2019 and *** percent in interim 2020.[80]

Thus, for the purposes of the preliminary phase of this investigation, we find the volume of subject imports and its increase during the period of investigation to be significant in absolute terms and relative to apparent U.S. consumption in the United States.

D. Price Effects of the Subject Imports

Section 771(7)(C)(ii) of the Tariff Act provides that, in evaluating the price effects of subject imports, the Commission shall consider whether –

[73] CR/PR at VI-9 and Table VI-1.
[74] CR/PR at V-1 and n.2.
[75] CR/PR at Table V-2.
[76] CR/PR at V-4.
[77] CR/PR at Table V-2.
[78] 19 U.S.C. § 1677(7)(C)(i).
[79] CR/PR at Table IV-2.
[80] CR/PR at Table IV-7. As a ratio to U.S. production, subject imports increased from *** percent in 2017 to *** percent in 2018 and *** percent in 2019; this ratio was higher, at *** percent, in interim 2020 compared to *** percent in interim 2019. CR/PR at Table IV-2.

(I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and

(II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.[81]

As discussed above, we find a high degree of substitutability between subject imports and the domestic like product, and that price is an important purchasing factor.

We have examined several sources of data in our underselling analysis, including pricing data from questionnaire responses and responses by purchasers to the Commission's lost sales/lost revenue questionnaire survey. The Commission collected quarterly f.o.b. pricing data on sales of five SRC pipe and tube products shipped to unrelated U.S. customers during the period of investigation.[82] Three U.S. producers[83] and one importer[84] provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.[85] The reported pricing data allow only limited quarterly comparisons, accounting for 2.9 percent of U.S. producers' U.S. shipments of SRC pipe and tube and 0.2 percent of U.S. shipments of subject imports from Vietnam over the period of investigation.[86]

These data show that subject imports undersold the domestic like product in *** of *** quarterly comparisons, at margins ranging between *** and *** percent and an average underselling margin of *** percent. Subject imports oversold the domestic like product in the remaining *** quarterly comparison at a margin of *** percent. There were *** of subject

[81] 19 U.S.C. § 1677(7)(C)(ii).

[82] CR/PR at V-5. The five pricing products are: **Product 1.**-- Seamless refined copper pipe and tube, 3/8" OD, ACR/RST Coil, 50' Length; **Product 2.**-- Seamless refined copper pipe and tube, 3/4" OD, ACR/RST Coil, 50' Length; **Product 3.**-- Seamless refined copper pipe and tube, 3/8" OD, Inner-Grooved LWC, 0.0110"-0.0144" bottom wall thickness; **Product 4.**-- Seamless refined copper pipe and tube, 3/8" OD, Smooth Bore, LWC, 0.0249"-0.0327" bottom wall thickness; and **Product 5.--** Seamless refined copper pipe and tube, 3/4" OD, Smooth Bore LWC, 0.0327"-0.0430" bottom wall thickness. *Id*.

[83] CR/PR at V-5. U.S. producer *** provided pricing data for *** for products 4 and 5. These data were not included in our analysis because the firm was not able to adjust prices for all discounts and rebates, and it reported prices on a delivered basis, not f.o.b., as requested, making its pricing data not comparable to other reported pricing data. CR/PR at V-5 n.19.

[84] CR/PR at V-5. Importer *** provided pricing data for *** quarters for product 1, totaling *** pieces, and *** quarters of data for product 2, totaling *** pieces. These data were not included in our analysis because *** reported values were based on its import costs and not shipment values. CR/PR at V-5 n.20.

[85] No importer reported pricing data for products 3 to 5 (SRC pipe and tube with commercial applications). *See* CR/PR at Table V-6.

[86] CR/PR at Table V-6. In any final phase of the investigation, we request that, in comments on the draft questionnaires, parties provide suggestions on pricing products and methodology that would allow the Commission to collect more comparable pricing data for the domestic like product and the subject imports and improve pricing coverage.

imports reported in quarters with underselling, compared to *** in quarters with overselling.[87] Thus, *** percent of the quantity of subject imports covered by the Commission's pricing data was in quarters with underselling.[88]

We have also considered purchaser responses to lost sales allegations. Two of five responding purchasers reported that they purchased subject imports instead of the domestic like product, that subject imports were priced lower than domestically produced SRC pipe and tube, and that price was a primary reason for purchasing subject imports.[89] Both purchasers estimated the quantity of SRC pipe and tube from Vietnam purchased instead of domestic product for a total quantity of lost sales due to lower subject import price of *** pounds.[90]

Based on the limited price comparison data and confirmed lost sales data available, we find for purposes of the preliminary phase of this investigation that subject imports significantly undersold the domestic like product.

We also examined the limited data available on price trends. Domestic prices for all five pricing products fluctuated but were relatively stable over the period of investigation.[91] The available domestic pricing data for pricing product 1, 3, and 5 show modest increases overall from the first quarter of 2017 through the first quarter of 2020.[92] Domestic prices for pricing products 2 and 4 show slight decreases overall during that time.[93] Subject import pricing data were reported only for pricing products 1 and 2 and only for a few quarters; as there is no subject import pricing data for pricing products 3 through 5.[94] The reported subject import pricing data are insufficient to provide a reliable basis for assessing pricing trends.[95]

We also observe that the industry's ratio of COGS to net sales fluctuated between years but declined overall from 2017 to 2019.[96] Unit net sales value increased from 2017 to 2018, but

[87] CR/PR at Table V-6.

[88] Calculated from CR/PR at Table V-6.

[89] CR/PR at V-17 and Table V-8.

[90] CR/PR at V-17 and Table V-8.

[91] *See* CR/PR at Table V-5. In responding to the lost sales lost revenue survey, one purchaser reported that U.S. market prices had dropped 18 percent or more due to subject imports. CR/PR at V-18.

[92] CR/PR at Table V-5. The domestic industry's price increased by *** percent for pricing product 1, *** percent for product 3, and *** percent for product 5 over the period examined.

[93] CR/PR at Table V-5. The domestic industry's price decreased by *** percent for pricing product 2 and *** percent for product 4 over the period examined.

[94] CR/PR at Tables V-3, V-4a, and V-4b.

[95] CR/PR at V-14.

[96] CR/PR at Table VI-1. The ratio of COGS to net sales was *** percent in 2017, *** percent in 2018, and *** percent in 2019; it was *** percent in interim 2019 and *** percent in interim 2020. *Id.*

then declined from 2018 to 2019, declining overall from 2017 to 2019.[97] The domestic industry's unit COGS decreased over the period of investigation.[98]

Given that the domestic like product and subject imports are highly substitutable and that price is an important factor in purchasing decisions, based on the information available in the preliminary phase of this investigation, we cannot conclude that the market share shift from the domestic industry to subject imports from 2018 to 2019 was not the result of significant underselling by subject imports. Given the foregoing and the totality of the available evidence in this preliminary phase investigation, we cannot conclude that subject imports did not have adverse price effects on the domestic industry. We intend to further examine the price competition between subject imports and the domestic like product, and possible price effects of subject imports, in any final phase of this investigation.

E. Impact of the Subject Imports[99]

Section 771(7)(C)(iii) of the Tariff Act provides that the Commission, in examining the impact of the subject imports on the domestic industry, "shall evaluate all relevant economic factors which have a bearing on the state of the industry." These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, gross profits, net profits, operating profits, cash flow, return on investment, return on capital, ability to raise capital, ability to service debt, research and development, and factors affecting domestic prices. No single factor is dispositive and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[100]

While many of the industry's indicators improved as apparent U.S. consumption increased from 2017 to 2018, these indicators remained flat or declined from 2018 to 2019, as the volume and market share of subject imports increased in a declining market.[101] The domestic industry's capacity and production initially increased from 2017 to 2018, but then decreased from 2018 to 2019.[102] The domestic industry's capacity utilization rate fluctuated

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[97] CR/PR at VI-1. Unit net sales value per 1000 pounds was $*** in 2017, $*** in 2018, and $*** in 2019; it was $*** in interim 2019 and $*** in interim 2020. *Id.*

[98] The domestic industry's net sales value increased overall from 2017 to 2019, and this increase was greater than the increase in COGS during the same period. CR/PR at VI-11. Although gross profit improved overall from 2017 to 2019, it declined from 2018 to 2019 as net sales value declined more than COGS. CR/PR at VI-11 n.7.

[99] In its notice initiating the antidumping duty investigation of SRC pipe and tube from Vietnam, Commerce estimated a dumping margin of 111.82 percent for subject imports. *Commerce Initiation Notice*, 85 Fed. Reg. at 47183.

[100] 19 U.S.C. § 1677(7)(C)(iii). This provision was amended by the Trade Preferences Extension Act of 2015, Pub. L. 114-27.

[101] In assessing the domestic industry's performance, because the interim period in this investigation is limited to only one quarter of 2020, we consider comparisons between the interim periods of lesser utility for our analysis.

[102] Capacity was *** pounds in 2017, *** pounds in 2018, and *** pounds in 2019; it was *** pounds in interim 2019 and *** pounds in interim 2020. CR/PR at Table III-4.

Production was *** pounds in 2017, *** pounds in 2018, and *** pounds in 2019; it was *** pounds in interim 2019 and *** pounds in interim 2020. CR/PR at Table III-4.

during the period of investigation but was below *** percent throughout.[103] Its U.S. shipments increased initially from 2017 to 2018 before decreasing from 2018 to 2019.[104] As the volume of subject imports increased and apparent U.S. consumption declined, subject imports gained *** percentage points of market share while the domestic industry lost *** percentage point of market share from 2018 to 2019.[105]

The domestic industry's employment indicia were mixed during the period of investigation. The number of production related workers ("PRWs") and wages paid increased steadily from 2017 to 2019.[106] Hours worked, hourly wages, and unit labor costs fluctuated but increased overall from 2017 to 2019.[107] Productivity however decreased overall.[108]

The domestic industry's financial performance indicators fluctuated between years, with declines from 2018 to 2019. While net sales value and COGS increased overall from 2017 to 2019, from 2018 to 2019 net sales value declined more than COGS, resulting in a slight increase in the industry's ratio of COGS to net sales from 2018 to 2019.[109] Although gross profit improved overall from 2017 to 2019, it declined substantially from 2018 to 2019.[110] Moreover, the domestic industry's financial results were generally weak over the period of investigation.

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[103] Capacity utilization was *** percent in 2017, *** percent in 2018, and *** percent in 2019; it was *** percent in interim 2019 and *** percent in interim 2020. CR/PR at Table III-4.

[104] The domestic industry's U.S. shipments were *** pounds in 2017, *** pounds in 2018, and *** pounds in 2019; they were *** pounds in interim 2019 and *** pounds in interim 2020. CR/PR at Table III-5. The domestic industry's inventories also fluctuated during the period of investigation. Ending inventories were *** pounds in 2017, *** pounds in 2018, and *** pounds in 2019; they were *** pounds in interim 2019 and *** pounds in interim 2020. CR/PR at Table III-6.

[105] The domestic industry's market share was *** percent in 2017, *** percent in 2018, and *** percent in 2019; it was *** percent in interim 2019 and *** percent in interim 2020. CR/PR at Table IV-7.

[106] The number of PRWs was *** in 2017, *** in 2018, and *** in 2019; it was *** in interim 2019 and *** in interim 2020. CR/PR at Table III-8. Wages paid were $*** in 2017, $*** in 2018, and $*** in 2019; they were $*** in interim 2019 and $*** in interim 2020. *Id*.

[107] Hours worked were *** in 2017, *** in 2018, and *** in 2019; they were *** in interim 2019 and interim 2020. CR/PR at Table III-8. Hourly wages were $*** in 2017, $*** in 2018, and $*** in 2019; they were $*** in interim 2019 and $*** in interim 2020. *Id*. Unit labor costs in dollars per 1,000 pounds were $*** in 2017, $*** in 2018, and $*** in 2019; they were $*** in interim 2019 and $*** in interim 2020. *Id*.

[108] Productivity was *** pounds per hour in 2017, *** pounds per hour in 2018, and *** pounds per hour in 2019; it was *** pounds per hour in interim 2019 and *** pounds per hour in interim 2020. CR/PR at Table III-8.

[109] Total net sales value was $*** in 2017, $*** in 2018, and $*** in 2019; it was $*** in interim 2019 and $*** in interim 2020. CR/PR at Table VI-1. Total COGS was $*** in 2017, $*** in 2018, and $*** in 2019; it was $*** in interim 2019 and $*** in interim 2020. *Id*. The ratio of COGS to net sales was *** percent in 2017, *** percent in 2018, and *** percent in 2019; it was *** percent in interim 2019 and *** percent in interim 2020. *Id*.

[110] Gross profits were $*** in 2017, $*** in 2018, and $*** in 2019; they were $*** in interim 2019 and $*** in interim 2020. CR/PR at Table VI-1.

Operating income[111] and net income[112] decreased over the period of investigation, as did these indicators' ratios to net sales, and the ratios were less than *** percent throughout the period of investigation.[113] Capital expenditures also decreased overall.[114] All four responding domestic producers also reported anticipated negative effects from subject imports, with three reporting negative effects on investment and two reporting negative effects on growth and development.[115]

During the period of investigation, the volume of low-priced subject imports, which were highly substitutable for the domestic like product, was significant and increasing, taking market share from the domestic industry between 2018 and 2019. At the same time, the domestic industry experienced significant declines in financial performance from 2018 to 2019, in particular with respect to operating income and net income. Further, as discussed, we cannot conclude that the increasing volume of subject imports did not have significant adverse price effects, thus contributing to the domestic industry's poor financial performance. We therefore cannot conclude for purposes of this preliminary phase investigation that subject imports did not have a significant adverse impact on the domestic industry.

We have also considered the role of factors other than subject imports to ensure that we are not attributing injury from other factors to the subject imports. Nonsubject imports decreased from 95.0 million pounds in 2017 to 89.3 million pounds in 2018 and 88.1 million pounds in 2019.[116] Their market share fluctuated, but declined overall by *** percentage points from *** percent in 2017 to *** percent in 2019.[117] Thus, based on the available data, nonsubject imports cannot explain the magnitude of the domestic industry's deterioration in performance from 2018 to 2019.

[111] Operating income was $*** in 2017, $*** in 2018, and $*** in 2019; it was $*** in interim 2019 and $*** in interim 2020. CR/PR at Table VI-1.

[112] Net income was $*** in 2017, $*** in 2018, and $*** in 2019; it was $*** in interim 2019 and $*** in interim 2020. CR/PR at Table VI-1.

[113] The domestic industry's ratio of operating income to net sales was *** percent in 2017, *** percent in 2018, and *** percent in 2019; it was *** percent in interim 2019 and *** percent in interim 2020. CR/PR at Table VI-1. The domestic industry's ratio of net income to net sales was *** percent in 2017, *** percent in 2018, and *** percent in 2019; it was *** percent in interim 2019 and *** percent in interim 2020. *Id*.

[114] Capital expenditures were $*** in 2017, $*** in 2018, and $*** in 2019; they were $*** in interim 2019 and $*** in interim 2020. There were *** research and development expenses reported for the period of investigation. CR/PR at Table VI-6.

[115] CR/PR at Tables VI-8 and VI-9.

[116] CR/PR at Table C-1. Nonsubject imports were lower in interim 2020, at 20.6 million pounds, than in interim 2019, at 21.6 million pounds. *See id.*

[117] CR/PR at Table C-1. Nonsubject imports' market share was lower in interim 2020, at *** percent, than in interim 2019, at *** percent. *See id.*

VII. Conclusion

For the reasons stated above, for the purposes of the preliminary phase of this investigation, we determine that there is a reasonable indication that an industry in the United States is materially injured by reason of subject imports of SRC pipe and tube from Vietnam that are allegedly sold in the United States at less than fair value.

Part I: Introduction

Background

This investigation results from a petition filed with the U.S. Department of Commerce ("Commerce") and the U.S. International Trade Commission ("USITC" or "Commission") by the American Copper Tube Coalition, consisting of Mueller Group,[1] Collierville, Tennessee, and Cerro Flow Products, LLC ("Cerro"), Sauget, Illinois, on June 30, 2020, alleging that an industry in the United States is materially injured and threatened with material injury by reason of less-than-fair-value ("LTFV") imports of seamless refined copper pipe and tube ("SRC pipe and tube")[2] from Vietnam. The following tabulation provides information relating to the background of this investigation.[3] [4]

Effective date	Action
June 30, 2020	Petition filed with Commerce and the Commission; institution of Commission investigations (85 FR 40680, July 7, 2020)
July 20, 2020	Commerce's notice of initiation (85 FR 47181, August 4, 2020)
July 21, 2020	Commission's conference (conducted through written statements, testimony, questions, and responses, July 17-July 24, 2020)
August 13, 2020	Commission's vote
August 14, 2020	Commission's determination
August 21, 2020	Commission's views

[1] Mueller Group ("Mueller") consists of Mueller Copper Tube Products, Inc., Mueller Copper Tube West Co., Mueller Copper Tube Company, Inc., Howell Metal Company, and Linesets, Inc. Petition, p. 1.

[2] See the section entitled "The subject merchandise" in Part I of this report for a complete description of the merchandise subject in this proceeding.

[3] Pertinent *Federal Register* notices are referenced in appendix A and may be found at the Commission's website (www.usitc.gov).

[4] Appendix B presents a list of witnesses participating in the conference.

Statutory criteria

Section 771(7)(B) of the Tariff Act of 1930 (the "Act") (19 U.S.C. § 1677(7)(B)) provides that in making its determinations of injury to an industry in the United States, the Commission--

> *shall consider (I) the volume of imports of the subject merchandise, (II) the effect of imports of that merchandise on prices in the United States for domestic like products, and (III) the impact of imports of such merchandise on domestic producers of domestic like products, but only in the context of production operations within the United States; and. . . may consider such other economic factors as are relevant to the determination regarding whether there is material injury by reason of imports.*

Section 771(7)(C) of the Act (19 U.S.C. § 1677(7)(C)) further provides that--[5]

> *In evaluating the volume of imports of merchandise, the Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States is significant.. . .In evaluating the effect of imports of such merchandise on prices, the Commission shall consider whether. . .(I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.. . . In examining the impact required to be considered under subparagraph (B)(i)(III), the Commission shall evaluate (within the context of the business cycle and conditions of competition that are distinctive to the affected industry) all relevant economic factors which have a bearing on the state of the industry in the United States, including, but not limited to. . . (I) actual and potential decline in output, sales, market share, gross profits, operating profits, net profits, ability to service debt, productivity, return on investments, return on assets, and utilization of capacity, (II) factors affecting domestic prices, (III) actual and potential negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment, (IV) actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product, and (V) in {an antidumping investigation}, the magnitude of the margin of dumping.*

[5] Amended by PL 114-27 (as signed, June 29, 2015), Trade Preferences Extension Act of 2015.

In addition, Section 771(7)(J) of the Act (19 U.S.C. § 1677(7)(J)) provides that—[6]

(J) EFFECT OF PROFITABILITY.—The Commission may not determine that there is no material injury or threat of material injury to an industry in the United States merely because that industry is profitable or because the performance of that industry has recently improved.

Organization of report

Part I of this report presents information on the subject merchandise, alleged dumping margins, and domestic like product. Part II of this report presents information on conditions of competition and other relevant economic factors. Part III presents information on the condition of the U.S. industry, including data on capacity, production, shipments, inventories, and employment. Parts IV and V present the volume of subject imports and pricing of domestic and imported products, respectively. Part VI presents information on the financial experience of U.S. producers. Part VII presents the statutory requirements and information obtained for use in the Commission's consideration of the question of threat of material injury as well as information regarding nonsubject countries.

Market summary

SRC pipe and tube are generally used in various applications, including water applications and plumbing; distribution systems for other liquids and gases; and thermal transfer applications including heating systems, commercial refrigeration systems (such as grocery store refrigerated cases), and combined or split-unit air conditioning systems.[7] The leading U.S. producers of SRC pipe and tube are Cerro and Mueller, while identified producers of SRC pipe and tube in Vietnam include Hailiang (Vietnam) Copper Manufacturing Company, Limited ("Hailiang"), JinTian Copper Industrial (Vietnam) Company Limited ("JinTian"), and Toan Phat Copper Joint Stock Company (also known as "Ruby Copper").[8] The leading U.S. importers of SRC pipe and tube from Vietnam are ***, while leading importers among responding companies include ***, while leading importers of SRC pipe and tube from nonsubject

[6] Amended by PL 114-27 (as signed, June 29, 2015), Trade Preferences Extension Act of 2015.

[7] Petition, p. 7.

[8] Petition, exh. 20 and p. 33. No foreign producer submitted a response to the Commission's foreign producers' questionnaire.

countries (primarily ***) include ***.[9] U.S. purchasers of SRC pipe and tube are distributors of HVAC or plumbing equipment and end users that produce HVAC equipment; leading responding purchasers include plumbing and HVAC equipment distributors ***.

Apparent U.S. consumption of SRC pipe and tube totaled approximately *** pounds ($***) in 2019. Currently, at least eight firms are believed to produce SRC pipe and tube in the United States, four of which provided data in response to the Commission's questionnaires.[10] U.S. producers' U.S. shipments of SRC pipe and tube totaled *** pounds ($***) in 2019, and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value. U.S. imports from subject sources totaled 44.6 million pounds ($151.8 million) in 2019 and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value. U.S. imports from nonsubject sources totaled 88.1 million pounds ($341.4 million) in 2019 and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value.

Summary data and data sources

A summary of data collected in this investigation is presented in appendix C, table C-1. Except as noted, U.S. industry data are based on questionnaire responses of four firms that are believed to account for *** percent of U.S. production of SRC pipe and tube during 2019.[11] U.S. imports are based on official import statistics for HTS statistical reporting numbers 7411.10.1030 and 7411.10.1090, the two statistical reporting numbers under the HTS subheading for seamless tubes and pipes of refined copper.

[9] Though usable questionnaire responses were received from 21 companies, these responses represented only *** percent of U.S. imports from Vietnam in 2019 under HTS statistical reporting numbers 7411.10.1030 and 7411.10.1090.

Responses to the Commission's importers questionnaire were not received from *** despite numerous staff attempts to obtain questionnaires. According to ***, these two firms alone accounted for *** percent of imports from Vietnam imported under this subheading in 2019. ***, which also did not respond to numerous attempts by staff for a questionnaire response, accounted for an additional *** percent of imports from Vietnam imported under this subheading in 2019.

[10] See Part III for detailed information on possible U.S. producers.

[11] Staff calculated the response rate of U.S. producers by dividing reported production in U.S. producers' questionnaire responses by petitioner's estimate of *** pounds of U.S. production in 2019. Petition, p. 4.

Previous and related investigations

SRC pipe and tube has been the subject of prior antidumping duty investigations in the United States. Since November 22, 2010, Commerce has administered antidumping duty orders on SRC pipe and tube from China and Mexico.[12]

Nature and extent of alleged sales at LTFV

Alleged sales at LTFV

On August 4, 2020, Commerce published a notice in the *Federal Register* of the initiation of its antidumping duty investigation on SRC pipe and tube from Vietnam.[13] Commerce has initiated this antidumping duty investigation based on an estimated dumping margin of 111.82 percent.

The subject merchandise

Commerce's scope

In the current proceeding, Commerce has defined the scope as follows:[14]

> *The products covered by this investigation are all 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) in actual outside diameter (OD), regardless of wall thickness, bore (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 this investigation 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-*

[12] 75 FR 71070, November 22, 2010. In its first review of these orders in 2016, the Commission found that revocation of the antidumping duty orders on SRC 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. 81 FR 88704, December 8, 2016.

[13] 85 FR 47181, August 4, 2020.

[14] 85 FR 47181, August 4, 2020.

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 of this investigation 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 actual weight of copper; or (2) metal containing at least 97.5 percent by actual weight of copper, provided that the content by actual 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 this investigation are all seamless circular hollows of refined copper less than 12 inches in actual length whose actual OD exceeds its actual length.

Tariff treatment

Based upon the scope set forth by Commerce, information available to the Commission indicates that the merchandise subject to this investigation are imported under the following provisions of the Harmonized Tariff Schedule of the United States ("HTS"): 7411.10.1030 and 7411.10.1090. The 2020 general rate of duty is 1.5 percent *ad valorem* for HTS subheading

7411.10.10. Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.[15]

The product

Description and applications[16]

SRC pipe and tube are fabricated products of refined copper, distinguished by a circular cross section of varying nominal outside diameter ("OD") sizes (typically 0.04"–12")[17] and wall thicknesses.[18] The tubing surfaces are either smooth, internally enhanced (e.g., with grooves or ridges), or externally enhanced (e.g., with fins, or gills).[19] 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 pipe and tube 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 pipe and tube, 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 pipe and tube reflects the range of end-use applications that take advantage of copper's strength, malleability, ductility, thermal conductivity, corrosion resistance, and chemical (e.g., lead-free)

[15] Although imports of this product from China are subject to additional duties of 25 percent under Section 301 of the Trade Act of 1974, as discussed in greater detail in Part IV, China is not a substantial source of U.S. imports of SRC pipe and tube.

[16] Unless specified otherwise, information in this section is based on *Seamless Refined Copper Pipe and Tube from China and Mexico, Investigation Nos. 731-TA-1174-1175 (Review)*, USITC Publication 4650, November 2016, pp. I-16 to I-19.

[17] 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 ± 0.005".

[18] The petitioner considers all the merchandise in the scope to be "copper tube," while acknowledging that members of the industry generally refer to a subset of copper tube as being "pipe." The petitioner further notes that while there is no clear and consistent definition of "pipe" in the industry, the term typically denotes larger ODs and/or wall thicknesses of straight length copper tube. Petitioner's postconference brief, p. II-3. "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.

[19] Enhancements are designed to improve the heat transfer ability of the tube and are typically produced by carving a helical shape in the inner or outer wall. Petitioner's postconference brief, p. II-3.

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, institutional, 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 pipe and tube based on end-use applications (tables I-1 and I-2). "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 pipe and tube include refrigeration and heating units; split-system central, room and window, central, and vehicle air conditioners; and chillers and freezers.

Table I-1
SRC pipe and tube: ASTM standard designations, titles, and specified end-use applications

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

Table continued on next page.

Table I-1--Continued
SRC pipe and tube: ASTM standard designations, titles, and specified end-use applications

ASTM designation	Title	Specified end-use applications
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 Service*	Air conditioning and refrigeration units
B-302	*Standard Specification for Threadless Copper Pipe, Standard Sizes*	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 Enhancement*	Refrigeration, air conditioning, and other heat exchangers

Source: Seamless Refined Copper Pipe and Tube from China and Mexico, Investigation Nos. 731-TA-1174-1175 (Review), USITC Publication 4650, November 2016, p. I-18.

Table I-2
SRC pipe and tube: Designations, color codes, standards, apps, sizes, tempers, and lengths

Designation	Color Code	ASTM	Applications	Commercially available lengths		
				Size	Drawn	Annealed
Type K (thicker walled)[1]	Green	B-88	Water service and distribution Fire protection Solar energy Fuel and fuel oil Heating, ventilation, air conditioning Snow melting Compressed air Natural gas Liquefied petroleum gas Vacuums	Straight lengths:		
				¼"–8"	20'	20'
				10"	18'	18'
				12"	12'	12'
				Coils:		
				¼"–1"	—	60'
					—	100'
				1¼"–1½"	—	60'
				2"	—	40'
					—	45'
Type L (intermediate walled)[1]	Blue	B-88	Water service and distribution Fire protection Solar energy Fuel and fuel oil Heating, ventilation, air conditioning Snow melting Compressed air Natural gas Liquefied petroleum gas Vacuums	Straight lengths:		
				¼"–10"	20'	20'
				12"	18'	18'
				Coils:		
				¼"–1"	—	60'
					—	100'
				1¼"–1½"	—	60'
				2"	—	40'
					—	45'
Type M (thinner walled	Red	B-88	Water service and distribution Fire protection Solar energy Fuel and fuel oil Heating, ventilation, air conditioning Snow melting Vacuums	Straight lengths:		
				¼"–12"	20'	—
DWV	Yellow	B-306	Drain, waste, vent Heating, ventilation, air conditioning Solar energy	Straight lengths:		
				1¼"–8"	20'	—
ACR/RST	Blue	B-280	Air conditioning Refrigeration Natural gas Liquefied petroleum gas Compressed air	Straight lengths:		
				⅜"–4⅛"	20'	([2])
				Coils:		
				⅛"–1⅝"	—	50'
OXY/MED	(K) Green (L) Blue	B-819	Medical gases Compressed air Vacuums	Straight lengths:		
				¼"–8"	20'	—

[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, Investigation Nos. 731-TA-1174-1175 (Review)*, USITC Publication 4650, November 2016, p. I-19.

Manufacturing processes[20]

The steps for producing SRC pipe and tube 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 pipe and tube.

The starting material for SRC pipe and tube production is metallic copper in the form of whole or sections cut from refined cathodes, scrap, or cast ingots.[21] 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 pipe and tube 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.

Prefabricating

Melting

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,[22] and ingots into molten copper that does not need further refining. Alternatively, inclusion of less-pure old scrap[23] 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 is melted at temperatures between 2,300° and 2,400° F (above the melting point of copper at 1,981° F), and

[20] Unless specified otherwise, information in this section is based on *Seamless Refined Copper Pipe and Tube from China and Mexico, Investigation Nos. 731-TA-1174-1175 (Review)*, USITC Publication 4650, November 2016, pp. I-20 to I-23.

[21] A cathode contains at least 99.95 percent copper. Petition, p. 9. The most common form of scrap consumed in the production of SRC pipe and tube is *** Petitioner's postconference brief, p. II-1. Brick-shaped copper ingots cast from melted-down cathodes and scrap are more commonly consumed by SRC pipe and tube mills with smaller-scale melting furnaces with doors that cannot accommodate full cathode sections and baled scrap.

[22] New scrap consists of pieces of refined copper recovered within the mill from the various downstream production steps.

[23] Old scrap consists of 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.

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 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. Phosphorous copper is added to deoxidize the molten copper to produce "phosphorous-deoxidized, high residual phosphorus copper.[24]

Casting

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. "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 logs or shells into approximately two-foot-long sections for logs or approximately 30 to 60 feet for shells as it emerges from the casting machine.[25] These sections, each weighing approximately 400 to 2400 pounds, are now known as billets or shells.[26] In the semi-continuous 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.

[24] Petition, p. 10.

[25] Petition, p. 11.

[26] Petition, p. 11. The petitioner considers a "billet" to be a portion of a "log" that has been cut-to-length. However, the petitioner notes that different companies in the industry may use these terms to mean different things. Petitioner's postconference brief, p. II-3.

Extrusion/rolling

After casting has been completed, the resulting billets or tube rounds are processed by either the extrusion or the cast-and-roll process to produce "mother tube."[27] Both the extrusion and cast-and-roll processes are similar in terms of the quality of the product and the cost of production. The main difference relates to production scale, i.e., extrusion-based systems require more capital expenditure and have larger capacity (e.g., at least 150 million pounds). Therefore, depending upon the size of the investment that is planned, a company will employ one technology or the other.[28]

In the extrusion process, the billet is preheated to approximately 1,535^{o} 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.[29] 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.

In mills using the cast-and-roll process, after casting, a shell less than 12 inches in diameter is fed into a high reduction rolling mill, either by cylinder or continuous sleds. The rolling mill has a series of rolling heads that press on the outside of the shell causing a reduction in the outside diameter of the shell as well as the wall thickness of the shell. A mandrel is present during the rolling process to maintain a specific inside diameter of the shell. The reduced diameter shell travels down the run out table, and the nose as well as the tail of the

[27] The petitioner stated that the extrusion and cast-and-roll processes are both common in the United states and throughout the world. In the United States, Cambridge and Mueller have both extrusion and cast-and-roll production lines. GD Copper uses only cast-and-roll technology. Cerro uses only extrusion technology. The petitioner also believes that both technologies are used in Vietnam. Mother tube is a semi-finished copper tube profile used for further drawing into a finished product. Mother tube also referred to as redraw hollows. Petitioner's postconference brief, p. II-2.

[28] Petitioner's postconference brief, p. II-2.

[29] 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.

shell are removed leaving only good shell. The remaining good portion of shell is coiled into a large coil and is passed down to the drawing section of the mill.[30]

Intermediate fabricating

The mother tube resulting from the prefabrication stage (irrespective of which of the different casting technologies was used) 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.

Finishing

The finishing steps depend on the specific type of SRC pipe and tube 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 pipe and tube, the ends also can be finished by swaging, flaring, expanding, crimping, or threading.[31]

SRC pipe and tube are sold either as drawn ("hard") or annealed ("soft"). Annealing softens the finished product and enables the end-user to deform the copper tube (e.g., uncoiling coils; flaring or bending straight lengths; etc).[32] SRC pipe and tube (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^{o} F in a non-reactive

[30] Petition, pp. 12-13. The cast-and-roll process can produce SRC pipe and tube with an OD of only up to 1.5 inches. Despite this limitation, the petitioner estimates that cast-and-roll producers can meet more than *** percent of commercial tube specifications, and more than *** percent of plumbing tube specifications. Petitioner's postconference brief, p. II-2.

[31] Swaged ends are deformed so the copper tube can mate with another coper tube. Flared ends are flared to connect with a fitting. Expanded ends are expanded to permit connection with another tube or fixture. Crimped ends have been closed by crimping. Petitioner's postconference brief, p. II-3.

[32] Petitioner's postconference brief, p. II-2.

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 pipe and tube can be distinguished by the matte surface finish and lesser stiffness compared to as-drawn tubing. Otherwise, annealed and non-annealed SRC pipe and tube 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 pipe and tube 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 pipe and tube 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.

Domestic like product issues

No issues with respect to domestic like product have been raised in this investigation. The petitioner proposes that the Commission define a single domestic like product consisting of all SRC pipe and tube corresponding to the investigation's scope.[33]

[33] Petitioner's postconference brief, pp. I-7—I-9.

Part II: Conditions of competition in the U.S. market

U.S. market characteristics

SRC pipe and tube are used in plumbing and commercial applications that generally involve fluids under pressure for conveyance or for thermal transfer. Conveyance applications use plumbing pipe and tube and include distribution systems for water and other liquids and gases. Thermal transfer applications include heating systems, commercial refrigeration systems, and air-conditioning systems and use commercial (or "industrial") pipe and tube.[1] SRC pipe and tube are made to American Society for Testing and Materials ("ASTM") standards or original equipment manufacturers ("OEM") specifications.

According to the petitioner, there are distinct channels of distribution and price setting methods for plumbing and commercial SRC pipe and tube. Plumbing applications meet ASTM standards for chemistry, outside diameter, wall thickness, strength, hardness, cleanliness, and roundness.[2] Plumbing pipe and tube are typically sold to distributors, wholesalers, or retailers, with some sales directly to OEMs, and are sold on the spot market with a set price list and a "multiplier."[3] [4]

Commercial SRC pipe and tube are made to ASTM standards as well as OEM specifications and include grooves, ridges, fins, or gills designed to enhance the efficiency of thermal transfer.[5] OEMs specify custom dimensions, tempers, and packaging.[6] Commercial SRC pipe and tube are typically sold directly to OEMs, with some small sales to distributors, and prices are set using annual contracts.[7] [8]

Regardless of application, SRC pipe and tube are sold in diameters ranging from 0.04 inches to 12 inches. SRC pipe and tube can be sold in straight lengths or coiled (either coiled onto spools or without spools).[9] SRC pipe and tube can be used in the construction industry, for single residences to large commercial buildings, and HVAC applications, from residential air

[1] Petition, p. 7.
[2] Petition, p. 7.
[3] Statement of Devin Malone, Mueller, p. 2.
[4] See Part V for a discussion on the price setting methods.
[5] Petition, pp. 7-8.
[6] Statement of Devin Malone, Mueller, p. 2.
[7] Statement of Devin Malone, Mueller, p. 2.
[8] See Part V for a discussion on the price setting methods.
[9] Petition, p. 8.

conditioning units to commercial chillers for large offices. There are also specialty applications.[10]

The U.S. market is supplied by U.S. producers, as well as imports from Vietnam[11] and imports from nonsubject sources such as Canada, Korea, Mexico, and Greece.[12] SRC pipe and tube from China and Mexico are subject to antidumping duty orders which were continued in November 2016.[13] According to petitioner, there is structural oversupply in the U.S. market and purchasers have the market power to use competitive offers to lower prices.[14]

Apparent U.S. consumption of SRC pipe and tube increased during 2017-19. Overall, apparent U.S. consumption in 2019 was *** percent higher than in 2017, increasing from *** pounds to *** pounds. Apparent U.S. consumption of SRC pipe and tube was *** percent higher in January-March 2020 than in January-March 2019.

Channels of distribution

As noted above, SRC pipe and tube can be used for plumbing or industrial applications. U.S. producers sold more than half of their SRC pipe and tube to distributors, and more than half of their product had plumbing applications. Importers, however, shipped subject imports mostly to end users, regardless of application. Subject imports were increasingly sold for industrial applications as opposed to plumbing.[15]

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[10] Specialty applications can include "ice makers, refrigerated cases, kitchen and bath fixtures" as well as other applications such as "electrical conduit, compressed air, instrumentation, and decorative products." Statement of Devin Malone, Mueller, pp. 2-3.

[11] Subject imports are concentrated by a limited number of importers. Over *** percent of subject imports were imported by importer ***. *** did not respond to the Commission's importer questionnaire in the preliminary phase.

[12] All four responding U.S. producers (Cambridge, Cerro, Golden Dragon, and Mueller) are also importers. Their responses to the U.S. producer and importer questionnaires are presented separately throughout this section, unless otherwise indicated.

[13] *Seamless Refined Copper Pipe and Tube from China and Mexico*, *Inv. Nos. 731-TA-1174-1175 (Review),* USITC Publication 4650, December 3, 2016.

[14] Petitioner's postconference brief, p. I-13.

[15] Importers *** reported that their "other application" shipments were for HVAC and refrigerant piping which would fall under industrial applications.

Table II-1
SRC pipe and tube: U.S. producers' and importers' U.S. shipments, by source and channel of distribution, 2017-19, January to March 2019, and January to March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Share of U.S. shipments (percent)				
U.S. producers.--					
to Distributors	***	***	***	***	***
to End users	***	***	***	***	***
U.S. importers: Vietnam.--					
to Distributors	***	***	***	***	***
to End users	***	***	***	***	***
U.S. importers: Nonsubject sources.--					
to Distributors	***	***	***	***	***
to End users	***	***	***	***	***

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

Table II-2
SRC pipe and tube: U.S. producers' and importers' U.S. shipments, by source and application, 2017-19, January to March 2019, and January to March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Share of U.S. shipments (percent)				
U.S. producers:					
Plumbing applications	***	***	***	***	***
Industrial applications	***	***	***	***	***
Other applications	***	***	***	***	***
U.S. importers: Vietnam.--					
Plumbing applications	***	***	***	***	***
Industrial applications	***	***	***	***	***
Other applications	***	***	***	***	***
U.S. importers: Nonsubject sources.--					
Plumbing applications	***	***	***	***	***
Industrial applications	***	***	***	***	***
Other applications	***	***	***	***	***

Note: The increase in other applications in 2019 for Vietnamese product was from importer *** which reported all of its shipments as ***.

Geographic distribution

U.S. producers and importers reported selling SRC pipe and tube to all regions in the United States (table II-3). For U.S. producers, *** percent of sales were within 100 miles of their production facility, *** percent were between 101 and 1,000 miles, and *** percent were over 1,000 miles. Importers sold *** percent within 100 miles of their U.S. point of shipment, *** percent between 101 and 1,000 miles, and *** percent over 1,000 miles.

Table II-3
SRC pipe and tube: Geographic market areas in the United States served by U.S. producers and importers

Region	U.S. producers	Subject importers
Northeast	4	2
Midwest	4	5
Southeast	4	5
Central Southwest	4	4
Mountain	4	2
Pacific Coast	4	4
Other	3	2
All regions (except Other)	4	1
Reporting firms	4	10

Note: 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

Table II-4 provides a summary of the supply factors regarding SRC pipe and tube from U.S. producers; no Vietnamese producer returned a foreign producer questionnaire.

Table II-4
SRC pipe and tube: Supply factors that affect the ability to increase shipments to the U.S. market

	Capacity (1,000 lbs)		Capacity utilization (percent)		Ratio of inventories to total shipments (percent)		Shipments by market, 2019 (percent)		Able to shift to alternate products
Country	2017	2019	2017	2019	2017	2019	Home market shipments	Exports to non-U.S. markets	No. of firms reporting "yes"
United States	***	***	***	***	***	***	***	***	0 of 4
Vietnam	***	***	***	***	***	***	***	***	---

Note: Responding U.S. producers accounted for over 80 percent of U.S. production of SRC pipe and tube in 2019. No Vietnamese producer responded to the Commission's questionnaire. For additional data on the number of responding firms and their share of U.S. production and of U.S. imports from each subject country, please refer to Part I, "Summary Data and Data Sources."

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

Domestic production

Based on available information, U.S. producers of SRC pipe and tube have the ability to respond to changes in demand with moderate-to-large changes in the quantity of shipments of U.S.-produced SRC pipe and tube to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity. Factors mitigating responsiveness of supply include the limited ability to shift shipments from alternate markets or inventories and the limited ability to shift production to or from alternate products.

U.S. producers' reported capacity was relatively stable, increasing by *** percent from 2017-19, while production fluctuated slightly. Overall, capacity utilization was relatively stable, increasing slightly overall from *** to *** percent from 2017 to 2019. Major export markets include ***. No producers reported that they can produce other products on the same equipment as SRC pipe and tube. Factors affecting U.S. producers' ability to shift production include device restrictions, casting and refining capacity, as well as setup and cleanup times.

Subject imports from Vietnam

No Vietnamese producers responded to the Commission's foreign producer questionnaire.

Imports from nonsubject sources

Imports from nonsubject sources accounted for 66.4 percent of total U.S. imports in 2019. The largest nonsubject sources of imports of SRC pipe and tube during 2017-19, in

descending order, were Canada, Korea, Mexico, and Greece. Combined, these countries accounted for 71.4 percent of SRC pipe and tube imports from nonsubject sources in 2019.

Supply Constraints

U.S. producer *** was the only firm to report it experienced supply constraints since January 1, 2017. It reported that it had "significant equipment breakdowns in the second half of 2018."

U.S. demand

Based on available information, the overall demand for SRC pipe and tube is likely to experience moderate changes in response to changes in price. The main contributing factors are the availability of substitute products and the small cost share of SRC pipe and tube in most of its end-use products.

End uses and cost share

U.S. demand for SRC pipe and tube depends on the demand for U.S.-produced downstream products. Reported end uses include HVAC, refrigeration, heat exchangers, air conditioning, plumbing applications, and industrial applications.

SRC pipe and tube accounts for a large share of the cost of the component parts, such as condenser tube or electrical tube, and a small cost of most of the end-use products in which it is used, such as HVAC. Reported cost shares for some end uses were 10.0-15.0 percent for air conditioning, 57.0 percent for heat exchangers, and 25.0 percent for building water supplies.

Business cycles

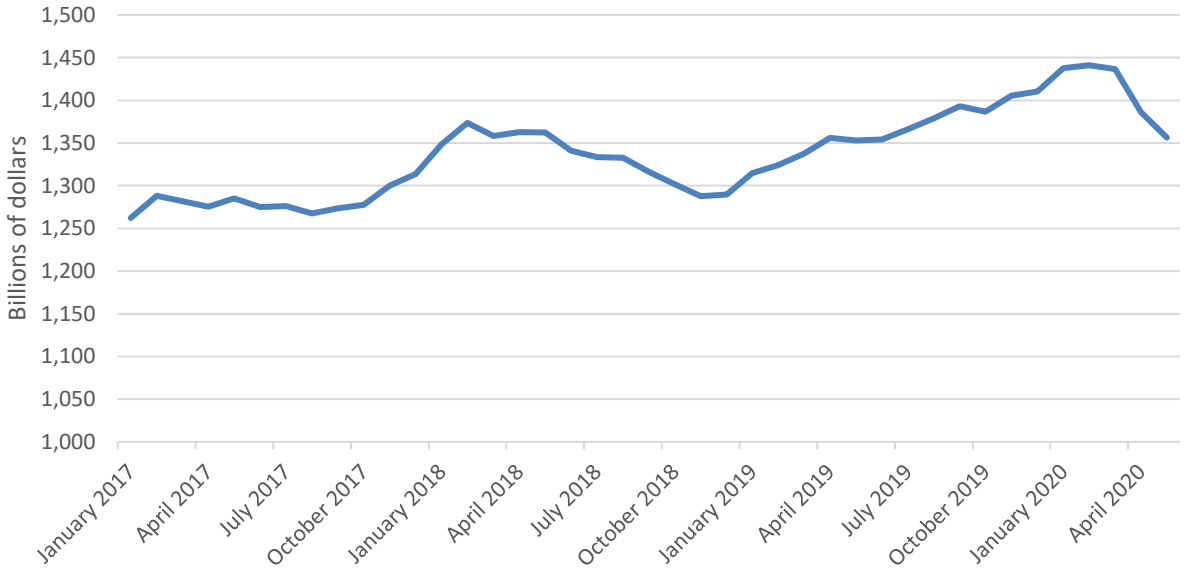
All four responding U.S. producers and 11 of 20 importers indicated that the market was subject to business cycles or conditions of competition. Regarding business cycles, U.S. producers and importers noted that construction activity increases in the spring, and that air conditioning unit production occurs in March to September. U.S. producer/importer *** reported that demand for plumbing SRC pipe and tube is "approximately three percent" higher in the second and third quarters, demand for some commercial SRC pipe and tube "similarly ramps up" in the same time frame. It also reported that demand for some commercial SRC pipe and tube is non-seasonal. Importer *** added that the first quarter is typically the strongest and the fourth quarter is the weakest and *** also noted that school renovations occur in the summer.

U.S. producers and importers reported that conditions of competition specific to the SRC pipe and tube market include substitution to aluminum (importer ***).

Demand trends

According to petitioner, demand for SRC pipe and tube is tied to the business cycle, including construction activity.[16] The National Bureau of Economic Research indicated that the United States entered a recession in February 2020.[17] The value of construction put in place increased by 11.7 percent in the United States from 2017 to 2019 but has decreased by 5.7 percent from January 2020 to June 2020 (figure II-1).

Figure II-1
Value of construction put in place: Total construction spending, seasonally adjusted annual rate, January 2017 – May 2020



Source: U.S. Census Bureau, retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/TTLCONS, retrieved July 19, 2020.

Most importers reported a decrease in U.S. demand for SRC pipe and tube, while most U.S. producers reported demand had fluctuated since January 1, 2017 (table II-5).[18] U.S.

[16] Statement of Devin Malone, Mueller, p. 4.

[17] National Bureau of Economic Research, Determination of the February 2020 Peak in US Economic Activity, June 8, 2020. https://www.nber.org/cycles/june2020.html, retrieved July 20, 2020.

[18] U.S. producer/importer *** reported that demand had increased and fluctuated, adding that "demand for copper tube is derived from demand for residential/commercial plumbing and industrial applications."

producer/importer *** reported that demand fluctuated due to more aluminum tube being used in air conditioners, and U.S. producer/importer *** reported that demand varies based on the season, construction, and copper price.

Table II-5
SRC pipe and tube: Firms' responses regarding U.S. demand and demand outside the United States

Item	Increase	No change	Decrease	Fluctuate
Demand in the United States				
U.S. producers	1	---	1	3
Importers	3	2	7	5
Demand outside the United States				
U.S. producers	1	---	1	1
Importers	3	2	4	1

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

Substitute products

Most importers (15 of 18 responding) reported that there were no substitutes, while all three responding U.S. producers reported there were substitutes for SRC pipe and tube.[19] Reported substitutes for SRC pipe and tube include plastic for plumbing and certain residential application, and aluminum tube for air conditioners.

Petitioner stated that plastic tubing is a substitute in residential plumbing and new home construction. It added that plastic tube substitution for these applications occurred mainly in 2002 to 2010,[20] but that "any shift in demand between these segments has since stabilized" due to code limitations and the "superior performance" of copper tube relative to plastic.[21] Copper tube is three to six times more expensive in residential construction applications than plastic tubing.[22] In addition, petitioner argued that aluminum is a potential substitute for thermal transfer applications, such as HVAC, but that aluminum's thermal conductivity is "inherently inferior to copper" and that redesigning and retooling for OEMs can take years. Petitioner noted that substitution to aluminum occurred from 2004 to 2014.[23]

[19] U.S. producer *** did not respond to the question regarding substitutes.

[20] The shift to plastic tubing occurred in the "non-premium residential construction in jurisdictions where the local code allowed for plastic tube." Petitioner's postconference brief, p. II-4.

[21] Statement of Devin Malone, Mueller, p. 5; and Petitioner's postconference brief, p. II-4.

[22] Petitioner's postconference brief, p. II-4.

[23] Statement of Devin Malone, Mueller, p. 5.

Substitutability issues

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

Lead times

SRC pipe and tube are primarily sold from inventory. U.S. producers reported that 70.1 percent of their commercial shipments came from inventories, with lead times averaging 7 days. The remaining 29.9 percent of their commercial shipments were produced-to-order, with lead times averaging 19 days. Importers reported that 51.5 percent of their commercial shipments came from U.S. inventories, with lead times averaging 2 days, while 6.2 percent of commercial shipments were from foreign inventories, with lead time averaging 120 days. The remaining 42.3 percent of importers' commercial shipments were produced-to-order with average lead times of 95 days.

Factors affecting purchasing decisions

Purchasers responding to lost sales lost revenue allegations[24] were asked to identify the main purchasing factors their firm considered in their purchasing decisions for SRC pipe and tube. The major purchasing factors identified by the five responding purchasers include availability (four purchasers), price (four firms), quality (three firms), and lead times (two firms).

Comparison of U.S.-produced and imported SRC pipe and tube

In order to determine whether U.S.-produced SRC pipe and tube can generally be used in the same applications as imports from Vietnam, U.S. producers and importers were asked whether the products can always, frequently, sometimes, or never be used interchangeably. As shown in table II-6, most U.S. producers reported that domestic and Vietnamese SRC pipe and tube are always interchangeable, and 15 of 17 responding importers reported that they are always or frequently interchangeable. Importer ***, which indicated that domestic and

[24] This information is compiled from responses by purchasers identified by Petitioner to the lost sales lost revenue allegations. See Part V for additional information.

subject product are sometimes interchangeable, reported that the temper of copper tubing from Vietnam is not available from U.S. producers, and that product is interchangeable only if bending is not desired.[25] Importer *** noted that its export markets cannot afford domestically produced SRC pipe and tube, and that exporting product from Vietnam makes it competitive.[26]

Table II-6
SRC pipe and tube: Interchangeability between SRC pipe and tube produced in the United States and in other countries, by country pair

Country pair	U.S. producers				U.S. importers			
	A	F	S	N	A	F	S	N
United States vs. Vietnam	3	1	---	---	8	7	1	1
United States vs. Other	3	1	---	---	7	6	---	2
Vietnam vs. Other	3	---	---	---	8	2	---	1

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

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

In addition, U.S. producers and importers were asked to assess how often differences other than price were significant in sales of SRC pipe and tube from the United States, Vietnam, or nonsubject countries. As seen in table II-7, three of four responding U.S. producers and 11 out of 17 responding importers reported that non-price factors are sometimes or never significant when considering domestic or subject product. U.S. producer/importer *** reported that significant non-price factors include quality, availability, Buy America requirements, and *** reported that availably and product quality are also relevant non-price factors. U.S. producer/importer *** reported that delivery, availability, quality, and technical support were significant non-price factors.[27] Importer *** added that tubes are specifically designed for their customers' products.

[25] *** added that imported product is rigid and bendable without the need for annealing.

[26] *** indicated that domestic SRC pipe and tube and product from Vietnam are never interchangeable and reported that *** of its imports from Vietnam were exported. It reported its principal export markets are ***.

[27] U.S. producer ***, the only responding U.S. producer to report that non-price factors were frequently significant, did not provide an explanation for its response.

Table II-7
SRC pipe and tube: Significance of differences other than price between SRC pipe and tube produced in the United States and in other countries, by country pair

Country pair	U.S. producers				U.S. importers			
	A	F	S	N	A	F	S	N
United States vs. Vietnam	---	1	3	---	2	4	7	4
United States vs. Other	---	1	3	---	3	3	7	3
Vietnam vs. Other	---	---	3	---	1	1	5	4

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

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

Part III: U.S. producers' production, shipments, and employment

The Commission analyzes a number of factors in making injury determinations (see 19 U.S.C. §§ 1677(7)(B) and 1677(7)(C)). Information on the dumping margins was presented in *Part I* of this report and information on the volume and pricing of imports of the subject merchandise is presented in *Part IV* and *Part V*. Information on the other factors specified is presented in this section and/or *Part VI* and (except as noted) is based on the questionnaire responses of four firms that are believed to account for *** percent of U.S. production of SRC pipe and tube during 2019.[1]

U.S. producers

The Commission issued a U.S. producer questionnaire to 13 firms based on information contained in the petition and obtained through staff research. Four firms provided usable data on their operations.[2] Staff believes that these responses represent *** of U.S. production of SRC pipe and tube in 2019.

Table III-1 lists U.S. producers of SRC pipe and tube, their production locations, positions on the petition, and shares of total production.

[1] Staff calculated the response rate of U.S. producers by dividing reported production in U.S. producers' questionnaire responses by petitioner's estimate of *** pounds of U.S. production in 2019 (Petition, p. 4).

[2] One firm, Precision Tube Company, was included in Mueller's response. Four other firms—Wieland Copper Products, LLC ("Wieland"), Drawn Metal Tube Company, Elkhart Products Corporation, H&H Tube—did not respond to the Commission's request for responses. Wieland in particular was contacted multiple times yet did not acknowledge Commission staff's various attempts to request a response. A fifth firm obtained from staff research, Bison Metals Technologies, also did not respond. ***.

Table III-1
SRC pipe and tube: U.S. producers, their position on the petition, location of production, and share of reported production, 2019

Firm	Position on petition	Production location(s)	Share of production (percent)
Cambridge	***	Reading, PA Fayetteville, NC	***
Cerro	Petitioner	Sauget, IL Shelbina, MO Vinita Park, MO	***
GD Copper	***	Pine Hill, AL	***
Mueller	Petitioner	Fulton, MS Cedar City, UT New Market, VA Wynne, AR North Wales, PA	***
Total			***

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

Table III-2 presents information on U.S. producers' ownership, related and/or affiliated firms.

Table III-2
SRC Pipe and Tube: U.S. producers' ownership, related and/or affiliated firms

Item / Firm	Firm Name	Affiliated/Ownership
Ownership:		
	***	***
***	***	***
***	***	***
***	***	***
Related producers:		
***	***	***
	***	***
	***	***
	***	***
	***	***
	***	***
***	***	***
	***	***
	***	***
***	***	***

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

As indicated in table III-2, no U.S. producers are related to foreign producers of SRC pipe and tube from Vietnam, nor are any related to U.S. importers of SRC pipe and tube from Vietnam. However, as discussed in greater detail below, all four U.S. producers directly import SRC pipe and tube from other sources and *** purchases SRC pipe and tube from multiple sources.

Table III-3 presents U.S. producers' reported changes in operations since January 1, 2017.

Table III-3
SRC Pipe and Tube: U.S. producers' reported changes in operations, since January 1, 2017

Item / Firm	Reported changed in operations
Plant openings:	
***	***
***	***
Plant closings:	
***	***
Relocations:	
***	***
***	***
Expansions:	
***	***
Acquisitions:	
***	***
Revised labor agreements:	
***	***
***	***
Other:	
***	***

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

U.S. production, capacity, and capacity utilization

Table III-4 and figure III-1 present U.S. producers' production, capacity, and capacity utilization. Capacity and production increased from 2017 to 2018 (by *** and *** percent respectively), and similarly capacity utilization rose by *** percentage points in the same period. However, these figures decreased from 2018 to 2019, with capacity and production decreasing by *** and *** percent respectively and capacity utilization decreasing by *** percentage points.

U.S. producers showed general improvement from January-March ("interim") 2019 to interim 2020. While capacity *** in both interim periods, production was

higher by *** percent in interim 2020 than in interim 2019, resulting in capacity utilization being *** percentage points higher in interim 2020 than in interim 2019.[3] [4]

Table III-4
SRC pipe and tube: U.S. producers' capacity, production, and capacity utilization, 2017-19, January to March 2019, and January to March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Capacity (1,000 pounds)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All firms	***	***	***	***	***
	Production (1,000 pounds)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All firms	***	***	***	***	***
	Capacity utilization (percent)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All firms	***	***	***	***	***
	Share of production (percent)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All firms	***	***	***	***	***

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

[3] Mueller explained its capacity calculation by reporting "***." Cerro reported operating ***, based on "***."

GD Copper reported operating *** while Cambridge reported operating ***, based on "***."

[4] *** reported other production on the same equipment used to make SRC pipe and tube.

Figure III-1
SRC pipe and tube: U.S. producers' capacity, production, and capacity utilization, 2017-19, January to March 2019, and January to March 2020

* * * * * * *

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

U.S. producers' U.S. shipments and exports

Table III-5 presents U.S. producers' U.S. shipments, export shipments, and total shipments. U.S. shipments and export shipments, like capacity and production, generally increased from 2017 to 2018 before falling from 2018 to 2019. Total U.S. shipments and export shipments increased by quantity from 2017 to 2018 (by *** and *** percent respectively), however, these figures decreased from 2018 to 2019 by *** and *** percent respectively. Comparing the interim periods, U.S. shipments were *** percent higher by quantity in interim 2020 than in interim 2019, while export shipments were *** percent higher.

U.S. commercial shipments comprised approximately *** percent of total shipments by quantity in each period, followed by export shipments. Internal consumption and transfers to related parties were more limited, never exceeding *** percent combined of the share of total shipments by quantity in any period.

Table III-5
SRC pipe and tube: U.S. producers' U.S. shipments, export shipments, and total shipments, 2017-19, January to March 2019, and January to March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Quantity (1,000 pounds)				
Commercial U.S. shipments	***	***	***	***	***
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
U.S. shipments	***	***	***	***	***
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***
	Value (1,000 dollars)				
Commercial U.S. shipments	***	***	***	***	***
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
U.S. shipments	***	***	***	***	***
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***
	Unit value (dollars per pound)				
Commercial U.S. shipments	***	***	***	***	***
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
U.S. shipments	***	***	***	***	***
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***
	Share of quantity (percent)				
Commercial U.S. shipments	***	***	***	***	***
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
U.S. shipments	***	***	***	***	***
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***
	Share of value (percent)				
Commercial U.S. shipments	***	***	***	***	***
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
U.S. shipments	***	***	***	***	***
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

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

U.S. producers' inventories

Table III-6 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**.** Inventories increased by *** percent from 2017 to 2018, before falling *** percent from 2018 to 2019, for an overall decrease of *** percent from 2017 to 2019. Inventories were *** percent lower in interim 2020 than in interim 2019.

As a ratio to total shipments, inventories decreased steadily (by *** percentage points overall) from 2017 to 2019. The ratio of inventories to total shipments was *** percentage points lower in interim 2020 than in interim 2019.

Table III-6
SRC pipe and tube: U.S. producers' inventories, 2017-19, January to March 2019, and January to March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Quantity (1,000 pounds)				
U.S. producers' end-of-period inventories	***	***	***	***	***
	Ratio (percent)				
Ratio of inventories to.--					
U.S. production	***	***	***	***	***
U.S. shipments	***	***	***	***	***
Total shipments	***	***	***	***	***

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

U.S. producers' imports and purchases

U.S. producers' imports of SRC pipe and tube are presented in table III-7. All four producers reported importing ***.[5]

*** was the only firm to report purchases from other importers or other domestic producers. *** reporting purchases of imported SRC pipe and tube from ***.[6] ***

[5] *** reported the source of their imports from nonsubject sources in their questionnaire responses. According to ***, these firms' imports in 2017-19 originated from ***. *** did report the source of their imports from nonsubject sources in their questionnaire responses, ***.

[6] ***.

reported purchases of ***.[7] *** reported purchases of ***.

Table III-7
SRC pipe and tube: U.S. producers' imports, 2017-19, January to March 2019, and January to March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Quantity (1,000 pounds)				
***	***	***	***	***	***
***	***	***	***	***	***
	Ratio (percent)				
***	***	***	***	***	***
	Narrative				
***	***.				
	Quantity (1,000 pounds)				
***	***	***	***	***	***
***	***	***	***	***	***
	Ratio (percent)				
***	***	***	***	***	***
	Narrative				
***	***.				

Table continued on next page.

[7] Importers identified as the source of the purchases include ***.

Table III-7--Continued
SRC pipe and tube: U.S. producers' imports, 2017-19, January to March 2019, and January to March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Quantity (1,000 pounds)				
***	***	***	***	***	***
***	***	***	***	***	***
	Ratio (percent)				
***	***	***	***	***	***
	Narrative				
***	***.				
	Quantity (1,000 pounds)				
***	***	***	***	***	***
***	***	***	***	***	***
	Ratio (percent)				
***	***	***	***	***	***
	Narrative				
***	***.				

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

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

U.S. employment, wages, and productivity

Table III-8 presents U.S. producers' employment-related data. The number of PRWs and total wages paid rose consistently from 2017 to 2019, and while the number of PRWs was higher by *** in interim 2020 than in interim 2019, wages were *** percent lower in interim 2020 than in interim 2019. Total hours worked and hours worked per PRW rose from 2017 to 2018, before falling from 2018 to 2019; these figures were roughly the same in interim 2019 and in interim 2020. Though productivity increased from 2018 to 2019 after a decrease from 2017 to 2018, productivity fell *** percent overall from 2017 to 2019; it was *** percent higher in interim 2020 than in interim 2019.

Table III-8
SRC pipe and tube: U.S. producers' employment related data, 2017-19, January to March 2019, and January to March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
Production and related workers (PRWs) (number)	***	***	***	***	***
Total hours worked (1,000 hours)	***	***	***	***	***
Hours worked per PRW (hours)	***	***	***	***	***
Wages paid ($1,000)	***	***	***	***	***
Hourly wages (dollars per hour)	***	***	***	***	***
Productivity (pounds per hour)	***	***	***	***	***
Unit labor costs (dollars per 1,000 pounds)	***	***	***	***	***

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

Part IV: U.S. imports, apparent U.S. consumption, and market shares

U.S. importers

The Commission issued importer questionnaires to 57 firms believed to be importers of subject SRC pipe and tube, as well as to all U.S. producers of SRC pipe and tube.[1] Usable questionnaire responses were received from 21 companies, representing *** percent of U.S. imports from Vietnam in 2019 under HTS statistical reporting numbers 7411.10.1030 and 7411.10.1090, the two statistical reporting numbers under the HTS subheading for seamless tubes and pipes of refined copper.[2] Table IV-1 lists all responding U.S. importers of SRC pipe and tube from Vietnam and other sources, their locations, and their shares of U.S. imports, in 2019.

[1] The Commission issued questionnaires to those firms identified in the petition, along with firms that, based on a review of data provided by U.S. Customs and Border Protection ("Customs"), may have accounted for more than one percent of total imports under HTS subheading 7411.10.10 in 2017-19.

[2] Responses to the Commission's importers questionnaire were not received from *** despite numerous staff attempts to obtain questionnaires. According to ***, these two firms alone accounted for *** percent of imports from Vietnam imported under this subheading in 2019. ***, which also did not respond to numerous attempts by staff for a questionnaire response, accounted for an additional *** percent of imports from Vietnam imported under this subheading in 2019.

Table IV-1
SRC pipe and tube: U.S. importers, their headquarters, and share of total imports by source, 2019

Firm	Headquarters	Share of imports by source (percent)		
		Vietnam	Nonsubject sources	All import sources
ABCO	Chatham, MA	***	***	***
All Tools	Guaynabo, PR	***	***	***
ASK	Aurora, IL	***	***	***
Atlas	San Diego, CA	***	***	***
Cambridge	Reading, PA	***	***	***
Cerro	Sauget, IL	***	***	***
Commercial Metals	Irving, TX	***	***	***
Dexter	Brooklyn, NY	***	***	***
Everwell	Miami, FL	***	***	***
GD Copper	Pine Hill, AL	***	***	***
Globomotive	Mableton, GA	***	***	***
Mehta	Parispanny, NJ	***	***	***
MetTube	Shah Alam, SE, Malaysia	***	***	***
Mueller	Collierville, TN	***	***	***
National Copper	Huntsville, AL	***	***	***
Reftekk	Boise, ID	***	***	***
Southland	Tujunga, CA	***	***	***
ST Products	Duncansville, PA	***	***	***
Venti	Houston, TX	***	***	***
Virtus	Franklin, KY	***	***	***
Wells	Chicago, IL	***	***	***
Total		***	***	***

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

U.S. imports

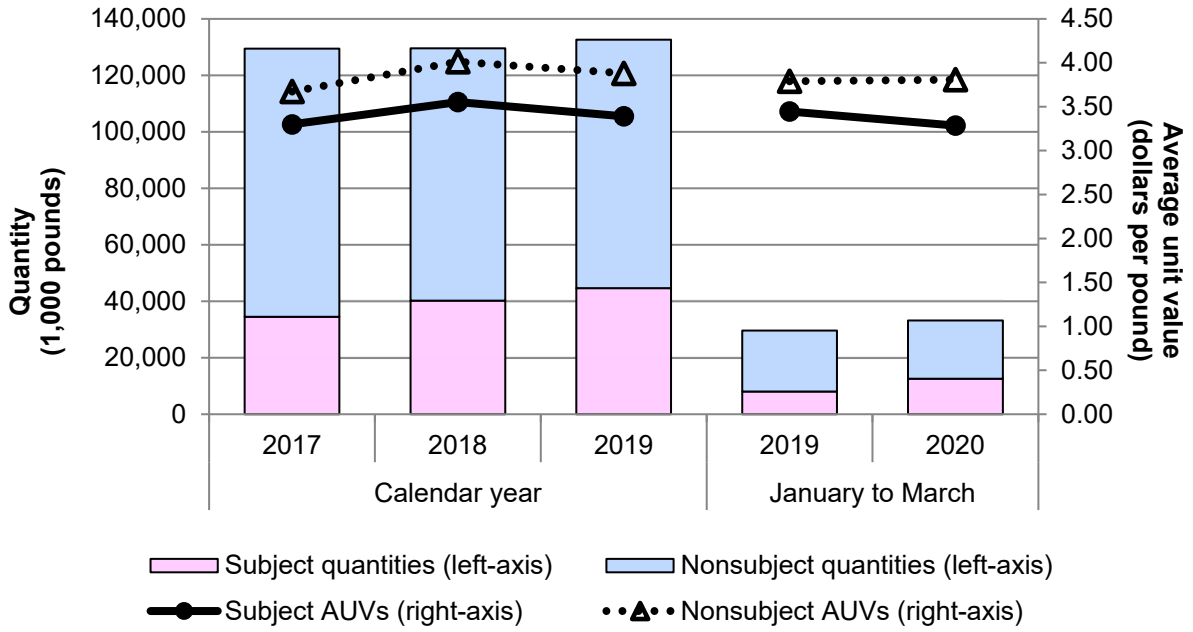
Table IV-2 and figure IV-1 present data for U.S. imports of SRC pipe and tube from Vietnam and from all other sources. Imports from Vietnam increased in both 2018 and 2019, increasing 29.5 percent by quantity during 2017-19. Imports of SRC pipe and tube from Vietnam were 53.1 percent higher in January-March ("interim") 2020 than in interim 2019. Imports of SRC pipe and tube from nonsubject sources, in contrast, decreased by 7.2 percent by quantity from 2017 to 2019, and were 4.6 percent lower in interim 2020 than in interim 2019. As a ratio to U.S. production, imports from Vietnam increased by *** percentage points from 2017-19, and were *** percentage points higher in interim 2020 than in interim 2019.

Table IV-2
SRC pipe and tube: U.S. imports, by source, 2017-19, January to March 2019, and January to March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Quantity (1,000 pounds)				
U.S. imports from.--					
Vietnam	34,470	40,377	44,629	8,192	12,543
Nonsubject sources	94,985	89,315	88,135	21,632	20,632
All import sources	129,456	129,692	132,764	29,824	33,175
	Value (1,000 dollars)				
U.S. imports from.--					
Vietnam	113,731	142,996	151,776	28,695	41,217
Nonsubject sources	348,969	358,201	341,357	81,582	78,563
All import sources	462,700	501,197	493,133	110,276	119,780
	Unit value (dollars per 1,000 pounds)				
U.S. imports from.--					
Vietnam	3,299	3,542	3,401	3,503	3,286
Nonsubject sources	3,674	4,011	3,873	3,771	3,808
All import sources	3,574	3,865	3,714	3,698	3,611
	Share of quantity (percent)				
U.S. imports from.--					
Vietnam	26.6	31.1	33.6	27.5	37.8
Nonsubject sources	73.4	68.9	66.4	72.5	62.2
All import sources	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)				
U.S. imports from.--					
Vietnam	24.6	28.5	30.8	26.0	34.4
Nonsubject sources	75.4	71.5	69.2	74.0	65.6
All import sources	100.0	100.0	100.0	100.0	100.0
	Ratio to U.S. production				
U.S. imports from.--					
Vietnam	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***

Source: Compiled from official U.S. import statistics for HTS statistical reporting numbers 7411.10.1030 and 7411.10.1090, accessed July 21, 2020.

Figure IV-1
SRC pipe and tube: U.S. import quantities and average unit values, 2017-19, January to March 2019, and January to March 2020



Source: Compiled from official U.S. import statistics for HTS statistical reporting numbers 7411.10.1030 and 7411.10.1090, accessed July 21, 2020.

Table IV-3 presents additional detail on U.S. imports from nonsubject sources. Canada, Korea, Mexico, and Greece were the largest nonsubject sources of imports of SRC pipe and tube from 2017-19. Imports from Canada decreased by 15.8 percent from 2017-19 but were 1.7 percent higher in interim 2020 than in interim 2019. Imports from Korea decreased by 20.4 percent from 2017-19 and were 18.3 percent lower in interim 2020 than in interim 2019. Imports from Mexico, which are already subject to an antidumping duty order, increased by 7.0 percent from 2017-19 but were 11.5 percent lower in interim 2020 than in interim 2020. Imports from Greece decreased by 31.5 percent from 2017-19 and were 24.0 percent lower in interim 2020 than in interim 2020.

Imports of SRC pipe and tube from China, which are already subject to an antidumping duty order as well as a section 301 duty, increased irregularly by 41.2 percent from 2017-19 and were 21.2 percent higher in interim 2020 than in interim 2019, but consistently accounted for less than one percent of the quantity of total imports.

Table IV-3
SRC pipe and tube: U.S. imports from nonsubject sources, by source, 2017-19, January to March 2019, and January to March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Quantity (1,000 pounds)				
U.S. imports from nonsubject sources.--					
Canada	35,047	27,828	29,504	7,336	7,464
Korea	20,396	15,956	16,245	4,059	3,315
Mexico	10,110	9,501	10,821	2,901	2,566
Greece	9,254	9,868	6,339	2,025	1,539
Malaysia	5,939	5,921	5,414	879	397
Germany	3,937	2,627	4,356	831	993
Brazil	3,303	5,838	2,448	693	529
China	641	1,189	905	134	162
All other nonsubject sources	6,358	10,587	12,104	2,776	3,666
All nonsubject sources	94,985	89,315	88,135	21,632	20,632
	Value (1,000 dollars)				
U.S. imports from nonsubject sources.--					
Canada	134,784	116,591	120,773	28,657	31,196
Korea	67,746	58,089	55,673	13,755	11,201
Mexico	37,806	37,518	40,364	10,814	9,285
Greece	29,758	35,314	21,809	6,919	5,057
Malaysia	20,295	21,912	19,145	3,138	1,373
Germany	16,727	13,376	20,314	3,839	4,251
Brazil	10,508	20,106	8,002	2,268	1,861
China	2,888	5,581	4,838	757	845
All other nonsubject sources	28,457	49,713	50,439	11,436	13,494
All nonsubject sources	348,969	358,201	341,357	81,582	78,563
	Unit value (dollars per 1,000 pounds)				
U.S. imports from nonsubject sources.--					
Canada	3,846	4,190	4,093	3,906	4,180
Korea	3,321	3,641	3,427	3,389	3,379
Mexico	3,740	3,949	3,730	3,728	3,618
Greece	3,216	3,579	3,441	3,417	3,285
Malaysia	3,417	3,701	3,536	3,569	3,461
Germany	4,248	5,092	4,664	4,621	4,280
Brazil	3,181	3,444	3,269	3,274	3,519
China	4,509	4,693	5,349	5,666	5,218
All other nonsubject sources	4,476	4,696	4,167	4,120	3,681
All nonsubject sources	3,674	4,011	3,873	3,771	3,808

Table continued on next page.

Table IV-3--Continued
SRC pipe and tube: U.S. imports from nonsubject sources, by source, 2017-19, January to March 2019, and January to March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Share of total U.S. imports based on quantity (percent)				
U.S. imports from nonsubject sources.--Canada	27.1	21.5	22.2	24.6	22.5
Korea	15.8	12.3	12.2	13.6	10.0
Mexico	7.8	7.3	8.2	9.7	7.7
Greece	7.1	7.6	4.8	6.8	4.6
Malaysia	4.6	4.6	4.1	2.9	1.2
Germany	3.0	2.0	3.3	2.8	3.0
Brazil	2.6	4.5	1.8	2.3	1.6
China	0.5	0.9	0.7	0.4	0.5
All other nonsubject sources	4.9	8.2	9.1	9.3	11.1
All nonsubject sources	73.4	68.9	66.4	72.5	62.2
	Share of total U.S. imports based on value (percent)				
U.S. imports from nonsubject sources.--Canada	29.1	23.3	24.5	26.0	26.0
Korea	14.6	11.6	11.3	12.5	9.4
Mexico	8.2	7.5	8.2	9.8	7.8
Greece	6.4	7.0	4.4	6.3	4.2
Malaysia	4.4	4.4	3.9	2.8	1.1
Germany	3.6	2.7	4.1	3.5	3.5
Brazil	2.3	4.0	1.6	2.1	1.6
China	0.6	1.1	1.0	0.7	0.7
All other nonsubject sources	6.2	9.9	10.2	10.4	11.3
All nonsubject sources	75.4	71.5	69.2	74.0	65.6

Source: Compiled from official U.S. import statistics for HTS statistical reporting numbers 7411.10.1030 and 7411.10.1090, accessed July 21, 2020.

Table IV-4 and figure IV-2 present U.S. imports by month from January 2017 through May 2020. Imports from Vietnam and from nonsubject sources were present in the market for every month in the data collection period.

Table IV-4
SRC pipe and tube: U.S. imports by month, January 2017 through May 2020

U.S. imports	Vietnam	Nonsubject sources	All import sources
	Quantity (1,000 pounds)		
2017.--			
January	2,345	7,620	9,965
February	2,933	6,725	9,658
March	2,402	8,040	10,442
April	2,548	7,924	10,472
May	4,279	9,063	13,343
June	4,328	9,366	13,694
July	3,337	8,715	12,052
August	2,773	7,874	10,647
September	3,328	7,797	11,125
October	1,911	7,996	9,907
November	1,624	7,475	9,099
December	2,661	6,391	9,051
2018.--			
January	2,759	7,812	10,570
February	3,105	6,500	9,605
March	4,966	6,887	11,853
April	2,850	7,742	10,592
May	3,897	8,145	12,042
June	4,960	7,428	12,388
July	3,842	8,869	12,712
August	3,350	7,405	10,755
September	2,509	7,377	9,886
October	3,777	7,774	11,551
November	2,328	7,021	9,349
December	2,032	6,357	8,389

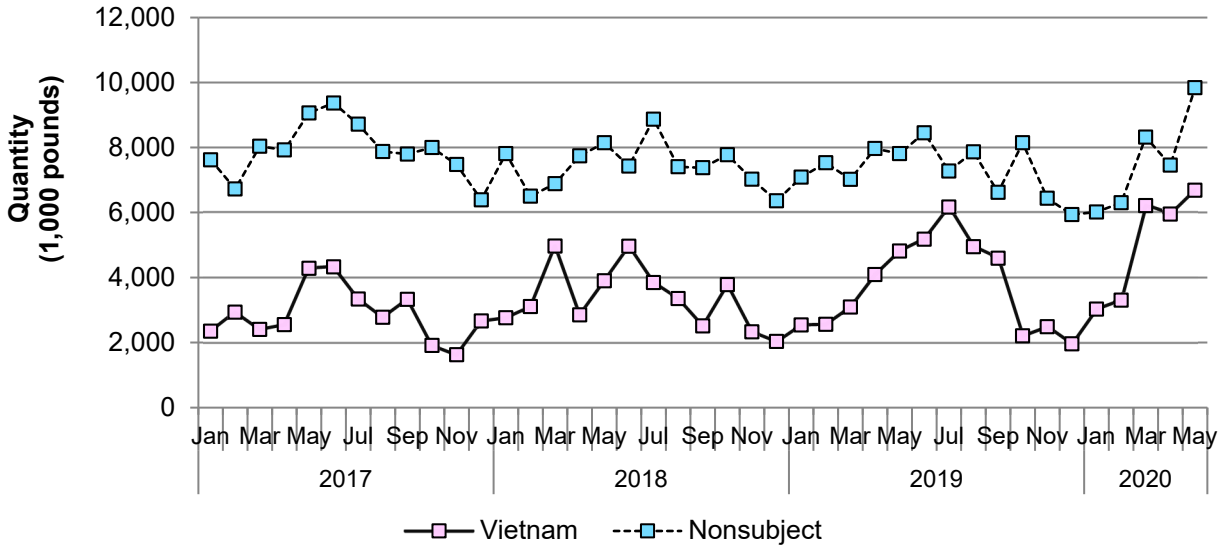
Table continued on next page.

Table IV-4--Continued
SRC pipe and tube: U.S. imports by month, January 2017 through May 2020

U.S. imports	Vietnam	Nonsubject sources	All import sources
	Quantity (1,000 pounds)		
2019.--			
January	2,541	7,085	9,626
February	2,560	7,529	10,089
March	3,091	7,019	10,109
April	4,089	7,966	12,056
May	4,813	7,810	12,623
June	5,178	8,451	13,629
July	6,167	7,277	13,443
August	4,945	7,866	12,811
September	4,593	6,619	11,211
October	2,206	8,143	10,350
November	2,487	6,437	8,924
December	1,960	5,933	7,893
2020.--			
January	3,028	6,015	9,043
February	3,303	6,297	9,601
March	6,211	8,320	14,531
April	5,949	7,457	13,405
May	6,682	9,840	16,522

Source: Compiled from official U.S. import statistics for HTS statistical reporting numbers 7411.10.1030 and 7411.10.1090, accessed July 21, 2020.

Figure IV-2
SRC pipe and tube: U.S. import quantities, January 2017 to May 2020



Source: Compiled from official U.S. import statistics for HTS statistical reporting numbers 7411.10.1030 and 7411.10.1090, accessed July 8, 2020.

Negligibility

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.[3] Negligible imports are generally defined in the Act, as amended, as imports from a Vietnam of merchandise corresponding to a domestic like product where such imports account for less than 3 percent of the volume of all such merchandise imported into the United States in the most recent 12-month period for which data are available that precedes the filing of the petition or the initiation of the investigation. However, if there are imports of such merchandise from a number of countries subject to investigations initiated on the same day that individually account for less than 3 percent of the total volume of the subject merchandise, and if the imports from those countries collectively account for more than 7 percent of the volume of all such merchandise imported into the United States during the applicable 12-month period, then imports from such countries are deemed not to be negligible.[4] Imports from Vietnam

[3] Sections 703(a)(1), 705(b)(1), 733(a)(1), and 735(b)(1) of the Act (19 U.S.C. §§ 1671b(a)(1), 1671d(b)(1), 1673b(a)(1), and 1673d(b)(1)).

[4] Section 771 (24) of the Act (19 U.S.C § 1677(24)).

accounted for 37.3 percent of total imports of SRC pipe and tube by quantity from June 2019 through May 2020.

Table IV-5
SRC pipe and tube: U.S. imports in the twelve month period preceding the filing of the petition, June 2019 through May 2020

Item	June 2019 through May 2020	
	Quantity (1,000 pounds)	Share quantity (percent)
U.S. imports.--		
Vietnam	52,709	37.3
Nonsubject sources	88,655	62.7
All import sources	141,364	100.0

Source: Compiled from official U.S. import statistics for HTS statistical reporting numbers 7411.10.1030 and 7411.10.1090, accessed July 21, 2020.

Apparent U.S. consumption

Table IV-6 and figure IV-3 presents data on apparent U.S. consumption for SRC pipe and tube. Apparent U.S. consumption increased by *** percent from 2017 to 2018, then declined by *** percent from 2018 to 2019, for an overall increase of *** percent from 2017-19. Apparent consumption was *** percent higher in interim 2020 than in interim 2019.

Table IV-6
SRC pipe and tube: Apparent U.S. consumption, 2017-19, January to March 2019, and January to March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Quantity (1,000 pounds)				
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. imports.--					
Vietnam	34,470	40,377	44,629	8,192	12,543
Nonsubject sources	94,985	89,315	88,135	21,632	20,632
All import sources	129,456	129,692	132,764	29,824	33,175
Apparent U.S. consumption	***	***	***	***	***
	Value (1,000 dollars)				
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. imports.--					
Vietnam	113,731	142,996	151,776	28,695	41,217
Nonsubject sources	348,969	358,201	341,357	81,582	78,563
All import sources	462,700	501,197	493,133	110,276	119,780
Apparent U.S. consumption	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires and official U.S. import statistics for HTS statistical reporting numbers 7411.10.1030 and 7411.10.1090, accessed July 21, 2020.

Figure IV-3
SRC pipe and tube: Apparent consumption, 2017-19, January to March 2019, and January to March 2020

* * * * * * *

Source: Compiled from data submitted in response to Commission questionnaires and official U.S. import statistics for HTS statistical reporting numbers 7411.10.1030 and 7411.10.1090, accessed July 21, 2020.

U.S. market shares

U.S. market share data are presented in table IV-7. U.S. shipments of domestically produced SRC pipe and tube accounted for more than three-quarters of the U.S. market throughout the period for which data were collected. Market share held by U.S. producers increased by *** percent points from 2017 to 2018 and fell by *** percentage point from 2018 to 2019, for an overall increase of *** percentage points. Market share held by U.S. producers was *** percentage points lower in interim 2020 than in interim 2019.

Subject imports from Vietnam held less market share than U.S. producers or imports from nonsubject sources in all periods, yet steadily increased market share from 2017-19. Imports from Vietnam increased market share by *** percentage points from 2017 to 2018, and a further *** percentage points from 2018 to 2019; market share for imports from Vietnam was *** percentage points higher in interim 2020 than in interim 2019.

Market share held by imports from nonsubject sources decreased *** percentage points from 2017 to 2018, but increased *** percentage points from 2018 to 2019. Market share held by nonsubject imports was *** percentage points lower in interim 2020 than in interim 2019.

Table IV-7
SRC pipe and tube: Market shares, 2017-19, January to March 2019, and January to March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Quantity (1,000 pounds)				
Apparent U.S. consumption	***	***	***	***	***
	Share of quantity (percent)				
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. imports.-- Vietnam	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
	Value (1,000 dollars)				
Apparent U.S. consumption	***	***	***	***	***
	Share of value (percent)				
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. imports.-- Vietnam	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires and official U.S. import statistics for HTS statistical reporting numbers 7411.10.1030 and 7411.10.1090, accessed July 21, 2020.

Part V: Pricing data

Factors affecting prices

Raw material costs

The primary raw material used in the production of SRC pipe and tube is metallic copper, either in the form of copper cathodes ("primary copper") or scrap. 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]

Copper cathode accounted for *** percent of U.S. producers' raw material costs and copper scrap accounted for *** percent in 2019. As a share of cost of goods sold ("COGS"), the share of raw materials fluctuated slightly during 2017-19, increasing from *** percent in 2017 to *** percent in 2018, before decreasing to *** percent in 2019. All four responding U.S. producers and most importers (13 of 20 responding firms) reported that raw material prices fluctuated during 2017-19.[2] [3]

Copper scrap prices closely track copper cathode prices. As shown in figure V-1, copper cathode and scrap prices fluctuated but were relatively stable from January 2017 to December 2019, with cathode prices increasing by *** percent from *** to ***, and scrap prices increasing by *** percent from *** to ***. From January 2020-June 2020, prices for cathode decreased by *** percent to *** and scrap prices decreased by *** percent to ***.

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[1] *Seamless Refined Copper Pipe and Tube from China and Mexico, Inv. Nos. 731-TA-1174-1175 (Review),* USITC Publication 4650, November 2016, p. V-1.

[2] One importer reported raw material prices increased, three importers reported they decreased, and three importers reported no change in raw material prices.

[3] All four responding U.S. producers (Cambridge, Cerro, Golden Dragon, and Mueller) are also importers. Their responses to the U.S. producer and importer questionnaires are presented separately throughout this section, unless otherwise indicated.

Figure V-1
SRC pipe and tube: U.S copper cathode and scrap monthly prices, dollars per pound, January 2017 – June 2020

* * * * * * *

Note: Copper scrap is the No.1 scrap buying price delivered to refiners. The COMEX price is the copper high grade 1st active series.

Source: ***, retrieved July 13, 2020.

Transportation costs to the U.S. market

Transportation costs for SRC pipe and tube shipped from Vietnam to the United States averaged 2.2 percent in 2019. This estimate was derived from official import data and represents the transportation and other charges on imports.[4]

U.S. inland transportation costs

All four responding U.S. producers and half of responding importers (9 of 18) reported that they typically arrange transportation to their customers. All four responding U.S. producers reported that their U.S. inland transportation costs ranged from 1.0 to 5.0 percent while most importers reported costs of 2.0 to 5.0 percent.[5]

[4] Staff estimated transportation costs by subtracting the customs value from the c.i.f. value of the imports for 2019 and then dividing by the customs value based on the HTS statistical reporting numbers 7411.10.0030 and 7411.10.1090.

[5] Importer *** reported inland transportation costs of *** percent and *** reported *** percent.

Pricing practices

Pricing methods

Petitioner characterizes the overall U.S. market for SRC pipe and tube as having a "relatively high degree of price transparency."[6] Both U.S. producers and subject imports set SRC pipe and tube prices based on copper prices. U.S. producers typically use COMEX copper prices, while Vietnamese product may be indexed to London Metal Exchange ("LME") prices.[7] However, plumbing and commercial SRC pipe and tube have separate pricing methods.

According to petitioner, plumbing pipe and tube sales are spot sales based on a published price list, which is adjusted to account for "changes in copper cost and other market conditions," with competition for the sale based on a multiplier.[8] [9] The multiplier represents the level of discount off the set price list and that the multiplier "is the basis of competition among producers."[10] Petitioner explained that both domestic producers and subject importers' sales price is the list price adjusted by the negotiated multiplier.[11] Some producers, including Vietnamese suppliers, list their net prices without a multiplier.[12]

Petitioner stated that SRC pipe and tube for industrial or commercial applications are sold pursuant to annual contracts[13] and are sold directly to OEMs.[14] Prices are set on a fabrication charge and the copper metal cost. Competition for sales to industrial end users is based on the fabrication charge, as the metal cost is considered a pass-through to the customers.[15]

U.S. producers and importers reported setting prices using transaction-by-transaction negotiations, contracts, and set price lists (table V-1).

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[6] Petitioner's postconference brief, p. II-5.

[7] Petitioner's postconference brief, p. II-3.

[8] Statement of Devin Malone, Mueller, p. 3.

[9] The multiplier is not published and is communicated verbally to purchasers. Mueller's multiplier ranges from *** to ***. Petitioner's postconference brief, p. II-5.

[10] Petitioner's postconference brief, p. I-14, n. 39.

[11] Statement of Devin Malone, Mueller, p. 3, *see also* Petitioner's postconference brief, pp. II-3-II-4.

[12] Statement of Devin Malone, Mueller, p. 3.

[13] As shown below, responding importers reported *** were sold on the spot market in 2019.

[14] Statement of Devin Malone, Mueller, p. 3.

[15] Statement of Devin Malone, Mueller, p. 3; and Petitioner's postconference brief, p. I-14, n. 39.

Table V-1
SRC pipe and tube: U.S. producers' and importers' reported price setting methods, by number of responding firms

Method	U.S. producers	Importers
Transaction-by-transaction	4	14
Contract	4	8
Set price list	3	5
Other	---	2
Responding firms	4	19

Note: The sum of responses down 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.

U.S. producers reported selling the majority of their SRC pipe and tube in the spot market. Similarly, eight responding importers reported selling *** of their Vietnamese product in the spot market (table V-2).

Table V-2
SRC pipe and tube: U.S. producers' and importers' shares of U.S. commercial shipments by type of sale, 2019

Type of sale	U.S. producers	Subject importers
Long-term contracts	***	***
Annual contracts	***	***
Short-term contracts	***	***
Spot sales	***	***
Total	100.0	100.0

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

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

All four responding U.S. producers reported using annual contracts; *** reported selling through long-term contracts with an average duration of ***, respectively, and *** reported it used short-term contracts with an average contract duration of ***. Short-term, annual, and long-term contracts are not subject to price renegotiation and have a fixed price and quantity provision. *** reported that their prices are indexed to raw material prices and *** reported that its prices are not indexed to raw material prices.[16]

Sales terms and discounts

U.S. producers typically quote prices on both f.o.b. and delivered bases, and importers typically quote prices on a delivered basis. U.S. producer *** reports offering quantity and

[16] *** did not respond to the question, however, *** its prices are indexed to COMEX copper prices.

total volume discounts, *** reports offering quantity discounts and cash or promotional discounts, and *** reports it offered no discounts. U.S. producer *** reported quantity and total volume discounts.[17] Most importers (15 of 20) report offering no discounts, those that offer discounts offered quantity and total volume discounts.

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 SRC pipe and tube products shipped to unrelated U.S. customers during January 2017 to March 2020. According to the petition, products 1-2 are plumbing pipe and tube products priced on a coil basis and products 3-5 are commercial pipe and tube products priced on a pound basis.[18]

Product 1.-- Seamless refined copper pipe and tube, 3/8" OD, ACR/RST Coil, 50' Length

Product 2.-- Seamless refined copper pipe and tube, 3/4" OD, ACR/RST Coil, 50' Length

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

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

Three U.S. producers (***)[19] and one importer (***)[20] provided usable pricing data for sales of the requested products, although not all firms reported

[17] *** added that it sets its prices for plumbing tube based on a list price, multiplier, discount and volume rebate, while its commercial tube prices are set on a contract or transaction-by-transaction basis using the metal price and the cost of fabrication.

[18] Petition, p. 29.

[19] U.S. producer *** reported pricing data for *** for products 4 and 5. It indicated that its prices "may not include all discounts and rebates" and that its reported prices were delivered, not F.O.B. Its pricing data have not been incorporated in the tables and analysis below.

[20] Importer *** reported pricing data for *** quarters of data for product 1, totaling *** pieces, and *** quarters of data for product 2 totaling *** pieces. *** reported values were based on its import cost, and not shipment values. Its pricing data have not been incorporated in the tables and analysis below. Staff telephone interview with ***.

pricing for all products for all quarters.[21] No importers reported pricing data for products 3-5, SRC pipe and tube with industrial applications. Pricing data reported by these firms accounted for approximately 2.9 percent of the value of U.S. producers' shipments of SRC pipe and tube and 0.2 percent of the value of U.S. shipments of subject imports from Vietnam in 2019.[22]

Price data for products 1-5 are presented in tables V-3 to V-4b and figures V-2 to V-6.

Table V-3
SRC pipe and tube: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 and margins of underselling/(overselling), by quarter, January 2017 through March 2020

Period	United States		Vietnam		
	Price (dollars per piece)	Quantity (pieces)	Price (dollars per piece)	Quantity (pieces)	Margin (percent)
2017:					
Jan.-Mar.	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2018:					
Jan.-Mar.	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2019:					
Jan.-Mar.	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2020:					
Jan.-Mar.	***	***	***	***	***

Note: Product 1: Seamless refined copper pipe and tube, 3/8" OD, ACR/RST Coil, 50' Length.

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

[21] 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.

[22] Petitioner noted that the pricing data has limited coverage as importer questionnaires accounted for only a fraction of subject imports and do not include responses from the largest importers including ***. Petitioner's postconference brief, pp. I-18-19.

Table V-4a
SRC pipe and tube: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 and margins of underselling/(overselling), by quarter, January 2017 through March 2020

Period	United States		Vietnam		
	Price (dollars per piece)	Quantity (pieces)	Price (dollars per piece)	Quantity (pieces)	Margin (percent)
2017: Jan.-Mar.	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2018: Jan.-Mar.	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2019: Jan.-Mar.	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2020: Jan.-Mar.	***	***	***	***	***

Note: Product 2: Seamless refined copper pipe and tube, 3/4" OD, ACR/RST Coil, 50' Length.

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

Table V-4b
SRC pipe and tube: Weighted-average f.o.b. prices and quantities of domestic product 3-5, by quarter, January 2017 through March 2020

Period	United States Product 3		United States Product 4		United States Product 5	
	Price (dollars per pound)	Quantity (pounds)	Price (dollars per pound)	Quantity (pounds)	Price (dollars per pound)	Quantity (pounds)
2017:						
Jan.-Mar.	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***
2018:						
Jan.-Mar.	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***
2019:						
Jan.-Mar.	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***
2020:						
Jan.-Mar.	***	***	***	***	***	***

Note: Product 3.-- Seamless refined copper pipe and tube, 3/8" OD, Inner-Grooved LWC, 0.0110" 0.0144" bottom wall thickness.

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.

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

Figure V-2
SRC pipe and tube: Weighted-average prices and quantities of domestic and imported product 1, by quarter, January 2017 through March 2020

* * * * * * *

* * * * * * *

Product 1: Seamless refined copper pipe and tube, 3/8" OD, ACR/RST Coil, 50' Length.

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

Figure V-3
SRC pipe and tube: Weighted-average prices and quantities of domestic and imported product 2, by quarter, January 2017 through March 2020

* * * * * * *

* * * * * * *

Product 2: Seamless refined copper pipe and tube, 3/4" OD, ACR/RST Coil, 50' Length.

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

Figure V-4
SRC pipe and tube: Weighted-average prices and quantities of domestic product 3, by quarter, January 2017 through March 2020

* * * * * * *

* * * * * * *

Product 3.-- 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.

Figure V-5
SRC pipe and tube: Weighted-average prices and quantities of domestic product 4, by quarter, January 2017 through March 2020

* * * * * * *

* * * * * * *

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.

Figure V-6
SRC pipe and tube: Weighted-average prices and quantities of domestic product 5, by quarter, January 2017 through March 2020

* * * * * * *

* * * * * * *

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.

Price trends

In general, prices were relatively stable during January 2017 through March 2020. Table V-5 summarizes the price trends, by country and by product. As shown in the table, domestic price increases ranged from *** to *** percent during 2017-March 2020, and price decreases ranged from *** to *** percent. Indexed U.S. producer prices show a slight fluctuation in prices of products 1-5 over the period, but prices of domestic product were similar in March 2020 to prices in January 2017 (figure V-7). There were too few quarters of price data for U.S. imports from Vietnam to constitute a price trend.

Table V-5
SRC pipe and tube: Summary of weighted-average f.o.b. prices for products 1-5 from the United States and Vietnam

Item	Number of quarters	Low price (dollars per piece)	High price (dollars per piece)	Change in price over period (percent)
Product 1:				
United States	***	***	***	***
Vietnam	***	***	***	***
Product 2:				
United States	***	***	***	***
Vietnam	***	***	***	***
Item	**Number of quarters**	**Low price (dollars per pound)**	**High price (dollars per pound)**	**Change in price over period[1] (percent)**
Product 3:				
United States	***	***	***	***
Vietnam	***	***	***	***
Product 4:				
United States	***	***	***	***
Vietnam	***	***	***	***
Product 5:				
United States	***	***	***	***
Vietnam	***	***	***	***

Note: Percentage change from the first quarter in which data were available to the last quarter in which price data were available.

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

Figure V-7
SRC pipe and tube: Indexed U.S. producer prices, January 2017 through March 2020

* * * * * * *

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

Price comparisons

As shown in table V-6, prices for product imported from Vietnam were below those for U.S.-produced product in 4 of 5 instances (*** pieces); margins of underselling ranged from *** to *** percent. In the one instance of overselling (*** pieces), the margin of overselling was *** percent.

Table V-6
SRC pipe and tube: Instances of underselling/overselling and the range and average of margins, by country, January 2017 through March 2020

Source	Underselling				
	Number of quarters	Quantity (pieces)	Average margin (percent)	Margin range (percent)	
				Min	Max
Product 1	2	***	***	***	***
Product 2	2	***	***	***	***
Total, underselling	4	***	***	***	***
Source	**(Overselling)**				
	Number of quarters	Quantity (pieces)	Average margin (percent)	Margin range (percent)	
				Min	Max
Product 1	1	***	***	***	***
Total, overselling	1	***	***	***	***

Note: These data include only quarters in which there is a comparison between the U.S. and subject product. No importers reported price data for products 3-5.

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

Lost sales and lost revenue

The Commission requested that U.S. producers of SRC pipe and tube report purchasers with which they experienced instances of lost sales or revenue due to competition from imports of SRC pipe and tube from Vietnam since 2017. *** reported that they had to reduce prices and had lost sales, and *** reported it had to roll back announced price increases. *** submitted lost sales and lost revenue allegations, in which they identified 32 firms with which they lost sales or revenue (2 consisting of lost revenue allegations, and 30 consisting of both types of allegations). *** alleged lost revenues of more than *** in 2020[23] and *** did not provide any information on the timing or method of sale in their allegations.

Staff contacted 29 purchasers and received responses from 8 purchasers.[24] [25] Responding purchasers reported purchasing 86.3 million pounds of SRC pipe and tube during 2017-19 (table V-7).[26]

[23] *** also alleged lost revenues of more than *** for sales for 2020-2022.

[24] ***. It included *** additional purchasers not identified by ***.

[25] Identified purchasers *** reported that they had not purchased SRC copper and pipe since January 2017.

[26] No firms reported importing SRC pipe and tube.

During 2019, responding purchasers purchased *** percent of their purchases from U.S. producers, *** percent from Vietnam, and *** percent from "unknown source" countries.[27] [28] Purchasers were asked about changes in their purchasing patterns from different sources since 2017. Of the five responding purchasers, two reported no change in purchases from domestic producers, one reported increasing purchases, one reported decreasing purchases, and one did not purchase any domestic product.[29] Explanations for decreasing purchases of domestic product included better prices on Vietnamese product (***).[30]

Table V-7
SRC pipe and tube: Purchasers' reported purchases and imports, 2017-19

Purchaser	Purchases and imports in 2017-19 (1,000 pounds)			Change in domestic share (pp, 2017-19)	Change in subject country share (pp, 2017-19)
	Domestic	Subject	All other		
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Total	***	***	***	***	***

Note: All other includes all other sources and unknown sources.
Note: Percentage points (pp) change: Change in the share of the firm's total purchases of domestic and/or subject country imports between first and last years.

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

Of the five responding purchasers, two reported that, since 2017, they had purchased imported SRC pipe and tube from Vietnam instead of U.S.-produced product. Both of these purchasers reported that subject import prices were lower than U.S.-produced product, and both of these purchasers reported that price was a primary reason for the decision to purchase imported product rather than U.S.-produced product. Both purchasers estimated the quantity of SRC pipe and tube from Vietnam purchased instead of domestic product; quantities ranged from *** pounds to *** pounds (table V-8).

Of the five responding purchasers, one purchaser reported that U.S. producers had not reduced prices in order to compete with lower-priced imports from Vietnam; four reported that

[27] No purchasers reported purchases of SRC pipe and tube from nonsubject sources.
[28] The largest responding purchaser, ***, is a ***.
[29] One of the five responding purchasers indicated that it did not know the source of the SRC pipe and tube it purchased.
[30] Purchaser *** did not explain why its domestic purchases had increased.

they did not know if domestic producers had reduced prices to compete with Vietnamese product.

Table V-8
SRC pipe and tube: Purchasers' responses to purchasing subject imports instead of domestic product

Purchaser	Subject imports purchased instead of domestic (Y/N)	Imports priced lower (Y/N)	If purchased subject imports instead of domestic, was price a primary reason		
			Y/N	If Yes, quantity (1,000 pounds)	If No, non-price reason
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Total	Yes--2; No--3	Yes--2; No--0	Yes--2; No--0	***	

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

In responding to the lost sales lost revenue survey, one purchaser provided additional information on purchases and market dynamics. Purchaser *** reported that market prices had dropped 18 percent or more due to SRC pipe and tube from Vietnam. It also reported that it had "lost a fair amount of business" as it would "not entertain" SRC pipe and tube at those prices.[31]

[31] *** reported that it did not know if U.S. producers had reduced prices to compete with SRC pipe and tube from Vietnam.

Part VI: Financial experience of U.S. producers

Background

Four firms provided usable financial results on their operations related to SRC pipe and tube.[1] In 2019, Cambridge accounted for *** percent of the U.S. producers' net sales by quantity, Cerro accounted for *** percent, GD Copper accounted for *** percent, and Mueller accounted for *** percent.[2] Net sales consisted primarily of commercial sales. Internal consumption and transfers to related firms were reported by several firms, and accounted for *** percent of total net sales quantity during the period for which data were requested.[3] Non-commercial sales are included but not shown separately in this section of the report.

Operations on SRC pipe and tube

Income-and-loss data for U.S. producers' SRC pipe and tube operations are presented in table VI-1. Table VI-2 presents corresponding changes in average per 1,000 pound values ("AUVs"). Table VI-3 presents selected company-specific financial data.

[1] All responding U.S. producers reported financial data on the basis of generally accepted accounting principles ("GAAP"), and all responding U.S. producers provided their financial data on a calendar year (or essentially equivalent) basis.

[2] By value, Cambridge accounted for *** percent, Cerro accounted for *** percent, GD Copper accounted for *** percent, and Mueller accounted for *** percent in 2019.

[3] *** reported transfers to related firms. *** reported a small amount of internal consumption and *** also reported a small amount of tolling activity as internal consumption. Email from ***, July 19, 2020. Internal consumption represented *** percent of total net sales quantity during the period for which data were requested.

Table VI-1
SRC pipe and tube: Results of operations of U.S. producers, 2017-19, January-March 2019, and January-March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Quantity (1,000 pounds)				
Total net sales	***	***	***	***	***
	Value (1,000 dollars)				
Total net sales	***	***	***	***	***
Cost of goods sold.-- Raw materials	***	***	***	***	***
Direct labor	***	***	***	***	***
Other factory costs	***	***	***	***	***
Less: by-product revenue	***	***	***	***	***
Total COGS	***	***	***	***	***
Gross profit	***	***	***	***	***
SG&A expense	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***
Other expenses/(income), net	***	***	***	***	***
Net income or (loss)	***	***	***	***	***
Depreciation/amortization	***	***	***	***	***
Cash flow	***	***	***	***	***
	Ratio to net sales (percent)				
Cost of goods sold.-- Raw materials	***	***	***	***	***
Direct labor	***	***	***	***	***
Other factory costs	***	***	***	***	***
Less: by-product revenue	***	***	***	***	***
Average COGS	***	***	***	***	***
Gross profit	***	***	***	***	***
SG&A expense	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***
Net income or (loss)	***	***	***	***	***

Table continued on next page.

Table VI-1—Continued
SRC pipe and tube: Results of operations of U.S. producers, 2017-19, January-March 2019, and January-March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Ratio to total COGS before by-product revenue offset (percent)				
Cost of goods sold.-- Raw materials	***	***	***	***	***
Direct labor	***	***	***	***	***
Other factory costs	***	***	***	***	***
Average COGS	***	***	***	***	***
	Unit value (dollars per 1,000 pounds)				
Total net sales	***	***	***	***	***
Cost of goods sold.-- Raw materials	***	***	***	***	***
Direct labor	***	***	***	***	***
Other factory costs	***	***	***	***	***
Less: by-product revenue	***	***	***	***	***
Average COGS	***	***	***	***	***
Gross profit	***	***	***	***	***
SG&A expense	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***
Net income or (loss)	***	***	***	***	***
	Number of firms reporting				
Operating losses	***	***	***	***	***
Net losses	***	***	***	***	***
Data	***	***	***	***	***

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

Table VI-2
SRC pipe and tube: Changes in AUVs between calendar years and partial-year periods

Item	Between calendar years			January to March
	2017-19	2017-18	2018-19	2019-20
	Change in AUVs (percent)			
Total net sales	***	***	***	***
Cost of goods sold.-- Raw materials	***	***	***	***
Direct labor	***	***	***	***
Other factory costs	***	***	***	***
Less: by-product revenue	***	***	***	***
Average COGS	***	***	***	***
	Change in AUVs (dollars per 1,000 pounds)			
Total net sales	***	***	***	***
Cost of goods sold.-- Raw materials	***	***	***	***
Direct labor	***	***	***	***
Other factory costs	***	***	***	***
Less: by-product revenue	***	***	***	***
Average COGS	***	***	***	***
Gross profit	***	***	***	***
SG&A expense	***	***	***	***
Operating income or (loss)	***	***	***	***
Net income or (loss)	***	***	***	***

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

Table VI-3
SRC pipe and tube: Select results of operations of U.S. producers, by company, 2017-19, January-March 2019, and January-March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Total net sales (1,000 pounds)				
Cambridge	***	***	***	***	***
Cerro	***	***	***	***	***
GD Copper	***	***	***	***	***
Mueller	***	***	***	***	***
All firms	***	***	***	***	***
	Total net sales (1,000 dollars)				
Cambridge	***	***	***	***	***
Cerro	***	***	***	***	***
GD Copper	***	***	***	***	***
Mueller	***	***	***	***	***
All firms	***	***	***	***	***
	Cost of goods sold (1,000 dollars)				
Cambridge	***	***	***	***	***
Cerro	***	***	***	***	***
GD Copper	***	***	***	***	***
Mueller	***	***	***	***	***
All firms	***	***	***	***	***
	Gross profit or (loss) (1,000 dollars)				
Cambridge	***	***	***	***	***
Cerro	***	***	***	***	***
GD Copper	***	***	***	***	***
Mueller	***	***	***	***	***
All firms	***	***	***	***	***
	SG&A expenses (1,000 dollars)				
Cambridge	***	***	***	***	***
Cerro	***	***	***	***	***
GD Copper	***	***	***	***	***
Mueller	***	***	***	***	***
All firms	***	***	***	***	***

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Table VI-3—Continued
SRC pipe and tube: Select results of operations of U.S. producers, by company, 2017-19, January-March 2019, and January-March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Operating income or (loss) (1,000 dollars)				
Cambridge	***	***	***	***	***
Cerro	***	***	***	***	***
GD Copper	***	***	***	***	***
Mueller	***	***	***	***	***
All firms	***	***	***	***	***
	Net income or (loss) (1,000 dollars)				
Cambridge	***	***	***	***	***
Cerro	***	***	***	***	***
GD Copper	***	***	***	***	***
Mueller	***	***	***	***	***
All firms	***	***	***	***	***
	COGS to net sales ratio (percent)				
Cambridge	***	***	***	***	***
Cerro	***	***	***	***	***
GD Copper	***	***	***	***	***
Mueller	***	***	***	***	***
All firms	***	***	***	***	***
	Gross profit or (loss) to net sales (percent)				
Cambridge	***	***	***	***	***
Cerro	***	***	***	***	***
GD Copper	***	***	***	***	***
Mueller	***	***	***	***	***
All firms	***	***	***	***	***
	SG&A expense to net sales (percent)				
Cambridge	***	***	***	***	***
Cerro	***	***	***	***	***
GD Copper	***	***	***	***	***
Mueller	***	***	***	***	***
All firms	***	***	***	***	***

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Table VI-3—Continued
SRC pipe and tube: Select results of operations of U.S. producers, by company, 2017-19, January-March 2019, and January-March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Operating income or (loss) to net sales (percent)				
Cambridge	***	***	***	***	***
Cerro	***	***	***	***	***
GD Copper	***	***	***	***	***
Mueller	***	***	***	***	***
All firms	***	***	***	***	***
	Net income or (loss) to net sales (percent)				
Cambridge	***	***	***	***	***
Cerro	***	***	***	***	***
GD Copper	***	***	***	***	***
Mueller	***	***	***	***	***
All firms	***	***	***	***	***
	Unit net sales value (dollars per 1,000 pounds)				
Cambridge	***	***	***	***	***
Cerro	***	***	***	***	***
GD Copper	***	***	***	***	***
Mueller	***	***	***	***	***
All firms	***	***	***	***	***
	Unit raw materials (dollars per 1,000 pounds)				
Cambridge	***	***	***	***	***
Cerro	***	***	***	***	***
GD Copper	***	***	***	***	***
Mueller	***	***	***	***	***
All firms	***	***	***	***	***
	Unit conversion value (dollars per 1,000 pounds)				
Cambridge	***	***	***	***	***
Cerro	***	***	***	***	***
GD Copper	***	***	***	***	***
Mueller	***	***	***	***	***
All firms	***	***	***	***	***

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Table VI-3—Continued
SRC pipe and tube: Select results of operations of U.S. producers, by company, 2017-19, January-March 2019, and January-March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Unit direct labor (dollars per 1,000 pounds)				
Cambridge	***	***	***	***	***
Cerro	***	***	***	***	***
GD Copper	***	***	***	***	***
Mueller	***	***	***	***	***
All firms	***	***	***	***	***
	Unit other factory costs (dollars per 1,000 pounds)				
Cambridge	***	***	***	***	***
Cerro	***	***	***	***	***
GD Copper	***	***	***	***	***
Mueller	***	***	***	***	***
All firms	***	***	***	***	***
	Unit COGS (dollars per 1,000 pounds)				
Cambridge	***	***	***	***	***
Cerro	***	***	***	***	***
GD Copper	***	***	***	***	***
Mueller	***	***	***	***	***
All firms	***	***	***	***	***
	Unit gross profit or (loss) (dollars per 1,000 pounds)				
Cambridge	***	***	***	***	***
Cerro	***	***	***	***	***
GD Copper	***	***	***	***	***
Mueller	***	***	***	***	***
All firms	***	***	***	***	***
	Unit SG&A expenses (dollars per 1,000 pounds)				
Cambridge	***	***	***	***	***
Cerro	***	***	***	***	***
GD Copper	***	***	***	***	***
Mueller	***	***	***	***	***
All firms	***	***	***	***	***

Table continued on next page.

Table VI-3—Continued
SRC pipe and tube: Select results of operations of U.S. producers, by company, 2017-19, January-March 2019, and January-March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Unit operating income or (loss) (dollars per 1,000 pounds)				
Cambridge	***	***	***	***	***
Cerro	***	***	***	***	***
GD Copper	***	***	***	***	***
Mueller	***	***	***	***	***
All firms	***	***	***	***	***
	Unit net income or (loss) (dollars per 1,000 pounds)				
Cambridge	***	***	***	***	***
Cerro	***	***	***	***	***
GD Copper	***	***	***	***	***
Mueller	***	***	***	***	***
All firms	***	***	***	***	***

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

Net sales

As shown in table VI-1, total net sales quantity and value irregularly increased from 2017 to 2019, increasing by *** percent by quantity and by *** percent by value during this time. Total net sales quantity was higher in January-March 2020 ("interim 2020") than in January-March 2019 ("interim 2019"), while total net sales value was slightly lower in interim 2020 than in interim 2019. In contrast to total net sales, average unit net sales values irregularly declined from $*** per 1,000 pounds in 2017 to $*** per 1,000 pounds in 2019, and were also lower in interim 2020 than in interim 2019. The overall decline in average unit values reflects the smaller increase in total net sales value compared to total net sales quantity during the three full years, and the higher quantity and corresponding lower value in interim 2020 compared to interim 2019.

Cost of goods sold and gross profit or (loss)

As shown in table VI-1, the average cost of goods sold ("COGS") to net sales ratio irregularly declined from *** percent in 2017 to *** percent in 2019 and was lower in interim 2020 than in interim 2019.

Raw material costs were the largest component of COGS throughout the period for which data were requested, and accounted for between *** and *** percent of total COGS. Raw material costs per 1,000 pounds irregularly declined from $*** in 2017 to $*** in 2019, and were lower in interim 2020 than in interim 2019, with *** firms exhibiting

similar trends in per unit raw material costs. Table VI-4 presents a break-out of the raw material costs, by type, for 2019.[4] [5] [6]

Table VI-4
SRC pipe and tube: U.S. producers' raw materials, by type, 2019

Raw materials	Calendar 2019		
	Value (1,000 dollars)	Unit value (dollars per 1,000 pounds)	Share of value (percent)
Cathode copper	***	***	***
Copper ingot	***	***	***
Copper scrap	***	***	***
Other material inputs	***	***	***
Total raw materials	***	***	***

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

Direct labor costs accounted for between *** and *** percent of total COGS during the period for which data were requested, and other factory costs accounted for between *** and *** percent of total COGS during this time. Direct labor costs per 1,000 pounds increased from $*** in 2017 to $*** in 2019 and were lower in interim 2020 than in interim 2019. Other factory costs per 1,000 pounds increased from $*** in 2017 to $*** in 2019 and were lower in interim 2020 compared to interim 2019. Individual firms exhibited mixed trends in per unit direct labor and other factory costs.

Scrap/by-product revenue, consisting primarily of slag produced during the production of SRC pipe and tube, represented just *** percent of total revenue (net sales value plus by-product revenue) during the period for which data were requested.

[4] *** firms identified phosphorous copper as a notable "other material input." U.S. producers' questionnaire responses, question III-9c.

[5] *** firms reported that they actively manage copper costs. U.S. producers' questionnaire responses, question III-9d; emails from ***, July 19, 2020.

[6] According to the Petitioner, per-unit conversion values (per-unit net sales values minus per-unit raw material costs) are a relevant measure of financial performance because U.S. producers typically pass through copper costs to their customers. Postconference brief of Petitioner, Answers to Staff Questions, p. II-6. As shown in table VI-3, the average conversion value irregularly increased from $*** per 1,000 pounds in 2017 to $*** per 1,000 pounds in 2019. The average conversion value was also higher in interim 2020 than in interim 2019. Firms exhibited mixed trends in conversion value for the three full years; however *** had a higher per unit conversion value in interim 2020 than in interim 2019 ***.

From 2017 to 2019, the overall increase in net sales value was greater than the increase in COGS, thus gross profit improved from $*** in 2017 to $*** in 2019 and also increased on a per unit basis and as a ratio to net sales. Gross profit was higher in interim 2020 compared to interim 2019 due to the greater decline in COGS compared to revenue. [7]

SG&A expenses and operating income

Total SG&A expenses increased from $*** in 2017 to $*** in 2019, and were higher in interim 2020 than in interim 2019. The SG&A expense ratio (SG&A expenses as a share of net sales) irregularly increased from *** percent in 2017 to *** percent in 2019, and was higher in interim 2020 than in interim 2019.[8]

Due to the increased SG&A expenses and in contrast to gross profit, operating income irregularly declined from $*** in 2017 to $*** in 2019. Operating income was higher in interim 2020 than in interim 2019. The operating income margins (operating income as a share of net sales) irregularly declined from *** percent in 2017 to *** percent in 2019, and were *** percent in interim 2019 and *** percent in interim 2020. [9]

[7] Although gross profit improved overall for the three full years, it declined from 2018 to 2019 as net sales value declined more than COGS. The aggregate trends in gross profit are ***. *** firms reported higher gross profit in interim 2020 compared to interim 2019.

[8] ***. Emails from ***, July 19, 2020, and July 30, 2020.

[9] Although operating income declined overall for the three full years, it notably increased from 2017 to 2018 as net sales value increased more than operating costs (COGS and SG&A expenses, combined). *** firms reported generally similar trends to the aggregate results in operating income from 2017 to 2019; however, *** reported improved operating income during this time. *** firms reported higher operating income in interim 2020 than in interim 2019. ***. Email from ***, August 3, 2020.

Other expenses and net income

Classified below the operating income level are interest expense, other expense, and other income. In table VI-1, these items are aggregated and only the net amount is shown. The net amount increased from 2017 to 2019 and was lower in interim 2020 than in interim 2019. Over *** percent of this net amount is interest expense. Net other expenses/income represented just *** percent of total costs and expenses during the period for which data were requested.

On an overall basis and similar to the trend in operating income, net income irregularly declined from $*** in 2017 to $*** in 2019 but was higher in interim 2020 than in interim 2019 (***). The net income margins (net income as a share of net sales) irregularly declined from *** percent in 2017 to *** percent in 2019, and were *** percent in interim 2019 and *** percent in interim 2020.[10]

[10] Similar to operating income, ***. *** firms reported higher net income in interim 2020 compared to interim 2019.

Variance analysis

The variance analysis presented in table VI-5 is based on the data in table VI-1.[11]

Table VI-5

SRC pipe and tube: Variance analysis for U.S. producers, between calendar years and between partial year periods

Item	Between calendar years			January to March
	2017-19	2017-18	2018-19	2019-20
	Value (1,000 dollars)			
Net sales:				
Price variance	***	***	***	***
Volume variance	***	***	***	***
Net sales variance	***	***	***	***
COGS:				
Cost variance	***	***	***	***
Volume variance	***	***	***	***
COGS variance	***	***	***	***
Gross profit variance	***	***	***	***
SG&A expenses:				
Cost/expense variance	***	***	***	***
Volume variance	***	***	***	***
Total SG&A expense variance	***	***	***	***
Operating income variance	***	***	***	***
Summarized (at the operating income level) as:				
Price variance	***	***	***	***
Net cost/expense variance	***	***	***	***
Net volume variance	***	***	***	***

Note.--Unfavorable variances are shown in parenthesis; all others are favorable.

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

[11] 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 variance (in the case of the COGS and SG&A expense variance), and a volume variance. The sales or cost variance is calculated as the change in unit price or unit cost/expense times the new volume, while the volume variance is calculated as the change in volume times the old unit price or unit cost. 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 expense variances, respectively, and the volume variance is the sum of the volume components of the net sales, COGS, and SG&A expense variances.

Capital expenditures, research and development expenses, total assets, and return on assets

Table VI-6 presents the U.S. producers' capital expenditures, research and development ("R&D") expenses, total assets, and return on assets ("ROA").[12] Table VI-7 provides the producers' narrative responses regarding the nature and focus of their capital expenditures and R&D expenses as well as descriptions of and/or substantial changes in assets.

Table VI-6
SRC pipe and tube: Capital expenditures, R&D expenses, total assets, and ROA for U.S. producers, 2017-19, January-March 2019, and January-March 2020.

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Value (1,000 dollars)				
Capital expenditures	***	***	***	***	***
R&D expenses	***	***	***	***	***
Total assets	***	***	***		
	Percent				
ROA	***	***	***		

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

[12] The return on assets is calculated as operating income divided by total assets. With respect to a firm's overall operations, the total asset value reflects an aggregation of a number of assets which are generally not product specific. Thus, high-level allocations are generally required in order to report a total asset value for the subject product.

Table VI-7

SRC pipe and tube: Narrative descriptions of U.S. producers' capital expenditures, R&D expenses, and assets, since January 1, 2017

Capital expenditures nature and focus:	
Firm	**Narrative**
***	***
***	***
***	***
***	***
R&D expenses nature and focus:	
Firm	**Narrative**
***	***
Assets description:	
Firm	**Narrative**
***	***
***	***
***	***
***	***

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

Capital and investment

The Commission requested U.S. producers of SRC pipe and tube to describe any actual or potential negative effects of imports of SRC pipe and tube from Vietnam on their firms' growth, investment, ability to raise capital, development and production efforts, or the scale of capital investments. Table VI-8 presents the number of firms reporting an impact in each category and table VI-9 provides the U.S. producers' narrative responses.

Table VI-8
SRC pipe and tube: Actual and anticipated negative effects of imports on investment and growth and development

Item	No	Yes
Negative effects on investment	1	3
Cancellation, postponement, or rejection of expansion projects		***
Denial or rejection of investment proposal		***
Reduction in the size of capital investments		***
Return on specific investments negatively impacted		***
Other		***
Negative effects on growth and development	2	2
Rejection of bank loans		***
Lowering of credit rating		***
Problem related to the issue of stocks or bonds		***
Ability to service debt		***
Other		***
Anticipated negative effects of imports	0	4

Note.—***.

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

Table VI-9
SRC pipe and tube: Narratives relating to actual and anticipated negative effects of imports on investment and growth and development, since January 1, 2017

Item / Firm	Narrative
Cancellation, postponement, or rejection of expansion projects:	
***	***
Reduction in the size of capital investments:	
***	***
***	***
Return on specific investments negatively impacted:	
***	***
***	***
Other negative effects on investments:	
***	***
Other effects on growth and development:	
***	***
***	***
Anticipated effects of imports:	
***	***
***	***
***	***
***	***

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

Part VII: Threat considerations and information on nonsubject countries

Section 771(7)(F)(i) of the Act (19 U.S.C. § 1677(7)(F)(i)) provides that—

> *In determining whether an industry in the United States is threatened with material injury by reason of imports (or sales for importation) of the subject merchandise, the Commission shall consider, among other relevant economic factors*[1]*--*
>
> *(I) if a countervailable subsidy is involved, such information as may be presented to it by the administering authority as to the nature of the subsidy (particularly as to whether the countervailable subsidy is a subsidy described in Article 3 or 6.1 of the Subsidies Agreement), and whether imports of the subject merchandise are likely to increase,*
>
> *(II) any existing unused production capacity or imminent, substantial increase in production capacity in the exporting country indicating the likelihood of substantially increased imports of the subject merchandise into the United States, taking into account the availability of other export markets to absorb any additional exports,*
>
> *(III) a significant rate of increase of the volume or market penetration of imports of the subject merchandise indicating the likelihood of substantially increased imports,*
>
> *(IV) whether imports of the subject merchandise are entering at prices that are likely to have a significant depressing or suppressing effect on domestic prices, and are likely to increase demand for further imports,*
>
> *(V) inventories of the subject merchandise,*

[1] Section 771(7)(F)(ii) of the Act (19 U.S.C. § 1677(7)(F)(ii)) provides that "The Commission shall consider {these factors} . . . as a whole in making a determination of whether further dumped or subsidized imports are imminent and whether material injury by reason of imports would occur unless an order is issued or a suspension agreement is accepted under this title. The presence or absence of any factor which the Commission is required to consider . . . shall not necessarily give decisive guidance with respect to the determination. Such a determination may not be made on the basis of mere conjecture or supposition."

(VI) 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,

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

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

(IX) any other demonstrable adverse trends that indicate the probability that there is likely to be material injury by reason of imports (or sale for importation) of the subject merchandise (whether or not it is actually being imported at the time).[2]

Information on the volume and pricing of imports of the subject merchandise is presented in *Parts IV* and *V*; and information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts is presented in *Part VI*. Information on inventories of the subject merchandise; foreign producers' operations, including the potential for "product-shifting;" any other threat indicators, if applicable; and any dumping in third-country markets, follows. Also presented in this section of the report is information obtained for consideration by the Commission on nonsubject countries.

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

The industry in Vietnam

The Commission issued foreign producers' or exporters' questionnaires to five firms believed to produce and/or export SRC pipe and tube from Vietnam.[3] Despite repeated efforts by staff to reach all firms,[4] no firm returned a response to the Commission's questionnaire.

According to the petitioner, the SRC pipe and tube industry in Vietnam has substantial production capacity and has increased production capacity in recent years. Hailiang, the petitioner claims, shifted production from China to Vietnam in 2010 following the imposition of antidumping duties on Chinese SRC pipe and tube, establishing a copper tube plant with 71,000 metric tons of capacity. Similarly, JinTian (another Chinese-owned company) reportedly installed 30,000 metric tons of copper tube capacity in 2018. Petitioner also reports that Ruby Copper recently announced the completion of a second manufacturing plant with a capacity of 50,000 metric tons. The petitioner believes that Vietnamese producers have the capacity to supply more than 100 percent of total U.S. demand for copper tube.[5]

Exports

According to GTA, the leading export markets for refined copper pipe and tube (including products outside of the scope of this investigation) from Vietnam are India, the United States, and China (table VII-1).[6] During 2019, exports to India under HS subheading 7411.10 accounted for 39.6 percent of Vietnam's exports of copper pipe and tube, exports to the United States accounted for 20.9 percent, and exports to China accounted for 15.7 percent.

[3] These firms were identified through a review of information submitted in the petition.

[4] Staff in particular received assurances from Hailiang's U.S.-based office that questionnaires would be forthcoming, however the firm did not provide responses in this preliminary phase and informed staff that Hailiang would cooperate in the final phase. Commission staff email with ***, Hailiang America Corporation, July 22, 2020.

[5] Petition, pp. 32-33.

[6] All refined copper pipe and tube are classified in HS subheading 7411.10, including products that fall outside of the scope of this investigation because they do not meet the product dimensions described in the scope and/or because the pipe and tube are welded (not seamless).

Table VII-1
Tubes and pipes of refined copper: Exports from Vietnam by destination market, 2017-19

Destination market	Calendar year		
	2017	2018	2019
	Quantity (1,000 pounds)		
United States	34,496	40,418	44,652
India	51,851	59,282	84,558
China	22,338	25,101	33,483
Korea	6,956	9,337	10,672
United Kingdom	5,944	6,885	10,008
Brazil	3,969	4,744	6,115
Italy	2,883	5,764	5,108
Australia	6,405	5,919	4,466
Thailand	4,149	1,609	4,390
All other destination markets	2,996	7,174	10,334
All destination markets	141,987	166,233	213,787
	Value (1,000 dollars)		
United States	109,402	138,110	146,513
India	163,143	204,574	269,922
China	56,826	71,722	88,032
Korea	21,339	31,412	33,251
United Kingdom	18,814	23,248	30,976
Brazil	12,454	16,866	20,159
Italy	8,929	19,110	15,713
Australia	23,720	23,638	17,138
Thailand	13,006	5,524	13,486
All other destination markets	9,147	25,247	33,183
All destination markets	436,781	559,450	668,373

Table continued.

Table VII-1--Continued
Tubes and pipes of refined copper: Exports from Vietnam by destination market, 2017-19

Destination market	Calendar year		
	2017	2018	2019
	Unit value (dollars per 1,000 pounds)		
United States	3,171	3,417	3,281
India	3,146	3,451	3,192
China	2,544	2,857	2,629
Korea	3,068	3,364	3,116
United Kingdom	3,165	3,376	3,095
Brazil	3,138	3,555	3,296
Italy	3,097	3,315	3,076
Australia	3,703	3,993	3,837
Thailand	3,134	3,433	3,072
All other destination markets	3,053	3,519	3,211
All destination markets	3,076	3,365	3,126
	Share of quantity (percent)		
United States	24.3	24.3	20.9
India	36.5	35.7	39.6
China	15.7	15.1	15.7
Korea	4.9	5.6	5.0
United Kingdom	4.2	4.1	4.7
Brazil	2.8	2.9	2.9
Italy	2.0	3.5	2.4
Australia	4.5	3.6	2.1
Thailand	2.9	1.0	2.1
All other destination markets	2.1	4.3	4.8
All destination markets	100.0	100.0	100.0

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. United States is shown at the top, all remaining top import destinations shown in descending order of 2019 data.

Source: Official imports statistics under HS subheading 7411.10 reported by various national statistical authorities in the Global Trade Atlas database, accessed July 7, 2020 and official global exports statistics from Vietnam under HS subheading 7411.10 as reported by various national statistical authorities in the Global Trade Atlas database, accessed July 7, 2020.

U.S. inventories of imported merchandise

Table VII-2 presents data on U.S. importers' reported inventories of SRC pipe and tube. Inventories of imports from Vietnam increased overall by *** percent between 2017 and 2019.[7] Inventories of imports from Vietnam were *** percent lower in interim 2020 than in interim 2019. Inventories of imports from nonsubject sources increased steadily between 2017 and 2019 by *** percent. Such inventories also were *** percent higher in interim 2020 than in interim 2019.

Table VII-2
SRC pipe and tube: U.S. importers' end-of-period inventories of imports by source, 2017-19, January to March 2019, and January to March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Inventories (1,000 pounds); Ratios (percent)				
Imports from Vietnam Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from nonsubject sources: Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from all import sources: Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***

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

[7] Inventories of imports from Vietnam are likely understated given that importer questionnaire responses represent *** percent of U.S. imports from Vietnam in 2019.

U.S. importers' outstanding orders

The Commission requested importers to indicate whether they imported or arranged for the importation of SRC pipe and tube from Vietnam after March 31, 2020. Such arranged imports are reported in table VII-3.

Table VII-3
SRC pipe and tube: Arranged imports, April 2020 to March 2021

Item	Period				
	Apr-Jun 2020	Jul-Sept 2020	Oct-Dec 2020	Jan-Mar 2021	Total
	Quantity (1,000 pounds)				
Arranged U.S. imports from.--					
Vietnam	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***

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

Antidumping or countervailing duty orders in third-country markets

Antidumping duty orders in Canada cover copper tube from Brazil, China, Greece, Mexico, and Korea, while a countervailing duty order covers copper tube from China. Canada's orders include seamless and welded copper tube; however, it covers a narrower range of seamless tube than what is covered in the scope of the current investigation. In Canada's orders, the OD of the subject product is limited to 0.2 inch to 4.25 inches (0.502 centimeter to 10.795 centimeters), and industrial and coated or insulated copper tube are excluded from the orders.[8]

[8] Canada Border Services Agency, "Certain Copper Tube," accessed August 1, 2020, https://www.cbsa-asfc.gc.ca/sima-lmsi/mif-mev/ct-eng.html. The antidumping duty is set at 82.4 percent of the export price for copper tube originating in/or exported from Brazil, China, Greece, Mexico, and Korea. The countervailing duty is set at 25,239 Renminbi per metric ton for copper tube originating in/or exported from China.

Information on nonsubject countries

Canada

The United States was the top destination market for refined copper pipe and tube (including products outside of the scope of this investigation) from Canada and accounted for 98.7 percent of Canada's refined copper pipe and tube exports under HS subheading 7411.10, by quantity (table VII-4).[9] According to GTA, Canada was the ninth largest global exporter of refined copper pipe and tube, by value, in 2019 (table VII-9).

Table VII-4
Tubes and pipes of refined copper: Exports from Canada by destination market, 2017-19

Destination market	Calendar year		
	2017	2018	2019
	Quantity (1,000 pounds)		
United States	35,114	27,865	29,659
Cuba	---	203	163
Ethiopia	4	---	153
France	19	16	25
Thailand	0	---	22
Sweden	28	23	13
United Kingdom	13	11	6
Poland	7	6	4
All other destination markets	78	48	9
All destination markets	35,263	28,173	30,054
	Value (1,000 dollars)		
United States	135,070	116,767	121,259
Cuba	---	775	785
Ethiopia	17	---	470
France	58	55	77
Thailand	0	---	84
Sweden	88	73	39
United Kingdom	40	34	21
Poland	22	19	21
All other destination markets	210	148	27
All destination markets	135,504	117,870	122,783

Table continued.

[9] All refined copper pipe and tube are classified in HS subheading 7411.10, including products that fall outside of the scope of this investigation because they do not meet the product dimensions described in the scope and/or because the pipe and tube are welded (not seamless).

Table VII-4--Continued
Tubes and pipes of refined copper: Exports from Canada by destination market, 2017-19

Destination market	Calendar year		
	2017	2018	2019
	Unit value (dollars per 1,000 pounds)		
United States	3,847	4,190	4,088
Cuba	---	3,812	4,823
Ethiopia	4,225	---	3,076
France	3,130	3,496	3,073
Thailand	3,444	---	3,848
Sweden	3,142	3,132	3,076
United Kingdom	3,130	3,143	3,232
Poland	3,126	3,223	5,277
All other destination markets	2,686	3,047	2,911
All destination markets	3,843	4,184	4,085
	Share of quantity (percent)		
United States	99.6	98.9	98.7
Cuba	---	0.7	0.5
Ethiopia	0.0	---	0.5
France	0.1	0.1	0.1
Thailand	0.0	---	0.1
Sweden	0.1	0.1	0.0
United Kingdom	0.0	0.0	0.0
Poland	0.0	0.0	0.0
All other destination markets	0.2	0.2	0.0
All destination markets	100.0	100.0	100.0

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. United States is shown at the top, all remaining top imports destinations shown in descending order of 2019 data.

Source: Official export statistics under HS subheading 7411.10 reported by Statistic Canada in the Global Trade Atlas database, accessed July 27, 2020.

China

Thailand and Taiwan were the top destination markets for refined copper pipe and tube (including products outside of the scope of this investigation) from China and accounted for 19.7 and 10.8 percent of China's refined copper pipe and tube exports under HS subheading 7411.10, by quantity, respectively (table VII-5).[10] According to GTA, China was the leading global exporter of refined copper pipe and tube (including products outside of the scope of this investigation), by value (table VII-9).

Table VII-5
Tubes and pipes of refined copper: Exports from China by destination market, 2017-19

Destination market	Calendar year		
	2017	2018	2019
	Quantity (1,000 pounds)		
United States	3,364	3,242	3,700
Thailand	51,405	60,486	73,829
Taiwan	40,717	44,283	40,690
Malaysia	30,671	33,020	30,744
Japan	21,168	20,890	29,622
Indonesia	17,714	17,953	19,098
Korea	15,185	16,547	16,949
Australia	11,358	11,873	13,377
Vietnam	7,035	6,561	11,709
All other destination markets	121,358	125,605	135,898
All destination markets	319,977	340,460	375,616
	Value (1,000 dollars)		
United States	13,891	15,860	16,299
Thailand	159,857	209,280	236,886
Taiwan	124,308	151,645	129,182
Malaysia	92,777	114,587	101,266
Japan	68,166	75,807	99,784
Indonesia	55,138	61,994	61,783
Korea	50,141	60,363	55,375
Australia	38,069	42,441	44,024
Vietnam	22,596	22,786	36,669
All other destination markets	386,859	442,077	440,656
All destination markets	1,011,802	1,196,840	1,221,925

Table continued.

[10] All refined copper pipe and tube are classified in HS subheading 7411.10, including products that fall outside of the scope of this investigation because they do not meet the product dimensions described in the scope and/or because the pipe and tube are welded (not seamless).

Table VII-5--Continued
Tubes and pipes of refined copper: Exports from China by destination market, 2017-19

Destination market	Calendar year		
	2017	2018	2019
	Unit value (dollars per 1,000 pounds)		
United States	4,129	4,893	4,406
Thailand	3,110	3,460	3,209
Taiwan	3,053	3,424	3,175
Malaysia	3,025	3,470	3,294
Japan	3,220	3,629	3,369
Indonesia	3,113	3,453	3,235
Korea	3,302	3,648	3,267
Australia	3,352	3,575	3,291
Vietnam	3,212	3,473	3,132
All other destination markets	3,188	3,520	3,243
All destination markets	3,162	3,515	3,253
	Share of quantity (percent)		
United States	1.1	1.0	1.0
Thailand	16.1	17.8	19.7
Taiwan	12.7	13.0	10.8
Malaysia	9.6	9.7	8.2
Japan	6.6	6.1	7.9
Indonesia	5.5	5.3	5.1
Korea	4.7	4.9	4.5
Australia	3.5	3.5	3.6
Vietnam	2.2	1.9	3.1
All other destination markets	37.9	36.9	36.2
All destination markets	100.0	100.0	100.0

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. United States is shown at the top, all remaining top imports destinations shown in descending order of 2019 data.

Source: Official export statistics under HS subheading 7411.10 reported by China customs in the Global Trade Atlas database, accessed July 27, 2020.

Greece

The United Kingdom, Italy, and France were the top destination markets for refined copper pipe and tube (including products outside of the scope of this investigation) from Greece and accounted for 14.7, 12.7, and 12.5 percent of Greece's refined copper pipe and

tube exports under HS subheading 7411.10, by quantity, respectively (table VII-6).[11] According to GTA, Greece was the third largest global exporter of refined copper pipe and tube, by value, in 2019 (table VII-9).

Table VII-6
Tubes and pipes of refined copper: Exports from Greece by destination market, 2017-19

Destination market	Calendar year		
	2017	2018	2019
	Quantity (1,000 pounds)		
United States	9,340	10,780	6,426
United Kingdom	20,059	22,944	22,360
Italy	17,311	20,205	19,366
France	16,454	18,151	18,939
Germany	12,305	14,425	14,256
Spain	11,627	13,091	13,078
Turkey	14,697	8,079	8,716
Israel	5,589	4,928	5,382
Belgium	4,699	4,059	4,811
All other destination markets	30,142	34,316	38,558
All destination markets	142,222	150,978	151,891
	Value (1,000 dollars)		
United States	28,982	36,903	20,631
United Kingdom	62,076	76,489	68,552
Italy	57,661	72,584	62,519
France	52,832	63,330	60,412
Germany	40,664	51,280	46,566
Spain	37,728	45,299	42,521
Turkey	48,024	29,021	29,172
Israel	17,416	16,052	16,495
Belgium	15,251	14,668	16,748
All other destination markets	99,780	120,854	126,247
All destination markets	460,414	526,480	489,863

Table continued.

[11] All refined copper pipe and tube are classified in HS subheading 7411.10, including products that fall outside of the scope of this investigation because they do not meet the product dimensions described in the scope and/or because the pipe and tube are welded (not seamless).

Table VII-6--Continued
Tubes and pipes of refined copper: Exports from Greece by destination market, 2017-19

Destination market	Calendar year		
	2017	2018	2019
	Unit value (dollars per 1,000 pounds)		
United States	3,103	3,423	3,211
United Kingdom	3,095	3,334	3,066
Italy	3,331	3,592	3,228
France	3,211	3,489	3,190
Germany	3,305	3,555	3,266
Spain	3,245	3,460	3,251
Turkey	3,268	3,592	3,347
Israel	3,116	3,257	3,065
Belgium	3,246	3,613	3,481
All other destination markets	3,310	3,522	3,274
All destination markets	3,237	3,487	3,225
	Share of quantity (percent)		
United States	6.6	7.1	4.2
United Kingdom	14.1	15.2	14.7
Italy	12.2	13.4	12.7
France	11.6	12.0	12.5
Germany	8.7	9.6	9.4
Spain	8.2	8.7	8.6
Turkey	10.3	5.4	5.7
Israel	3.9	3.3	3.5
Belgium	3.3	2.7	3.2
All other destination markets	21.2	22.7	25.4
All destination markets	100.0	100.0	100.0

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. United States is shown at the top, all remaining top imports destinations shown in descending order of 2019 data.

Source: Official export statistics under HS subheading 7411.10 reported by Eurostat in the Global Trade Atlas database, accessed July 27, 2020.

Korea

The United States and Australia were the top destination markets for refined copper pipe and tube (including products outside of the scope of this investigation) from Korea and accounted for 26.4 and 15.6 percent of Korea's refined copper pipe and tube exports under HS

subheading 7411.10, by quantity, respectively (table VII-7).[12] According to GTA, Korea was the eighth largest global exporter of refined copper pipe and tube, by value, in 2019 (table VII-9).

Table VII-7
Tubes and pipes of refined copper: Exports from Korea by destination market, 2017-19

Destination market	Calendar year		
	2017	2018	2019
	Quantity (1,000 pounds)		
United States	25,207	23,958	21,714
Australia	14,725	12,088	12,851
United Kingdom	4,287	4,958	5,530
United Arab Emirates	3,737	4,187	4,715
China	4,576	5,372	4,163
Saudi Arabia	3,056	3,788	4,121
Thailand	7,142	4,105	4,002
Hong Kong	3,534	3,346	3,255
Brazil	2,245	2,335	3,082
All other destination markets	25,813	22,791	18,933
All destination markets	94,322	86,929	82,365
	Value (1,000 dollars)		
United States	82,278	83,351	70,983
Australia	47,664	41,254	40,939
United Kingdom	13,531	16,340	17,150
United Arab Emirates	11,824	14,551	15,092
China	13,710	18,918	13,884
Saudi Arabia	9,463	13,124	12,940
Thailand	24,412	15,357	13,437
Hong Kong	11,793	12,104	10,872
Brazil	7,674	8,461	10,668
All other destination markets	83,932	79,997	62,075
All destination markets	306,281	303,457	268,041

Table continued.

[12] All refined copper pipe and tube are classified in HS subheading 7411.10, including products that fall outside of the scope of this investigation because they do not meet the product dimensions described in the scope and/or because the pipe and tube are welded (not seamless).

Table VII-7--Continued
Tubes and pipes of refined copper: Exports from Korea by destination market, 2017-19

Destination market	Calendar year		
	2017	2018	2019
	Unit value (dollars per 1,000 pounds)		
United States	3,264	3,479	3,269
Australia	3,237	3,413	3,186
United Kingdom	3,156	3,296	3,101
United Arab Emirates	3,164	3,475	3,201
China	2,996	3,521	3,335
Saudi Arabia	3,096	3,465	3,140
Thailand	3,418	3,741	3,358
Hong Kong	3,337	3,617	3,341
Brazil	3,418	3,624	3,462
All other destination markets	3,252	3,510	3,279
All destination markets	3,247	3,491	3,254
	Share of quantity (percent)		
United States	26.7	27.6	26.4
Australia	15.6	13.9	15.6
United Kingdom	4.5	5.7	6.7
United Arab Emirates	4.0	4.8	5.7
China	4.9	6.2	5.1
Saudi Arabia	3.2	4.4	5.0
Thailand	7.6	4.7	4.9
Hong Kong	3.7	3.8	4.0
Brazil	2.4	2.7	3.7
All other destination markets	27.4	26.2	23.0
All destination markets	100.0	100.0	100.0

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. United States is shown at the top, all remaining top imports destinations shown in descending order of 2019 data.

Source: Official export statistics under HS subheading 7411.10 reported by Korea customs and trade development institution in the Global Trade Atlas database, accessed July 27, 2020.

Mexico

The United States was the top destination market for refined copper pipe and tube (including products outside of the scope of this investigation) from Mexico and accounted for 96.0 percent of Mexico's refined copper pipe and tube exports under HS subheading 7411.10,

by quantity (table VII-8).[13] According to GTA, Mexico was not one of the twelve leading exporters of refined copper pipe and tube in 2019 (table VII-9).

Table VII-8
Tubes and pipes of refined copper: Exports from Mexico by destination market, 2017-19

Destination market	Calendar year		
	2017	2018	2019
	Quantity (1,000 pounds)		
United States	10,923	12,438	61,111
Colombia	5,655	6,107	1,959
Peru	738	1,023	214
Panama	893	1,041	155
Ecuador	1,760	1,583	136
All other destination markets	19,720	27,869	84
All destination markets	39,688	50,062	63,659
	Value (1,000 dollars)		
United States	40,100	46,476	53,379
Colombia	18,169	20,694	6,120
Peru	2,387	3,397	640
Panama	2,958	3,679	485
Ecuador	5,751	5,551	455
All other destination markets	65,087	97,260	273
All destination markets	134,452	177,056	61,353

Table continued.

[13] All refined copper pipe and tube are classified in HS subheading 7411.10, including products that fall outside of the scope of this investigation because they do not meet the product dimensions described in the scope and/or because the pipe and tube are welded (not seamless).

Table VII-8--Continued
Tubes and pipes of refined copper: Exports from Mexico by destination market, 2017-19

Destination market	Calendar year		
	2017	2018	2019
	Unit value (dollars per 1,000 pounds)		
United States	3,671	3,737	873
Colombia	3,213	3,388	3,124
Peru	3,233	3,321	2,984
Panama	3,312	3,534	3,129
Ecuador	3,268	3,506	3,343
All other destination markets	3,301	3,490	3,264
All destination markets	3,388	3,537	964
	Share of quantity (percent)		
United States	27.5	24.8	96.0
Colombia	14.2	12.2	3.1
Peru	1.9	2.0	0.3
Panama	2.3	2.1	0.2
Ecuador	4.4	3.2	0.2
All other destination markets	49.7	55.7	0.1
All destination markets	100.0	100.0	100.0

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. United States is shown at the top, all remaining top imports destinations shown in descending order of 2019 data.

Source: Official export statistics under HS subheading 7411.10 reported by INEGI in the Global Trade Atlas database, accessed July 27, 2020.

Global exports

Table VII-9 presents the largest global export sources of refined copper pipe and tube under HS subheading 7411.10 (including products outside of the scope of this investigation).[14] Data are presented by value only because quantity data for some countries were only available in units that could not be converted to a standard unit of measure. China and Vietnam were the largest exporters in 2019 and accounted for 23.7 percent and 12.9 percent of total global exports by value, respectively.

[14] All refined copper pipe and tube are classified in HS subheading 7411.10, including products that fall outside of the scope of this investigation because they do not meet the product dimensions described in the scope and/or because the pipe and tube are welded (not seamless).

Table VII-9
Tubes and pipes of refined copper: Global exports by destination market, 2017-19

Exporter	Calendar year		
	2017	2018	2019
	Value (1,000 dollars)		
United States	129,563	140,764	116,441
Vietnam	436,781	559,450	668,373
China	1,011,802	1,196,840	1,221,925
Greece	460,414	526,480	489,863
Germany	563,024	568,637	455,776
Italy	413,907	466,068	409,940
Malaysia	281,793	322,491	306,801
Thailand	230,895	277,597	275,347
Korea	306,281	303,457	268,041
Canada	135,504	117,870	122,783
Austria	127,441	139,643	106,192
Japan	129,167	109,369	97,217
All other exporters	773,892	891,851	626,521
All exporters	5,000,464	5,620,515	5,165,221
	Share of value (percent)		
United States	2.6	2.5	2.3
Vietnam	8.7	10.0	12.9
China	20.2	21.3	23.7
Greece	9.2	9.4	9.5
Germany	11.3	10.1	8.8
Italy	8.3	8.3	7.9
Malaysia	5.6	5.7	5.9
Thailand	4.6	4.9	5.3
Korea	6.1	5.4	5.2
Canada	2.7	2.1	2.4
Austria	2.5	2.5	2.1
Japan	2.6	1.9	1.9
All other exporters	15.5	15.9	12.1
All exporters	100.0	100.0	100.0

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

Source: Official exports statistics under HS subheading 7411.10 reported by various national statistical authorities in the Global Trade Atlas database, accessed July 7, 2020 and official global imports statistics from Vietnam under HS subheading 7411.10 as reported by various national statistical authorities in the Global Trade Atlas database, accessed July 7, 2020.

APPENDIX A

FEDERAL REGISTER NOTICES

The Commission makes available notices relevant to its investigations and reviews on its website, www.usitc.gov. 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
85 FR 40680 July 7, 2020	*Seamless Refined Copper Pipe and Tube From Vietnam; Institution of an Anti-Dumping Duty Investigation and Scheduling of Preliminary Phase Investigation*	https://www.govinfo.gov/content/pkg/FR-2020-07-07/pdf/2020-14541.pdf
85 FR 47181 August 4, 2020	*Seamless Refined Copper Pipe and Tube From the Socialist Republic of Vietnam: Initiation of Less-Than-Fair-Value Investigation*	https://www.govinfo.gov/content/pkg/FR-2020-08-04/pdf/2020-17067.pdf

APPENDIX B

LIST OF STAFF CONFERENCE WITNESSES

CALENDAR OF PRELIMINARY CONFERENCE

Those listed below participated in the United States International Trade Commission's preliminary conference. The Commission conducted its preliminary conference through submissions of written testimony and postconference briefs:

Subject: Seamless Refined Copper Pipe and Tube from Vietnam

Inv. No.: 731-TA-1528 (Preliminary)

Date: July 21, 2020

OPENING REMARKS:

In Support of Imposition (**Jack A. Levy**, Cassidy Levy Kent (USA) LLP)

In Support of the Imposition of Antidumping Duty Order:

Cassidy Levy Kent (USA) LLP
Washington, DC
on behalf of

the American Copper Tube Coalition

Devin Malone, President, Mueller Streamline Company

Hal Liller, Sector President, Cerro Flow Products

Jack A. Levy) – OF COUNSEL

-END-

APPENDIX C

SUMMARY DATA

Table C-1
SRC pipe and tube: Summary data concerning the U.S. market, 2017-19, January to March 2019, and January to March 2020
(Quantity=1,000 pounds; Value=1,000 dollars; Productivity=pounds per hour; Unit values, unit labor costs, and unit expenses=dollars per 1,000 pounds; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	Calendar year			January to March		Calendar year			Jan-Mar
	2017	2018	2019	2019	2020	2017-19	2017-18	2018-19	2019-20
U.S. consumption quantity:									
Amount	***	***	***	***	***	▲***	▲***	▼***	▲***
Producers' share (fn1)	***	***	***	***	***	▲***	▲***	▼***	▼***
Importers' share (fn1):									
Vietnam	***	***	***	***	***	▲***	▲***	▲***	▲***
Nonsubject sources	***	***	***	***	***	▼***	▼***	▲***	▼***
All import sources	***	***	***	***	***	▼***	▼***	▲***	▲***
U.S. consumption value:									
Amount	***	***	***	***	***	▲***	▲***	▼***	▲***
Producers' share (fn1)	***	***	***	***	***	▼***	▲***	▼***	▼***
Importers' share (fn1):									
Vietnam	***	***	***	***	***	▲***	▲***	▲***	▲***
Nonsubject sources	***	***	***	***	***	▼***	▼***	▲***	▼***
All import sources	***	***	***	***	***	▲***	▼***	▲***	▲***
U.S. imports from:									
Vietnam:									
Quantity	34,470	40,377	44,629	8,192	12,543	▲29.5	▲17.1	▲10.5	▲53.1
Value	113,731	142,996	151,776	28,695	41,217	▲33.5	▲25.7	▲6.1	▲43.6
Unit value	$3,299	$3,542	$3,401	$3,503	$3,286	▲3.1	▲7.3	▼(4.0)	▼(6.2)
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▼***	▼***
Nonsubject sources:									
Quantity	94,985	89,315	88,135	21,632	20,632	▼(7.2)	▼(6.0)	▼(1.3)	▼(4.6)
Value	348,969	358,201	341,357	81,582	78,563	▼(2.2)	▲2.6	▼(4.7)	▼(3.7)
Unit value	$3,674	$4,011	$3,873	$3,771	$3,808	▲5.4	▲9.2	▼(3.4)	▲1.0
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▲***	▲***
All import sources:									
Quantity	129,456	129,692	132,764	29,824	33,175	▲2.6	▲0.2	▲2.4	▲11.2
Value	462,700	501,197	493,133	110,276	119,780	▲6.6	▲8.3	▼(1.6)	▲8.6
Unit value	$3,574	$3,865	$3,714	$3,698	$3,611	▲3.9	▲8.1	▼(3.9)	▼(2.4)
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▼***	▲***
U.S. producers':									
Average capacity quantity	***	***	***	***	***	▲***	▲***	▼***	▲***
Production quantity	***	***	***	***	***	▲***	▲***	▼***	▲***
Capacity utilization (fn1)	***	***	***	***	***	▲***	▲***	▼***	▲***
U.S. shipments:									
Quantity	***	***	***	***	***	▲***	▲***	▼***	▲***
Value	***	***	***	***	***	▲***	▲***	▼***	▼***
Unit value	***	***	***	***	***	▼***	▲***	▼***	▼***
Export shipments:									
Quantity	***	***	***	***	***	▼***	▲***	▼***	▲***
Value	***	***	***	***	***	▼***	▲***	▼***	▲***
Unit value	***	***	***	***	***	▼***	▲***	▼***	▲***
Ending inventory quantity	***	***	***	***	***	▼***	▲***	▼***	▼***
Inventories/total shipments (fn1)	***	***	***	***	***	▼***	▼***	▼***	▼***
Production workers	***	***	***	***	***	▲***	▲***	▲***	▲***
Hours worked (1,000s)	***	***	***	***	***	▲***	▲***	▼***	▲***
Wages paid ($1,000)	***	***	***	***	***	▲***	▲***	▲***	▲***
Hourly wages (dollars per hour)	***	***	***	***	***	▲***	▼***	▲***	▲***
Productivity	***	***	***	***	***	▼***	▼***	▲***	▲***
Unit labor costs	***	***	***	***	***	▲***	▼***	▲***	▼***

Table continued on next page.

Table C-1--Continued
SRC pipe and tube: Summary data concerning the U.S. market, 2017-19, January to March 2019, and January to March 2020
(Quantity=1,000 pounds; Value=1,000 dollars; Productivity=pounds per hour; Unit values, unit labor costs, and unit expenses=dollars per 1,000 pounds; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	Calendar year			January to March		Calendar year			Jan-Mar
	2017	2018	2019	2019	2020	2017-19	2017-18	2018-19	2019-20
U.S. producers':--Continued									
Net sales:									
Quantity	***	***	***	***	***	▲***	▲***	▼***	▲***
Value	***	***	***	***	***	▲***	▲***	▼***	▼***
Unit value	***	***	***	***	***	▼***	▲***	▼***	▼***
Cost of goods sold (COGS)	***	***	***	***	***	▲***	▲***	▼***	▼***
Gross profit or (loss) (fn2)	***	***	***	***	***	▲***	▲***	▼***	▲***
SG&A expenses	***	***	***	***	***	▲***	▲***	▲***	▲***
Operating income or (loss) (fn2)	***	***	***	***	***	▼***	▲***	▼***	▲***
Net income or (loss) (fn2)	***	***	***	***	***	▼***	▲***	▼***	▲***
Capital expenditures	***	***	***	***	***	▼***	▼***	▲***	▲***
R&D expenses	***	***	***	***	***	***	***	***	***
Net assets	***	***	***	NA	NA	▼***	▼***	▼***	NA
Unit COGS	***	***	***	***	***	▼***	▲***	▼***	▼***
Unit SG&A expenses	***	***	***	***	***	▲***	▼***	▲***	▲***
Unit operating income or (loss) (fn2)	***	***	***	***	***	▼***	▲***	▼***	▲***
Unit net income or (loss) (fn2)	***	***	***	***	***	▼***	▲***	▼***	▲***
COGS/sales (fn1)	***	***	***	***	***	▼***	▼***	▲***	▼***
Operating income or (loss)/sales (fn1)	***	***	***	***	***	▼***	▲***	▼***	▲***
Net income or (loss)/sales (fn1)	***	***	***	***	***	▼***	▲***	▼***	▲***

Note.--Shares and ratios shown as "0.0" percent represent non-zero values less than "0.05" percent (if positive) and greater than "(0.05)" percent (if negative). Zeroes, null values, and undefined calculations are suppressed and shown as "---". Period changes preceded by a "▲" represent an increase, while period changes preceded by a "▼" represent a decrease.

fn1.--Reported data are in percent and period changes are in percentage points.
fn2.--Percent changes only calculated when both comparison values represent profits; The directional change in profitability provided when one or both comparison values represent a loss.

Source: Compiled from data submitted in response to questionnaire data and official U.S. import statistics for HTS statistical reporting numbers 7411.10.1030 and 7411.10.1090, accessed July 8, 2020.