Fabricated Structural Steel from Canada, China, and Mexico

Investigation Nos. 701-TA-616-617 and 731-TA-1432-1434 (Final)

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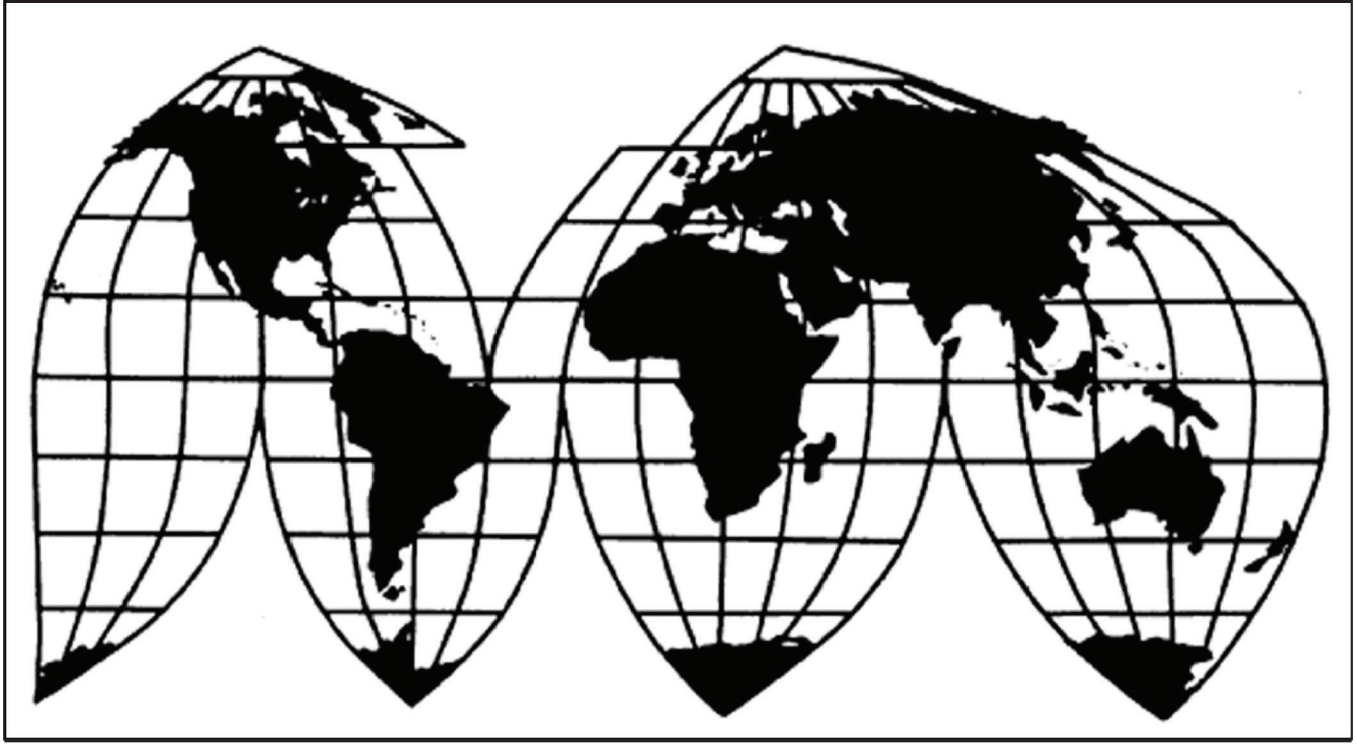
U.S. International Trade Commission



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Note.—Information that would reveal confidential operations of individual concerns may not be published. Such information is identified by brackets in confidential reports and is deleted and replaced with asterisks (***) in public reports.

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 701-TA-616-617 and 731-TA-1432-1434 (Final)

Fabricated Structural Steel from Canada, China, and Mexico

DETERMINATIONS

On the basis of the record[1] developed in the subject investigations, the United States International Trade Commission ("Commission") determines, pursuant to the Tariff Act of 1930 ("the Act"), that an industry in the United States is not materially injured or threatened with material injury by reason of imports of fabricated structural steel from Canada, China, and Mexico, provided for in subheadings 7308.90.95, 7308.90.30, and 7308.90.60 of the Harmonized Tariff Schedule of the United States, that have been found by the U.S. Department of Commerce ("Commerce") to be sold in the United States at less than fair value ("LTFV"), and to be subsidized by the governments of China and Mexico.[2]

BACKGROUND

The Commission instituted these investigations effective February 4, 2019, following receipt of petitions filed with the Commission and Commerce. The petitioner in these investigations is the American Institute of Steel Construction, LLC Full Member Subgroup, Chicago, Illinois. The final phase of the investigations was scheduled by the Commission following notification of preliminary determinations by Commerce that imports of fabricated structural steel from China and Mexico were subsidized within the meaning of section 703(b) of the Act (19 U.S.C. 1671b(b)) and sold at LTFV within the meaning of 733(b) of the Act (19 U.S.C. 1673b(b)).[3] Notice of the scheduling of the final phase of the Commission's investigations and of a public hearing to be held in connection therewith was given by posting copies of the notice

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

[2] Commissioners Rhonda K. Schmidtlein and Amy A. Karpel dissenting.

[3] Commerce made negative preliminary determinations with respect to imports of fabricated structural steel from Canada which were alleged to be sold at LTFV (84 FR 47481) and subsidized by the government of Canada (84 FR 33232).

in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* on September 23, 2019 (84 FR 49765). The hearing was held in Washington, DC, on January 28, 2020, and all persons who requested the opportunity were permitted to appear in person or by counsel. On January 30, 2020, Commerce gave notice in the *Federal Register* of affirmative final determinations of sales at LTFV in its investigations regarding Canada, China, and Mexico, affirmative final determinations in its countervailing duty investigations regarding China and Mexico, and a negative final determination in its countervailing duty investigation concerning Canada. Accordingly, the Commission terminated its countervailing duty investigation concerning fabricated structural steel from Canada (85 FR 8321).

Views of the Commission

Based on the record in the final phase of these investigations, we determine that an industry in the United States is not materially injured or threatened with material injury by reason of imports of fabricated structural steel ("FSS") from Canada, China, and Mexico found by the U.S. Department of Commerce ("Commerce") to be sold in the United States at less than fair value and subsidized by the governments of China and Mexico.[1] [2]

I. Background

Parties to the Investigation. The petitioner is the Full Member Subgroup of the American Institute of Steel Construction, LLC ("AISC"), an industry association with a majority of its full members being domestic producers of FSS.[3] Representatives appeared at the hearing accompanied by counsel and submitted prehearing and posthearing briefs and final comments.

A number of respondent parties participated actively in the final phase of the investigations. The Canadian Institute of Steel Construction ("CISC"), an industry association with a majority of its members being producers of subject merchandise in Canada, along with individual members of the CISC, Canam Buildings and Structures, Inc., Canatal Industries, Inc. ("Canatal"), and Walters Inc., producers of FSS in Canada (collectively, "Canadian Respondents"), appeared at the hearing and jointly submitted prehearing and posthearing briefs and final comments.[4] The Government of Canada also submitted a posthearing brief.

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[1] No party argues that the establishment of an industry in the United States is materially retarded by subject imports of FSS from Canada, China, and/or Mexico.

[2] Commissioners Schmidtlein and Karpel determine that an industry in the United States is materially injured by reason of subject FSS imports from Canada, China, and Mexico. *See* Separate and Dissenting Views of Commissioners Rhonda K. Schmidtlein and Amy A. Karpel. They join in sections I through V.B of these Views, except as otherwise indicated.

[3] The petitions were originally filed on February 4, 2019 by AISC as a whole, but respondents raised questions with both Commerce and the Commission as to whether AISC met the definition of an "interested party" in 19 § U.S.C. 1677(9)(C). To address these concerns, the petitioner amended the petition on February 21, 2019 to clarify that the petitioner is the AISC Full Member Subgroup, consisting of full members of AISC as defined in its bylaws, and not of other categories of individual members of AISC (*e.g.* associate or affiliate members, or retirees, educators, or students).

[4] As a result of Commerce's negative final countervailing duty determination with respect to FSS from Canada, and Canatal receiving a zero dumping margin in Commerce's final antidumping duty determination with respect to FSS from Canada shortly before the Commission's hearing, Canatal is now a producer of nonsubject merchandise in Canada. *Certain Fabricated Structural Steel From Canada: Final Negative Countervailing Duty Determination,* 85 Fed. Reg. 5387 (Jan. 30, 2020); *Certain Fabricated Structural Steel From Canada: Final Determination of Sales at Less Than Fair Value*, 85 Fed. Reg. 5373, 5374 (Jan. 30, 2020). Accordingly, Canatal's representatives appeared at the Commission's hearing but

Jinhuan Construction Group Co., Ltd., Wison (Nantong) Heavy Industry Co., Ltd., Shanghai Matsuo Steel Structure Co., Ltd., Yanda (Haimen) Heavy Equipment Manufacturing Co., Ltd., and Shanghai Cosco Kawasaki Heavy Industries Steel Structure Co., Ltd., producers and exporters of subject merchandise from China, and Dickerson Enterprises, Inc., and Steel Construction Group, LLC, importers of subject merchandise from China (collectively "Chinese Respondents"), appeared at the hearing and jointly filed prehearing and posthearing briefs and final comments. ExxonMobil Chemical Company and its affiliate, Gulf Coast Ventures, LLC (collectively "ExxonMobil"), importers of subject merchandise from China, appeared at the hearing and submitted prehearing and posthearing briefs and final comments.

Cornerstone Building Brands, Inc. ("Cornerstone"), a domestic producer of FSS;[5] Cornerstone's affiliate Building Systems de Mexico, S.A. de C.V. ("Building Systems"), a Mexican producer of subject merchandise; BlueScope Buildings North America Inc. ("BlueScope"), a domestic producer of FSS; BlueScope's affiliate Butler de Mexico, S. de R.L. de C.V. ("Butler"), a Mexican producer of subject merchandise; and Corey S.A. de C.V. ("Corey"), a Mexican producer of subject merchandise (collectively "Mexican Respondents") appeared at the hearing and jointly submitted a prehearing brief. Cornerstone and its affiliate Building Systems jointly submitted a posthearing brief and final comments, BlueScope and its affiliate Butler likewise jointly submitted a posthearing brief and final comments, and Corey individually submitted a posthearing brief and final comments.

In addition, the Canadian Respondents, Chinese Respondents, and Mexican Respondents listed above (collectively "Joint Respondents") jointly submitted a prehearing brief.

Wind Turbine & Energy Cables Corp. ("WTEC"), a U.S. purchaser and industrial end user of steel beams used to support solar panels, submitted a prehearing brief, but did not appear at the hearing or submit a posthearing brief or final comments.

Data Coverage. U.S. industry data are based on the questionnaire responses from *** domestic producers that accounted for an estimated 62.8 percent of domestic production of FSS in 2018.[6] U.S. import data are primarily based on official Commerce import statistics,

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did not testify, and Canatal did not join in the Canadian Respondents' posthearing brief or final comments.

[5] Cornerstone is the parent company of domestic producer NCI Group, Inc. ("NCI").

[6] Confidential Report ("CR") at I-5; Public Report ("PR") at I-5. The petitions estimated that domestic production of FSS totaled 3,418,290 short tons in 2017, and the responding U.S. producers reported producing 2,148,023 short tons in 2018. Thus, based on the 2017 production estimate, the

adjusted for affirmative and negative questionnaire responses;[7] the Commission received usable questionnaire responses from 74 U.S. importers of FSS, accounting in 2018 for 53.1 percent of subject imports from Canada; 28.0 percent of total U.S. imports of FSS from China; 46.2 percent of total U.S. imports of FSS from Mexico; 39.9 percent of imports of FSS from subject sources; 36.5 percent of imports of FSS from nonsubject sources; and 39.1 percent of total U.S. imports of FSS from all sources.[8] The Commission received foreign producer/exporter questionnaire responses from 25 firms in Canada, whose exports to the United States were equivalent to approximately *** percent of U.S. imports of FSS from Canada in 2018.[9] The Commission received foreign producer/exporter questionnaire responses from ten firms in China, whose exports to the United States were equivalent to approximately *** percent of U.S. imports of FSS from China in 2018.[10] The Commission received foreign producer/exporter questionnaire responses from eight firms in Mexico, whose exports to the United States were equivalent to approximately *** percent of U.S. imports of FSS from Mexico in 2018.[11]

II. Domestic Like Product

A. In General

In determining whether 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."[12] 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."[13] In turn, the Tariff Act defines "domestic like product" as "a

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accepted questionnaire responses in the final phase of these investigations account for 62.8 percent of domestic production of FSS in 2018. CR/PR at III-1, n.1.

[7] CR/PR at IV-2.

[8] CR/PR at I-5, IV-1 to IV-2.

[9] CR/PR at VII-3. Responding Canadian producers did not provide reliable estimates of their firms' shares of total production of FSS in Canada. *Id.* at VII-3 to VII-4.

[10] CR/PR at VII-16. Responding Chinese producers did not provide reliable estimates of their firms' shares of total production of FSS in China. *Id.*

[11] CR/PR at VII-23 to VII-24. Responding Mexican producers did not provide reliable estimates of their firms' shares of total production of FSS in Mexico. *Id*. at VII-24.

[12] 19 U.S.C. § 1677(4)(A).

[13] 19 U.S.C. § 1677(4)(A).

product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation."[14]

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.[15] 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."[16] The Commission then defines the domestic like product in light of the imported articles Commerce has identified.[17] The decision regarding the appropriate domestic like product(s) in an investigation is a factual determination, and the Commission has applied the statutory standard of "like" or "most similar in characteristics and uses" on a case-by-case basis.[18] No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.[19] The

[14] 19 U.S.C. § 1677(10).

[15] 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).

[16] *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. Circ. Feb. 7, 2020) (the statute requires the Commission to start with Commerce's subject merchandise in reaching its own like product determination).

[17] *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).

[18] *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).

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

Commission looks for clear dividing lines among possible like products and disregards minor variations.[20]

B. Product Description

Commerce defined the scope of the imported merchandise under investigation as follows:

> The merchandise covered by the investigation is carbon and alloy fabricated structural steel. Fabricated structural steel is made from steel in which: (1) Iron predominates, by weight, over each of the other contained elements; and (2) the carbon content is two percent or less by weight. Fabricated structural steel products are steel products that have been fabricated for erection or assembly into structures, including, but not limited to, buildings (commercial, office, institutional, and multi-family residential); industrial and utility projects; parking decks; arenas and convention centers; medical facilities; and ports, transportation and infrastructure facilities. Fabricated structural steel is manufactured from carbon and alloy (including stainless) steel products such as angles, columns, beams, girders, plates, flange shapes (including manufactured structural shapes utilizing welded plates as a substitute for rolled wide flange sections), channels, hollow structural section (HSS) shapes, base plates, and plate-work components. Fabrication includes, but is not limited to cutting, drilling, welding, joining, bolting, bending, punching, pressure fitting, molding, grooving, adhesion, beveling, and riveting and may include items such as fasteners, nuts, bolts, rivets, screws, hinges, or joints.
>
> The inclusion, attachment, joining, or assembly of non-steel components with fabricated structural steel does not remove the fabricated structural steel from the scope.

[20] *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.").

Fabricated structural steel is covered by the scope of the investigation regardless of whether it is painted, varnished, or coated with plastics or other metallic or non-metallic substances and regardless of whether it is assembled or partially assembled, such as into modules, modularized construction units, or sub-assemblies of fabricated structural steel.

Subject merchandise includes fabricated structural steel that has been assembled or further processed in the subject country or a third country, including but not limited to painting, varnishing, trimming, cutting, drilling, welding, joining, bolting, punching, bending, beveling, riveting, galvanizing, coating, and/or slitting or any other processing that would not otherwise remove the merchandise from the scope of the investigation if performed in the country of manufacture of the fabricated structural steel.

All products that meet the written physical description of the merchandise covered by the investigation are within the scope of the investigation unless specifically excluded or covered by the scope of an existing antidumping duty order.

Specifically excluded from the scope of the investigation are:

1. Fabricated steel concrete reinforcing bar (rebar) if: (i) It is a unitary piece of fabricated rebar, not joined, welded, or otherwise connected with any other steel product or part; or (ii) it is joined, welded, or otherwise connected only to other rebar.

2. Fabricated structural steel for bridges and bridge sections that meets American Association of State and Highway and Transportation Officials (AASHTO) bridge construction requirements or any state or local derivatives of the AASHTO bridge construction requirements.

3. Pre-engineered metal building systems, which are defined as complete metal buildings that integrate steel framing, roofing and walls to form one, pre-engineered building system, that meet Metal Building

Manufacturers Association guide specifications. Pre-engineered metal building systems are typically limited in height to no more than 60 feet or two stories.

4. Steel roof and floor decking systems that meet Steel Deck Institute standards.

5. Open web steel bar joists and joist girders that meet Steel Joist Institute specifications.

6. Also excluded from the scope of the investigation is scaffolding, and parts and accessories thereof, that comply with ANSI/ASSE A10.8—2011—Scaffolding Safety Requirements, and/or Occupational Safety and Health Administration regulations at 29 CFR part 1926 subpart L—Scaffolds. The outside diameter of the scaffold tubing covered by this exclusion ranges from 25mm to 150mm.

7. Excluded from the scope of the investigation are access flooring systems panels and accessories, where such panels have a total thickness ranging from 0.75 inches to 1.75 inches and consist of concrete, wood, other non-steel materials, or hollow space permanently attached to a top and bottom layer of galvanized or painted steel sheet or formed coil steel, the whole of which has been formed into a square or rectangle having a measurement of 24 inches on each side +/− 0.1 inch; 24 inches by 30 inches +/− 0.1 inch; or 24 by 36 inches +/− 0.1 inch.

8. Excluded from the investigation are the following types of steel poles, segments of steel poles, and steel components of those poles:

- Steel Electric Transmission Poles, or segments of such poles, that meet (1) the American Society of Civil Engineers (ASCE)—Design of Steel Transmission Pole Structures, ASCE/SEI 48 or (2) the USDA RUS bulletin 1724E-214 Guide specification for standard class Steel Transmission Poles. The exclusion for steel electric transmission poles also encompasses the following components

thereof: Transmission arms which attach to poles; pole bases; angles that do not exceed 8" x 8" x 0.75"; steel vangs, steel brackets, steel flanges, and steel caps; safety climbing cables; ladders; and steel templates.

- Steel Electric Substation Poles, or segments of such poles, that meet the American Society of Civil Engineers (ASCE)—Manuals and Reports on Engineering Practice No. 113. The exclusion for steel electric substation poles also encompasses the following components thereof: Substation dead end poles; substation bus stands; substation mast poles, arms, and cross-arms; steel brackets, steel flanges, and steel caps; pole bases; safety climbing cables; ladders; and steel templates.

- Steel Electric Distribution Poles, or segments of such poles, that meet (1) American Society of Civil Engineers (ASCE)—Design of Steel Transmission Pole Structures, ASCE/SEI 48, (2) USDA RUS bulletin 1724E-204 Guide specification for steel single pole and H-frame structures, or (3) ANSI 05.1 height and class requirements for steel poles. The exclusion for steel electric distribution poles also encompasses the following components thereof: Distribution arms and cross-arms; pole bases; angles that do not exceed 8" x 8" x 0.75"; steel vangs, steel brackets, steel flanges, and steel caps; safety climbing cables; ladders; and steel templates.

- Steel Traffic Signal Poles, Steel Roadway Lighting Poles, Steel Parking Lot Lighting Poles, and Steel Sports Lighting Poles, or segments of such poles, that meet (1) the American Association of State Highway and Transportation Officials (AASHTO)—Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, (2) any state or local derivatives of the AASHTO highway sign, luminaries, and traffic signals requirements, or (3) American National Standard Institute (ANSI) C136—American National Standard for Roadway and Area Lighting Equipment standards. The exclusion for steel traffic signal

poles, steel roadway lighting poles, steel parking lot lighting poles, and steel sports lighting poles also encompasses the following components thereof: Luminaire arms; hand hole rims; hand hole covers; base plates that connect to either the shaft or the arms; mast arm clamps; mast arm tie rods; transformer base boxes; formed full base covers that hide anchor bolts; step lugs; internal cable guides; lighting cross arms; lighting service platforms; angles that do not exceed 8″ x 8″ x 0.75″; stainless steel hand hole door hinges and wind restraints; steel brackets, steel flanges, and steel caps; safety climbing cables; ladders; and steel templates.

- Communication Poles, or segments of such poles, that meet (1) Telecommunications Industry Association (TIA) ANSI/TIA-222 Structural Standards for Steel Antenna Towers and Antenna Supporting Structures, or (2) American Association of State Highway and Transportation Officials (AASHTO)—Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals. The exclusion for communication poles also encompasses the following components thereof: Luminaire arms; hand hole rims; hand hole covers; base plate that connects the pole to the foundation or arm to the pole; safety climbing cables; ladders; service ground platforms; step lugs; pole steps; steel brackets, steel flanges, and steel caps; angles that do not exceed 8″ x 8″ x 0.75″, coax, and safety brackets; subcomponent kits for antenna mounts weighing 80 lbs. or less; service platforms; ice bridges; stainless steel hand hole door hinges and wind restraints; and steel templates.

- OEM Round or Polygonal Tapered Steel Poles, segments or shaft components of such poles, that meet the (1) ASCE 48 or AASHTO, (2) ANSI/TIA 222, (3) ANSI 05.1, (4) RUS bulletin 1724E-204, or (5) RUS bulletin 1724E-214. The exclusion for OEM round or polygonal tapered steel poles also encompasses the following components thereof: Subcomponent kits for antenna mounts weighing 80 lbs. or less; mounts and platforms; steel brackets,

steel flanges, and steel caps; angles that do not exceed 8" x 8" x 0.75"; bridge kits; safety climbing cables; ladders; and steel templates.

The inclusion or attachment of one or more of the above-referenced steel poles in a structure containing fabricated structural steel (FSS) does not remove the FSS from the scope of the investigation. No language included in this exclusion should be read or understood to have applicability to any other aspect of this scope or to have applicability to or to exclude any product, part, or component other than those specifically identified in the exclusion.

9. Also excluded from the scope of the investigation are Shuttering, Formworks, Propping and Shoring and parts and accessories thereof that comply with ANSI/ASSE A10.9—Safety Requirements for Concrete and Masonry Work and ACI-347—Recommended Practice for Concrete Formwork. For Shoring and propping made from tube, the outside diameter of the tubing covered by this exclusion ranges from 48mm to 250mm. For Shuttering and Formworks, the panel sizes covered by this exclusion range from 25mm x 600mm to 3000mm x 3000mm.

10. Also excluded from the scope of the investigation are consumer items for do-it-yourself assembly that are prepackaged for retail sale. For the purposes of this exclusion, prepackaged for retail sale means that, at the time of importation, all components necessary to assemble the merchandise, including all steel components, all accessory parts (e.g., screws, bolts, washers, nails), and instructions providing guidance on the assembly of the finished merchandise or directions on where to find such instructions, are enclosed in retail packaging, such that an end-use, retail consumer could assemble the completed product with no additional components. The items may enter the United States in one or in multiple retail packages as long as all of the components are imported together.

The products subject to the investigations are currently classified in the Harmonized Tariff Schedule of the United States (HTSUS) under subheadings: 7308.90.3000, 7308.90.6000, and 7308.90.9590.

The products subject to the investigations may also enter under the following HTSUS subheadings: 7216.91.0010, 7216.91.0090, 7216.99.0010, 7216.99.0090, 7222.40.6000, 7228.70.6000, 7301.10.0000, 7301.20.1000, 7301.20.5000, 7308.40.0000, 7308.90.9530, and 9406.90.0030.

The HTSUS subheadings above are provided for convenience and customs purposes only. The written description of the scope of the investigations is dispositive.[21]

FSS consists of steel mill products that have been fabricated and are suitable for erection or assembly into a variety of structures, including buildings (commercial, office, institutional, and multi-family residential), industrial and utility projects, parking decks, arenas and convention centers, medical facilities, and ports, transportation, and infrastructure facilities. Regardless of a structure's commercial or industrial end use, FSS is usually designed to meet AISC's *Steel Construction Manual* specifications. FSS is assembled predominantly from heavy steel sections, especially heavy parallel flange beams, but also from angles, channels, and hollow structural shapes, as well as steel plates.[22]

C. Arguments of the Parties

Petitioner argues that the Commission should define a single domestic like product that is coextensive with the scope.[23] It argues that the Commission should find that structural components of pre-engineered metal building systems ("PEMBs") are included within the domestic like product and that complete PEMBs and non-structural components are not included.[24] Petitioner states that structural components of PEMBs share the same physical characteristics and uses as other FSS, and are manufactured from similar primary steel mill

[21] *Certain Fabricated Structural Steel From Canada: Final Determination of Sales at Less Than Fair Value*, 85 Fed. Reg. 5373, 5375-5376 (Jan. 30, 2020); *Certain Fabricated Structural Steel From the People's Republic of China: Final Determination of Sales at Less Than Fair Value*, 85 Fed. Reg. 5376, 5379-5380 (Jan. 30, 2020); *Certain Fabricated Structural Steel From Mexico: Final Determination of Sales at Less Than Fair Value*, 85 Fed. Reg. 5390. 5392-5394 (Jan. 30, 2020); *Certain Fabricated Structural Steel From the People's Republic of China: Final Affirmative Countervailing Duty Determination*, 83 Fed. Reg. 5385, 5386-5387 (Jan. 30, 2020); *Certain Fabricated Structural Steel From Mexico: Final Affirmative Countervailing Duty Determination*, 83 Fed. Reg. 5381, 5382-5384 (Jan 30, 2020).

[22] CR/PR at I-4, I-18 to I-19.

[23] Petitioner's Prehearing Brief at 10-13; Petitioner's Posthearing Brief, Exh. 1, at 105-107.

[24] Petitioner's Prehearing Brief at 14-24; Petitioner's Posthearing Brief, Exh. 1, at 114-120.

products.[25] Petitioner notes that there is limited interchangeability between specific products within the entire grouping of FSS products because they are custom-manufactured for specific projects.[26] It states that FSS and structural components of PEMBs are sold to end users or shipped to the job site.[27] Petitioner contends that FSS and structural components of PEMBs are produced with the same processes and same types of skilled employees even if the production facilities may be different.[28] Specifically, Petitioner contends that structural components of PEMBs are produced using the same basic fabrication processes, cutting, welding, and punching as are used in all FSS production, with similar types of workers and processes, even if they may be produced in different facilities.[29] Petitioner states that customers and producers expect that all in-scope FSS, including structural components of PEMBs, will meet the unique expectations for a particular project and comply with AISC standards.[30] Petitioner argues that the prices of all in-scope FSS, including structural components of PEMBs, vary according to the size and requirements of the specific project.[31]

Petitioner also argues that the Commission should find that FSS contained in process plant modules ("PPM") is included within the domestic like product, and that the PPM itself (which contains out-of-scope components in addition to in-scope FSS) is not a separate like product.[32] Petitioner further argues that FSS in steel beams used to support solar panels ("solar panel beams") is included within the domestic like product, contending that all FSS, including solar steel beams, shares the same physical characteristics and uses, and is generally manufactured in the same facilities using the same processes, and is sold primarily to end users.[33]

Respondents' Arguments. Mexican Respondents (including domestic producers Cornerstone and BlueScope) argue that the Commission should find that FSS components of PEMBs constitute a separate like product from other in-scope FSS. Mexican Respondents argue that "conventional" FSS and FSS components of PEMBs do not share similar physical characteristics and uses, and go through different manufacturing processes. They assert that producers and customers view PEMBs and their component parts differently from conventional

[25] Petitioner's Prehearing Brief at 15-18; Petitioner's Posthearing Brief, Exh. 1, at 114-116.
[26] Petitioner's Prehearing Brief at 18-20; Petitioner's Posthearing Brief, Exh. 1, at 116-117.
[27] Petitioner's Prehearing Brief at 20-21; Petitioner's Posthearing Brief, Exh. 1, at 117-118.
[28] Petitioner's Prehearing Brief at 21-22; Petitioner's Posthearing Brief, Exh. 1, at 118-119.
[29] Petitioner's Posthearing Brief, Exh. 1, at 118.
[30] Petitioner's Prehearing Brief at 22-23; Petitioner's Posthearing Brief, Exh. 1, at 119-120.
[31] Petitioner's Prehearing Brief at 23-24; Petitioner's Posthearing Brief, Exh. 1, at 120.
[32] Petitioner's Prehearing Brief at 24-29; Petitioner's Posthearing Brief, Exh. 1, at 107-114.
[33] Petitioner's Prehearing Brief at 29-32.

FSS, and view finished PEMBs as different from conventional structures. Mexican Respondents argue that the structural components of conventional FSS construction and the FSS components of PEMBs are not interchangeable, and that the channels of distribution are different. Mexican Respondents assert that FSS components of PEMBs are frequently more expensive than conventional FSS on a per-ton basis.[34]

Chinese Respondents and ExxonMobil (collectively "PPM Respondents") both argue that the Commission should find that PPM constitutes a separate domestic like product, whether using the Commission's traditional six like product factor analysis or the Commission's five factor semi-finished product analysis. PPM Respondents argue that the imported article captured by Commerce's scope is the entire PPM[35] and that the Commission should find that the entire PPM is a separate like product, not simply the in-scope FSS portion of the PPM.[36]

WTEC argues that the Commission should find that solar panel beams should be a separate domestic like product from other in-scope FSS. It argues that, compared to other in-scope FSS, solar panel beams have different physical characteristics and uses, cannot be produced on the same production line, are never interchangeable, are sold through different channels of distribution, are perceived by customers and producers to be different products, and are generally twice as expensive.[37]

D. Domestic Like Product Analysis

Based on the record, we define a single domestic like product consisting of all in-scope FSS.

In its preliminary determinations, the Commission defined a single domestic like product that was coextensive with the scope and consisting of all in-scope FSS, based on the information in the record indicating generally similar physical characteristics and uses for all in-scope FSS products, as well as similar channels of distribution, and common manufacturing facilities, production processes, and employees. The Commission observed that most domestically produced in-scope FSS is custom-made for a specific end use pursuant to unique design specifications, which resulted in differences between particular FSS products, but found

[34] Mexican Respondents' Prehearing Brief at 3-19; Cornerstone's Posthearing Brief at 8-9 and Appendix A at 1-13, 19-20; BlueScope's Posthearing Brief at 2-7 and Exh. 1 at I-13.

[35] ExxonMobil's Prehearing Brief at 2-3.

[36] ExxonMobil's Prehearing Brief at 4-20; Chinese Respondents' Prehearing Brief at 7-17; ExxonMobil's Prehearing Brief at 2-13; Chinese Respondents' Posthearing Brief, Response to Commissioner Questions, at 1-6.

[37] WTEC's Prehearing Brief at 6-10.

that the record did not establish any clear dividing lines between different types of FSS products within this broad grouping.[38]

1. FSS Components of PEMBs

Physical Characteristics and Uses. FSS is assembled predominantly from heavy steel sections, especially heavy parallel flange beams, but also from angles, channels, and hollow structural shapes, as well as steel plates.[39] Because it is typically custom-manufactured for each specific construction project, FSS for one project will necessarily vary from that designed for another due to differing engineering and design requirements.[40] PEMBs components include primary rigid frames; secondary members include wall girts and roof purlins, cladding and bracing, all of which are engineered and designed to act as an integrated building system. The FSS used in the structural frames of PEMBs is primarily made from flat-rolled steel sheet or thin plate that is cut to tapered shapes by the fabricator, and is lighter in weight than much of the other FSS made from I-beams and T-sections.[41]

In-scope FSS generally has a wide variety of end uses; however, in each case the FSS shares the same critical quality of having been fabricated for erection or assembly into structures. Commercial facilities constructed with FSS include office, institutional, and multi-family residential buildings. Industrial facilities include refineries, petrochemical plants, drill-rig platforms, and utility plants. Other facilities include parking decks, sporting arenas, entertainment centers, convention centers, medical facilities, ports, transportation, and other infrastructure facilities.[42] FSS components of PEMBs are used in complete PEMBs (excluded from the scope), which, as stated in the scope, are typically limited to two stories. PEMBs are used in construction of production facilities, warehouses and distribution centers, retail stores, shopping centers, motels, automobile dealerships, office complexes, airplane hangars, and arenas.[43] Thus, while other FSS may be used for more complex multistory projects that FSS

[38] *Fabricated Structural Steel from Canada, China, and Mexico*, Inv. Nos. 701-TA-615-617 and 731-TA-1432-1434 (Preliminary), USITC Pub. 4878 at 9-12 (March 2019) ("*Preliminary Determinations*").

[39] CR/PR at I-19.

[40] CR/PR at I-18.

[41] CR/PR at I-20, I-26-27 and Table E-9 (comments of ***); Transcript of Hearing ("Hearing Tr.") at 199-200 (Detwiler); BlueScope's Posthearing Brief at Exh. 2, affidavit of Greg Pasley, at paragraphs 5-8.

[42] CR/PR at I-18.

[43] CR/PR at I-20.

components of PEMBs may not be, there is also overlap in the particular end uses of FSS components of PEMBs and other FSS.[44]

Manufacturing Facilities, Production Processes and Employees. FSS is produced on a project-by-project basis. The fabrication work begins after the design and architectural plans are finalized, and the precise fabrication process depends on the specifications and design requirements of the customer. The typical manufacturing process for FSS involves cutting a structural steel piece, typically a beam or a plate, to the desired length, and perforating holes in it with a precision drilling machine based on the specific design of the piece. Once all the individual parts are produced to the desired dimensions, the components are fitted and welded according to customer specifications, and the FSS moves to the finishing stage where the piece is grinded and/or smoothed out.[45]

Production of FSS components of PEMBs also begins with a design customized for the particular project.[46] FSS components of PEMBs are produced with more sophisticated computerized machinery to produce the "3-plate" members used for structural components of FSS for PEMBs, and are often fabricated with an automated one-sided weld.[47] While most facilities producing other FSS generally do not have the necessary specialized machinery to produce FSS components of PEMBs, some producers of other types of FSS, such as *** and ***, also fabricate FSS for use in PEMBs.[48] Further, BlueScope and NCI, U.S. producers of FSS components of PEMBs, acknowledge that they fabricate some other types of FSS at their facilities producing FSS components of PEMBs, generally on a different production line.[49] Of the three principal producers of FSS components of PEMBs, one (***) reported producing appreciable quantities of other FSS products at the same facilities.[50] Thus, although we acknowledge that production of FSS components of PEMBs may be done in different facilities and require certain specialized machinery given the design-focused nature of

[44] Hearing Tr. at 199-200 (Detwiler).

[45] CR/PR at I-24 to I-25.

[46] Hearing Tr. at 322 (Golladay), 324 (Guile).

[47] CR/PR at I-26 to I-27; BlueScope's Posthearing Brief at Exh. 2, affidavit of Greg Pasley, at paragraphs 10-11; Hearing Tr. at 199-201 (Detwiler).

[48] Petitioner's Posthearing Brief, Exh. 39, declaration of ***, at paragraphs 1-2; Exh. 45, declaration of ***, at paragraphs 1-2; *see* BlueScope's Posthearing Brief at Exh. 2, affidavit of Greg Pasley, at paragraph 11; CR/PR at Table E-9 (comments of ***).

[49] Hearing Tr. at 312-13 (Golladay, Pasley); BlueScope's Posthearing Brief at Exh. 2, affidavit of Greg Pasley, at paragraph 10; Teleconference notes of ***, February 7, 2020, at 3 (EDIS Document No. 702682).

[50] CR/PR at E-3.

production of FSS components of PEMBs, at bottom, the same fundamental fabrication processes, such as cutting, bending, punching, and welding, are being performed by employees skilled in these tasks and the broader steel fabrication trade whether producing FSS components of PEMBs or other FSS.

Channels of Distribution. FSS components of PEMBs and other FSS are both delivered to a job site.[51] Given the project-specific nature of FSS production, each particular type of FSS product goes to a distinct end-use group.[52] While other FSS products are typically sold through a competitive bidding process, FSS components of PEMBs are not sold in a bidding process, but are typically sold by PEMBs component producers to a network of associated builders/contractors.[53] FSS components of PEMBs are shipped sometimes as "kits," since the PEMBs components are configured to the building in which they are to be used and can be assembled by bolting them together at the site, without on-site cutting or welding as with other FSS.[54] However, the record indicates that other FSS may also be shipped in kits.[55]

Interchangeability. As a general matter, there is limited interchangeability between specific in-scope FSS products because they are custom manufactured for specific projects.[56] Mexican Respondents contend that the structural components of PEMBs and the structural components of other FSS products are not interchangeable, in that lighter FSS components of PEMBs are not used for large, high-rise structures with great building loads, while other FSS is inefficient for use in small, low-rise buildings.[57] However, the record indicates that producers of FSS components of PEMBs such as NCI sell their product to both producers of complete PEMBs and other fabricators.[58] Moreover, producers of other types of FSS, such as *** and ***, also ***.[59] Further, ***

[51] CR/PR at Table II-1; CR/PR at Table E-9 (comments of ***); Hearing Tr. at 198 (Golladay), 203 (Pasley).

[52] CR/PR at II-1, II-11; s*ee* CR/PR at Table IV-4.

[53] CR/PR at V-4 to V-6; Hearing Tr. at 202-203, 253, 328-329 (Pasley).

[54] CR/PR at Table E-9 (comments of ***); BlueScope's Posthearing Brief at Exh. 2, affidavit of Greg Pasley, at paragraphs 15-16.

[55] CR/PR at Table E-9 (comments of *** reporting that ***).

[56] *See* CR/PR at II-28; Petitioner's Prehearing Brief at 18-19.

[57] BlueScope's Posthearing Brief, Exh. 2, affidavit of Greg Pasley, at paragraph 12; *see* CR/PR at Table E-9 (comments of ***).

[58] Hearing Tr. at 308 (Golliday)

[59] Petitioner's Posthearing Brief, Exh. 39, declaration of ***, a paragraphs 1-3; Exh. 45, declaration of ***, at paragraphs 1-3.

reported that ***.[60] Thus, the record indicates some degree of interchangeability between structural FSS components of PEMBs and other FSS.[61]

Further, while FSS components of PEMBs are not used for large, high-rise structures, other FSS is also used in small, low-rise buildings. The record indicates that NCI, a producer of both FSS components of PEMBs and other FSS, sells its product mainly to producers of complete PEMBs but also to other fabricators.[62] In addition, producers of other types of FSS, *** and ***, also ***.[63]

Producer and Customer Perceptions. The record evidence regarding producer and customer perceptions largely reflects the similarities and differences in physical characteristics and uses and interchangeability previously noted. Mexican Respondents contend that producers and customers view structures constructed using FSS components of PEMBs, which are lighter, smaller, lower-cost buildings, as being different from structures produced with other FSS.[64] Petitioner contends that customers and producers expect that all in-scope FSS, including structural components of PEMBs, will comply with AISC standards along with meeting the requirements of the particular project.[65] *** perceive the FSS components of PEMBs to be a distinct product from other FSS products.[66]

[60] *See* CR/PR at Table E-9 (Comments of ***); *see also* Teleconference notes of ***, February 7, 2020, at 3 (EDIS Document No. 702682).

[61] According to one U.S. producer of "conventional" FSS that also fabricates FSS for use in PEMBs, "a structural component for a pre-engineered metal building can be virtually identical to a fabricated structural steel product manufactured in one of our fabrication facilities." Petitioner's Posthearing Brief, Exh. 45, declaration of ***, at paragraph 4; see CR/PR at Table E-9 (comments of ***).

[62] Hearing Tr. at 308 (Golliday) (noting that "{w}e sell components to PEMBs producers, competitors of us, actually, and other fabricators" and that the other fabricators that it sells PEMBs components to use the components "mainly {for} pre-engineered type structures, or it could be components, just for a separate small project" or it "could be insulated panels for a cold storage building"); Hearing Tr. at 329 (Pasley) (indicating that contractors who typically work with PEMBs component suppliers "could be" also purchasing "conventional" FSS and that "there is an area of overlap in terms of the types of projects"); Hearing Tr. at 330 (Golladay) ("For NCI, we experience the same thing").

[63] Petitioner's Posthearing Brief, Exh. 39, declaration of ***, a paragraphs 1-3; Exh. 45, declaration of ***, at paragraphs 1-3.

[64] BlueScope's Posthearing Brief, Exh. 2, affidavit of Greg Pasley, at paragraphs 18-20; CR/PR at Table E-9 (comments of ***).

[65] Petitioner's Prehearing Brief at 22-23; Petitioner's Posthearing Brief, Exh. 1, at 119-120.

[66] CR/PR at Table E-9 (comments of ***).

As indicated in the scope, the Metal Building Manufacturers Association ("MBMA") publishes the standards used to manufacture PEMBs, rather than the AISC.[67] However, the primary rigid frames for PEMBs components are designed and constructed in accordance with standards developed by the AISC and the Sheet Steel Building Institute, so AISC standards are applicable to producers of FSS components of PEMBs as well.[68]

Price. The record does not contain reliable pricing data that would permit a comparison of prices of FSS components of PEMBs and prices for other FSS.[69]

Conclusion. In view of the foregoing, we cannot conclude that there is a clear dividing line between FSS components of PEMBs and other FSS. As an initial matter, however, we acknowledge that the record reflects some differences between FSS components of PEMBs and other FSS. For example, as we explain above, the steel inputs used in producing most FSS components of PEMBs are different in certain respects from those used in producing most other FSS. Further, the FSS used in the structural frames of PEMBs, which is generally made from flat-rolled steel sheet or thin plate, is lighter in weight than much of the other FSS made from I-beams or T-sections. Additionally, although both FSS components of PEMBs and other FSS are shipped directly to the job site, there are differences in how FSS components of PEMBs are sold, and most producers of FSS components of PEMBs perceive themselves as selling a distinct product.

However, it is not clear that these differences establish clear dividing lines between the FSS components of PEMBs and all other FSS, particularly where many of these same characteristics vary within other types of FSS products. For example, reported end uses for FSS span buildings, parking decks, arenas, and ports, among other things.[70] The physical characteristics of the specific FSS used in these projects will vary, which is why, as the parties acknowledge, there is such limited interchangeability across in-scope FSS.[71] The scope of these

[67] CR/PR at I-20.

[68] CR/PR at I-26 to I-27.

[69] Mexican Respondents assert that FSS components of PEMBs are frequently more expensive than other FSS on a per-ton basis due to specific production requirements, although the final installed system will use less steel and cost less than a conventional building. Mexican Respondents' Prehearing Brief at 18. However, we note that available average unit value ("AUV") data show that domestic producers' AUVs for their U.S. shipments of FSS components of PEMBs were *** than their AUVs for their U.S. shipments of other FSS throughout the period of investigation. CR/PR at Table F-2.

[70] CR/PR at I-4, I-18.

[71] CR/PR at I-26 (explaining that operators fabricate steel mill products into FSS by "by *various* cutting, drilling, punching, bending, welding, joining, bolting, pressure fitting, molding, and adhesion steps, as well as various finishing and coating procedures . . .") (emphasis added).

investigations includes a wide variety of specific FSS products that meet the distinct requirements of particular purchasers and particular projects. FSS products for different end uses will have somewhat different characteristics that limit interchangeability.[72] This limited interchangeability between FSS components of PEMBs and other FSS in particular applications, as well as divergent customer and producer perceptions, are inherent in a custom-manufactured product such as FSS and weigh against a finding of clear dividing lines between different sets of product. In cases where domestically manufactured merchandise is made up of a grouping of similar products, the Commission does not consider each item of merchandise to be a separate like product that is only "like" its identical counterpart in the scope, but considers the grouping itself to constitute the domestic like product.[73]

On balance, we find that the weight of the evidence reflects substantial overlap between FSS components of PEMBs and other FSS and that the distinctions between FSS components of PEMBs and other FSS are not different in kind from the distinctions across FSS generally. As detailed above, the record reflects substantial similarities in physical characteristics and uses, manufacturing processes and facilities, and channels of distribution. Both FSS components of PEMBs and other FSS are made from heavy steel sections and hollow structural shapes as well as steel plate and are fabricated for erection or assembly into structures. With respect to manufacturing facilities, the record shows that some producers of FSS components of PEMBs produce other FSS products at their production facilities, and some U.S. producers of other FSS produce FSS components of PEMBs at their production facilities; further, to the extent that manufacturing facilities or processes may differ, we do not consider that these differences support a finding of a difference in kind. In terms of channels of distribution, although the record shows that FSS components of PEMBs tend to be sold through builder-supplier relationships, the record reflects that these relationships are not necessarily exclusive, and in any event both FSS components of PEMBs and other FSS are shipped directly to job sites. Moreover, while PEMBs producers look primarily to the MBMA as an industry association, and other FSS producers look to the AISC, the record shows that AISC standards are applicable to production of FSS components of PEMBs as well as of other FSS. Thus, we find

[72] Petitioner's Prehearing Brief at 18-19.

[73] *See*, *e.g.*, *Carbon and Certain Alloy Steel Wire Rod from Belarus, Russia, and the United Arab Emirates*, Inv. Nos. 731-TA-1349, 1352, and 1357 (Final), USITC Pub. 4752 at 14-15 (Jan. 2018); *Carbon and Certain Alloy Steel Wire Rod from China, Germany, and Turkey*, Inv. Nos. 731-TA-1099-1101 (Preliminary), USITC Pub. 3832 at 10 (Jan. 2006) ("a lack of interchangeability among products comprising a continuum is not unexpected and not inconsistent with finding a single like product."); *Stainless Steel Bar from France, Germany, Italy, Korea, and the United Kingdom*, Inv. Nos. 701-TA-413 and 731-TA-913-916 and 918 (Final), USITC Pub. 3488 at 6-7 (Feb. 2002).

that there is no clear dividing line between FSS components of PEMBs and other FSS products. Accordingly, we do not define FSS components of PEMBs as a separate domestic like product.

2. Process Plant Modules (PPM)

According to the scope definition, "{f}abricated structural steel is covered by the scope of the investigation … regardless of whether it is assembled or partially assembled, such as into modules, modularized construction units, or sub-assemblies of fabricated structural steel." Thus, any FSS contained in a PPM is within the scope,[74] and any non-FSS components contained in a PPM are outside the scope. The FSS in a PPM is not transformed into an out-of-scope product when non-FSS materials are added.[75] Moreover, as we have explained, the Commission's "domestic like product" analysis begins with the "article subject to {Commerce's} investigation," which Commerce defines.[76] Because Commerce has defined the article subject to its investigation as FSS, our analysis begins there.

PPM Respondents argue that the Commission should address whether the out-of-scope PPM is a separate like product using the Commission's semifinished products analysis. However, the Commission does not use the semifinished products analysis to ascertain whether the like product should include out-of-scope downstream products.[77] Consequently, the semifinished product analysis does not provide a basis to evaluate PPM Respondents' arguments.

Moreover, PPM Respondents' arguments are not framed in a manner that can be considered in the context of a traditional like product analysis. The basis of their argument is

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[74] *See* Department of Commerce memorandum, *Fabricated Structural Steel from Canada, Mexico, and the People's Republic of China: Final Scope Decision Memorandum*, January 23, 2020, at 28 (EDIS Document No. 702277).

[75] Commerce's scope provides: "The inclusion, attachment, joining, or assembly of non-steel components with fabricated structural steel does not remove the fabricated structural steel from the scope."

[76] 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).

[77] *See, e.g., Sodium Hexametaphosphate from China*, Inv. No. 731-TA-1110 (Preliminary), USITC Pub. 3912 at 7 n.36 (April 2007); *Certain Frozen or Canned Warmwater Shrimp from Brazil, China, Ecuador, India, Thailand, and Vietnam*, Inv. Nos. 731-TA-1063-1068 (Preliminary), USITC Pub. 3672 at 14-15 (Feb. 2004); *Beryllium Metal and High-Beryllium Alloys from Kazakhstan*, Inv. No. 731-TA-746 (Final), USITC Pub. 3019 at 5 (Feb. 1997); *Fresh Garlic from the People's Republic of China*, Inv. No. 731-TA-683 (Final), USITC Pub. 2825 at I-14 & n. 65 (Nov. 1994).

that PPMs should be considered a separate domestic like product because any imposition of duties would be affording protection to the U.S. PPM industry.[78] But the entities protected by the imposition of duties are not the focus of the Commission's domestic like product analysis. The starting point of the analysis is the scope definition and the purpose of the analysis is to ascertain whether there are clear dividing lines between different in-scope products or whether there is a lack of a clear dividing line between an in-scope product and an out-of-scope product such that the domestic like product should be broadened to include merchandise outside of the scope.[79] PPM Respondents fail to address the first inquiry because they do not argue that the FSS components in PPMs (as opposed to the completed PPM, which overwhelmingly consists of material other than FSS)[80] is somehow distinct from other FSS, and disclaim interest in the second inquiry because they do not seek to include PPMs in a broader domestic like product definition. Consequently, we find that there is no basis for separate domestic like product treatment for PPMs.[81]

3. Steel Beams for Solar Panels

Solar panel beams are an FSS product with a specific end use, to provide support for solar panels.[82] WTEC asserts that solar panel beams have several differences from other FSS: solar panel beams are smaller than most FSS, are galvanized, do not provide structural support, and do not require AISC certification.[83] However, these types of distinctions between FSS used for solar panel beams and other FSS do not appear to be different in kind from the general distinctions between different types of FSS used for different applications discussed in section II.D.1. above. Moreover, the questionnaire responses from responding U.S. producers report

[78] *See* ExxonMobil's Final Comments at 4; ExxonMobil's Posthearing Brief at 9-10.

[79] *See Hitachi Metals, Ltd. v. United States*, Case No. 19-1289, slip op. at 8-9 (Fed. Circ. Feb. 7, 2020).

[80] An ExxonMobil representative testified that FSS accounted for less than five percent of the total value of the modules that ExxonMobil was importing. Hearing Tr. at 226 (Guilfoyle); *see* Chinese Respondents' Posthearing Brief, Response to Commissioner Questions, at 4-5 and Exh. 5 (reporting that the cost of the FSS was less than two percent of the value of a module project for Wison Petrochemicals).

[81] Given the limited record evidence regarding FSS used in PPMs, we are unable to determine whether a clear dividing line exists between that FSS and other in-scope FSS.

[82] CR/PR at I-28.

[83] WTEC's Prehearing Brief at 6-10.

that ***.[84] The responding producers also state that ***.[85]

Thus, while the record indicates that solar panel beams have a distinct end use from other in-scope FSS products, and are not interchangeable with other FSS products, they are part of the broader grouping of FSS products. In particular, the record indicates an overlap between panel beams and other FSS products in raw materials, manufacturing facilities, and channels of distribution. Thus, the record does not support a finding that there is a clear dividing line between solar panel beams and other FSS products, and we do not define solar panel beams to be a separate domestic like product.

Thus, we find that the record does not indicate clear dividing lines between any of the various articles that respondents seek to be accorded separate domestic like product treatment and other in-scope articles. Accordingly, we define a single domestic like product consisting of all in-scope FSS.

III. 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."[86] In defining the domestic industry, the Commission's general practice has been to include in the industry producers of all domestic production of the like product, whether toll-produced, captively consumed, or sold in the domestic merchant market.

We must determine whether any producer of the domestic like product should be excluded from the domestic industry pursuant to section 771(4)(B) of the Tariff Act. This provision allows the Commission, if appropriate circumstances exist, to exclude from the domestic industry producers that are related to an exporter or importer of subject merchandise

[84] CR/PR at Table E-6.
[85] CR/PR at Table E-6.
[86] 19 U.S.C. § 1677(4)(A).

or which are themselves importers.[87] Exclusion of such a producer is within the Commission's discretion based upon the facts presented in each investigation.[88]

As discussed below, U.S. producers ADF International ("ADF"), BlueScope, FabSouth LLC ("FabSouth"), NCI, Ocean Steel Corporation ("Ocean"), and Supreme Steel Inc. ("Supreme") directly imported subject merchandise during the January 2016-September 2019 period of investigation ("POI").[89] There are three additional U.S. producers that share an affiliation with an exporter or importer of subject merchandise; while their status under the related party provision is unclear, we find that there is no basis for their exclusion from the domestic

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

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

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

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

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

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

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

[89] In the preliminary determinations, the Commission excluded Canatal Steel USA ("Canatal USA") and Ocean from the domestic industry as related parties, and found that appropriate circumstances did not exist to exclude ADF, FabSouth, and Supreme from the domestic industry. *Preliminary Determinations,* USITC Pub. 4878 at 12-16. Because Canatal USA's Canadian affiliate, Canatal, is now a nonsubject producer, Canatal USA's imports from that affiliate are nonsubject imports, and Canatal USA is not a related party.

industry.[90] There is also one U.S. producer that reported purchasing subject merchandise that we find is not a related party.[91]

Petitioner argues that the Commission should exclude ADF, BlueScope, NCI, Ocean, and Supreme from the domestic industry under the related party provision, asserting that the primary interest of each of these producers lies in importation rather than domestic production, and that inclusion of their data distorts the overall data for the domestic industry.[92] Canadian Respondents argue that ADF and Supreme should not be excluded from the domestic industry under the related party provision, arguing that their interests do not lie primarily in importation of subject merchandise, given the integration between Canadian FSS producers and their U.S. affiliates.[93] Mexican Respondents and Chinese Respondents argue that

[90] Two U.S. producers, *** and *** are affiliated with foreign producers of subject merchandise, while a third U.S. producer, ***, reported that it is ***. CR/PR at III-8 n.5, Table III-3. However, in each case, the information in the record is insufficient to determine whether there is a control relationship between the U.S. producer and its affiliate(s). *See* *** U.S. Producers Questionnaire Response at Questions I-6, I-8 (EDIS Document No. ***); *** Foreign Producer Questionnaire Response at I-3 (EDIS Document No. ***); *** U.S. Producer Questionnaire Response at I-6 to I-8 (EDIS Document No. ***); *** Foreign Producer Questionnaire Response at I-3 (EDIS Document No. ***); *** U.S. Producer Questionnaire Response at I-7 (EDIS Document No. ***). Thus, it is unclear whether any of these three U.S. producers is a related party. *See* 19 U.S.C. § 1677(4)(B)(ii). None of the three U.S. producers directly imported subject merchandise during the POI, *see* CR/PR at Table III-10, and no party has argued that any of these three producers should be excluded from the domestic industry under the related party provision. Accordingly, even assuming *arguendo* that ***, *** and *** are related parties, we do not find that appropriate circumstances exist to exclude any of these three producers from the domestic industry.

[91] U.S. producer *** purchased *** short tons of subject imports in 2016, *** short tons in 2017, and *** short tons in 2018, in each case from ***. *** U.S. Producer Questionnaire Response at Question IV-13 (EDIS Document No. ***). The Commission has previously concluded that a purchaser may be treated as a related party if it controls large volumes of subject imports. The Commission has found such control to exist when the domestic producer was responsible for a predominant proportion of an importer's purchases and these purchases were substantial. *See Iron Construction Castings from Brazil, Canada, and China*, Inv. Nos. 701-TA-248, 731-TA-262-263, 265 (Fourth Review), USITC Pub. 4655 at 11 (Dec. 2016). *** purchases of FSS from *** from *** amounted to *** percent of that firm's *** short tons of imports into the United States in 2016, *** percent of that firm's *** short tons of imports in 2017, and *** percent of that firm's *** short tons of imports in 2018. *** Importer Questionnaire Response at Question II-5a (EDIS Document No. ***). Accordingly, we find that *** did not control a sufficiently large volume of subject imports to qualify as a related party.

[92] Petitioner's Prehearing Brief at 33-40; Petitioner's Posthearing Brief, Exh. 1, at 88-90.

[93] Canadian Respondents' Posthearing Brief at 9-10.

BlueScope and NCI should not be excluded from the domestic industry as related parties, asserting that their imports of FSS account for a very small portion of their domestic production.[94]

Analysis. We examine below for each of the six related party producers whether appropriate circumstances exist to exclude it from the domestic industry.

ADF. ADF imported subject merchandise from *** during the POI. ADF accounted for *** percent of U.S. production in 2018;[95] its domestic production was *** short tons in 2016, *** short tons in 2017, *** short tons in 2018, *** short tons in interim 2018, and *** short tons in interim 2019.[96] ADF's imports from subject sources in *** were *** short tons in 2016, *** short tons in 2017, *** short tons in 2018, *** short tons in January-September ("interim") 2018 and *** short tons in interim 2019.[97] The ratio of its imports of subject merchandise to its U.S. production was *** percent in 2016, *** percent in 2017, *** percent in 2018, *** percent in interim 2018, and *** percent in interim 2019.[98] ADF's reported reason for importing was ***,[99] and it ***.[100]

ADF's *** ratio of subject imports to domestic production, particularly after ***, does not support a finding that its interest lies primarily in domestic production. Indeed, ADF's volume of subject imports *** during the POI, including in the interim period, while its volume of domestic production ***.[101] In addition, there is no indication on this record that exclusion of its data skew the data for the industry as a whole. Accordingly, we find that appropriate circumstances exist to exclude ADF from the domestic industry.

BlueScope. BlueScope imported subject merchandise from *** during the POI. BlueScope was the *** domestic producer of FSS in 2018, accounting for ***

[94] Mexican Respondents' Prehearing Brief at 20-24; Cornerstone's Posthearing Brief at 5-6 and Appendix A at 14-15; BlueScope's Posthearing Brief at 12-13; Chinese Respondents' Posthearing Brief, Response to Commissioner Questions, at 10-14.

[95] CR/PR at Table III-1.

[96] CR/PR at Table III-10.

[97] CR/PR at Table III-10.

[98] CR/PR at Table III-10.

[99] CR/PR at Table III-10.

[100] ADF's U.S. Producer Questionnaire Response at Question I-5 (EDIS Document No. 693605)

[101] CR/PR at Table III-10.

percent of U.S. production in that year;[102] its domestic production was *** short tons in 2016, *** short tons in 2017, *** short tons in 2018, *** short tons in interim 2018, and *** short tons in interim 2019.[103] BlueScope's imports from subject sources in *** were *** short tons in 2016, *** short tons in 2017, *** short tons in 2018, *** short tons in interim 2018, and *** short tons in interim 2019.[104] The ratio of its imports of subject merchandise to its U.S. production was *** percent in 2016, *** percent in 2017, *** percent in 2018, *** percent in interim 2018, and *** percent in interim 2019.[105] BlueScope's reason for importing was ***.[106] BlueScope *** the petitions.[107]

Given that BlueScope's domestic production of FSS was *** than the quantity of its importation of subject merchandise throughout the POI, we find that its primary interest appears to lie in domestic production and not importation of subject merchandise. Accordingly, we find that appropriate circumstances do not exist to exclude BlueScope from the domestic industry.

FabSouth. FabSouth imported subject merchandise from *** during the POI, and its ***, is an importer of subject merchandise from ***.[108] FabSouth was the *** domestic producer of FSS in 2018, accounting for *** percent of domestic production;[109] its domestic production was *** short tons in 2016, *** short tons in 2017, *** short tons in 2018, *** short tons in interim 2018, and *** short tons in interim 2019.[110] FabSouth's imports of subject merchandise were *** short tons in 2016, *** short tons in 2017, *** short tons in 2018, *** short tons in interim 2018, and *** short tons in interim 2019.[111] *** imports of subject merchandise from *** were *** short tons in 2016, *** short tons in 2017, *** short tons in 2018, *** short tons in interim

[102] CR/PR at Table III-1.
[103] CR/PR at Table III-10.
[104] CR/PR at Table III-10.
[105] CR/PR at Table III-10.
[106] CR/PR at Table III-1.
[107] BlueScope's U.S. Producer Questionnaire Response at Question I-5 (EDIS Document No. 694313)
[108] CR/PR at Table III-10 and n.21.
[109] CR/PR at Table III-1.
[110] CR/PR at Table III-10.
[111] CR/PR at Table III-10.

2018, and *** short tons in interim 2019.[112] FabSouth's ratio of its own imports of subject merchandise to its domestic production was *** percent in 2016, *** percent in 2017, *** percent in 2018, *** percent in interim 2018, and *** percent in interim 2019. The ratio of the *** imports of subject merchandise by FabSouth *** to FabSouth's domestic production was *** percent in 2016, *** percent in 2017, *** percent in 2018, *** percent in interim 2018, and *** percent in interim 2019. FabSouth's reported reason for importing was ***,[113] and it ***.[114]

FabSouth's ratio of subject imports to domestic production was *** during the POI and *** while its domestic production ***, indicating that its interest lies primarily in domestic production. Although this ratio of subject imports to domestic production increases when we consider the *** subject imports of FabSouth ***, that ratio remained *** during the POI. Given that Fab South's domestic production of FSS was *** than the quantity of its importation of subject merchandise, we find that its primary interest appears to lie in domestic production and not importation of subject merchandise. Accordingly, we find that appropriate circumstances do not exist to exclude FabSouth from the domestic industry.

NCI. NCI imported subject merchandise from *** during the POI. NCI was the *** domestic producer of FSS in 2018, accounting for *** percent of U.S. production that year;[115] its domestic production was *** short tons in 2016, *** short tons in 2017, *** short tons in 2018, *** short tons in interim 2018, and *** short tons in interim 2019.[116] NCI's imports from subject sources in *** were *** short tons in 2016, *** short tons in 2017, *** short tons in 2018, *** short tons in interim 2018 and *** short tons in interim 2019.[117] The ratio of its imports of subject merchandise to its U.S. production was *** percent in 2016, *** percent in 2017, *** percent in 2018, *** percent in interim 2018, and *** percent in

[112] *** U.S. Importer Questionnaire Response at Question II-5a (EDIS Document No. ***).

[113] CR/PR at Table III-10.

[114] FabSouth's U.S. Producer Questionnaire Response at Question I-5 (EDIS Document No. 695032).

[115] CR/PR at Table III-1.

[116] CR/PR at Table III-10.

[117] CR/PR at Table III-10.

interim 2019.[118] NCI's reported reason for importing was ***.[119] NCI *** the petitions.[120]

Given that NCI's domestic production of FSS was *** than the quantity of its importation of subject imports throughout the POI, we find that its primary interest appears to lie in domestic production and not importation of subject merchandise. Accordingly, we find that appropriate circumstances do not exist to exclude NCI from the domestic industry.

*Ocean. O*cean imported subject merchandise from *** during the POI.[121] Ocean reported ***, and reported *** domestic production in 2018 or interim 2019;[122] its domestic production was *** short tons in 2016, *** short tons in 2017, and *** short tons in 2018, interim 2018, and interim 2019.[123] Ocean's imports from subject sources in *** were *** short tons in 2016, *** short tons in 2017, *** short tons in 2018, *** short tons in interim 2018 and *** short tons in interim 2019.[124] The ratio of its imports of subject merchandise to its U.S. production was *** percent in 2016, *** percent in 2017, and *** in 2018, interim 2018, and interim 2019.[125] Ocean ***.[126]

Given Ocean's intermittent domestic production and its *** ratio of subject imports to domestic production throughout the POI, we find that its interest does not lie primarily in domestic production, particularly in light of the reported ***. In addition, there is no indication on this record that exclusion of its data will

[118] CR/PR at Table III-10.
[119] CR/PR at Table III-10.
[120] CR/PR at Table III-1.
[121] CR/PR at Tables III-10.
[122] CR/PR at Table III-10; Ocean's Preliminary Phase U.S. Producer Questionnaire Response at Question II-2 (EDIS Document No. 667381).
[123] CR/PR at Table III-10.
[124] CR/PR at Table III-10.
[125] CR/PR at Table III-9.
[126] Ocean's U.S. Producer Questionnaire Response at Question I-5 (EDIS Document No. 694535).

skew the data for the rest of the industry as a whole.[127] Accordingly, we find that appropriate circumstances exist to exclude Ocean from the domestic industry.

Supreme. Supreme imported subject merchandise from *** during the POI.[128] Supreme accounted for *** percent of U.S. production in 2018;[129] its domestic production was *** short tons in 2016, *** short tons in 2017, *** short tons in 2018, *** short tons in interim 2018, and *** short tons in interim 2019.[130] Supreme's imports from subject sources were *** short tons in 2016, *** short tons in 2017, *** short tons in 2018, *** short tons in interim 2018 and *** short tons in interim 2019.[131] The ratio of its imports of subject merchandise to its U.S. production was *** percent in 2016, *** percent in 2017, *** percent in 2018, *** percent in interim 2018, and *** percent in interim 2019.[132] Supreme's reported reasons for importing were ***,[133] and it ***.[134]

[127] Ocean submitted *** data in its final phase U.S. producer questionnaire response. Ocean's U.S. Producer Questionnaire Response (EDIS Document No. 694535).

[128] CR/PR at Table III-10.

[129] CR/PR at Table III-1.

[130] CR/PR at Table III-10.

[131] CR/PR at Table III-10.

[132] CR/PR at Table III-10.

[133] CR/PR at Table III-10. Specifically, Supreme reported that its reason for importing was ***. *Id*.

[134] Supreme's U.S. Producer Questionnaire Response at Question I-5 (EDIS Document No. 694212).

Given Supreme's ratio of importation of subject merchandise to U.S. production fluctuated *** during the POI, its ***, we find that Supreme maintains a substantial interest in domestic production, notwithstanding ***. On balance we find that appropriate circumstances do not exist to exclude Supreme from the domestic industry.

Accordingly, we define the domestic industry to consist of all U.S. producers of the domestic like product except ADF and Ocean.

IV. Cumulation[135]

For purposes of evaluating the volume and effects for a determination of material injury by reason of subject imports, section 771(7)(G)(i) of the Tariff Act requires the Commission to cumulate subject imports from all countries as to which petitions were filed and/or investigations self-initiated by Commerce on the same day, if such imports compete with each other and with the domestic like product in the U.S. market. In assessing whether subject imports compete with each other and with the domestic like product, the Commission generally has considered four factors:

(1) the degree of fungibility between subject imports from different countries and between subject imports and the domestic like product,

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[135] 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 generally be deemed negligible. 19 U.S.C. §§ 1671b(a), 1673b(a), 1677(24)(A)(i), 1677(24)(B). The exceptions to this general rule are not applicable to these investigations.

There are two differences between the imports included in the Commission's negligibility determinations in its antidumping duty investigations and those included in its countervailing duty investigations for the investigations on FSS from Mexico. First, imports from Mexican producer Corey are included as subject imports in the negligibility calculations for the countervailing duty investigation, but are nonsubject for purposes of the antidumping duty investigation, since Corey received a zero dumping margin in Commerce's final determination in its antidumping duty investigation on FSS from Mexico. *Certain Fabricated Structural Steel From Mexico: Final Determination of Sales at Less Than Fair Value,* 85 Fed. Reg. 5390, 5392 (Jan. 30, 2020). Second, imports from Mexican producer Building Systems are included as subject imports in the negligibility calculations for the antidumping duty investigation, but are nonsubject for purposes of the countervailing duty investigation, since Building Systems received a *de minimis* subsidy rate in Commerce's final determination in its countervailing duty investigation on FSS from Mexico. *Certain Fabricated Structural Steel From Mexico: Final Affirmative Countervailing Duty Determination*, 83 Fed. Reg. 5381, 5382 (Jan 30, 2020).

In the antidumping duty investigations, for the period of February 2018 to January 2019, the most recent 12-month period preceding the filing of the petitions on February 5, 2019, subject imports from Canada accounted for 24.5 percent of total FSS imports by quantity, subject imports from China accounted for 34.5 percent, and subject imports from Mexico accounted for *** percent. CR/PR at Table IV-3. In the countervailing duty investigations, subject imports from China accounted for 34.5 percent of total FSS imports by quantity, and subject imports from Mexico accounted for *** percent. *Id.*

Thus, for the antidumping duty investigations, imports from all three subject countries exceed the pertinent 3 percent statutory threshold, and we accordingly find that imports from each subject country are not negligible. For the countervailing duty investigations, imports from both subject countries (China and Mexico) exceed the pertinent 3 percent statutory threshold, and we accordingly find that imports from both subject countries are not negligible.

including consideration of specific customer requirements and other quality related questions;

(2) the presence of sales or offers to sell in the same geographic markets of subject imports from different countries and the domestic like product;

(3) the existence of common or similar channels of distribution for subject imports from different countries and the domestic like product; and

(4) whether the subject imports are simultaneously present in the market.[136]

While no single factor is necessarily determinative, and the list of factors is not exclusive, these factors are intended to provide the Commission with a framework for determining whether the subject imports compete with each other and with the domestic like product.[137] Only a "reasonable overlap" of competition is required.[138]

A. Arguments of the Parties

Petitioner argues that the Commission should cumulate subject imports from Canada, China, and Mexico for its analysis of present material injury. It argues that the record shows sufficient fungibility between and among subject imports from all three sources and the domestic like product, that domestically produced FSS and subject imports from all three subject countries are sold in each region of the United States, are sold through the same channels of distribution, and were simultaneously present in the U.S. market throughout the POI.[139]

Mexican Respondents argue that subject imports from Mexico should not be cumulated with subject imports from Canada or China, asserting that there is no reasonable overlap of

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

[137] *See*, *e.g.*, *Wieland Werke, AG v. United State*s, 718 F. Supp. 50 (Ct. Int'l Trade 1989).

[138] The Statement of Administrative Action (SAA) to the Uruguay Round Agreements Act (URAA), expressly states that "the new section will not affect current Commission practice under which the statutory requirement is satisfied if there is a reasonable overlap of competition." H.R. Rep. No. 103-316, Vol. I at 848 (1994) (*citing Fundicao Tupy, S.A. v. United States*, 678 F. Supp. at 902); *see Goss Graphic Sys., Inc. v. United States*, 33 F. Supp. 2d 1082, 1087 (Ct. Int'l Trade 1998) ("cumulation does not require two products to be highly fungible"); *Wieland Werke, AG*, 718 F. Supp. at 52 ("Completely overlapping markets are not required.").

[139] Petitioner's Prehearing Brief at 41-48; Petitioner's Posthearing Brief, Exh. 1, at 94-103.

competition between imports from Mexico and imports from any other subject country or the domestic like product. They contend that subject imports from Mexico are not fungible with FSS from other sources, that subject imports from Mexico are sold through different channels of distribution than FSS from other sources, and that subject imports from Mexico differ geographically from other subject sources in that more than 99 percent of subject imports from Mexico enter the United States via the Southern or Western border.[140] Mexican producer Corey argues that the Commission should not cross-cumulate subject imports from Mexico in the antidumping and countervailing duty investigations, because there is a different product mix of the subject imports from Mexico in the two investigations, given the exclusion of Corey in the antidumping duty investigation and the exclusion of Building Management in the countervailing duty investigation.[141]

Canadian Respondents argue that subject imports from Canada should not be cumulated with subject imports from China and Mexico, asserting that imports from Canada are not fungible with the domestic like product or imports from the other subject sources, because FSS is primarily produced to order and FSS projects are unique. They argue that there is little overlap in particular applications and product categories between subject imports from different sources.[142] The Government of Canada argues that the Commission should not cross-cumulate subject imports from Canada, which Commerce determined are not subsidized, with subject imports from China and Mexico, which Commerce determined are subsidized.[143] Chinese Respondents do not make any argument contesting cumulation.[144]

B. Analysis

The statutory threshold for cumulation is satisfied in these investigations because petitioner filed the antidumping and countervailing duty petitions with respect to all three subject countries on the same day, February 4, 2019.[145]

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[140] Mexican Respondents' Prehearing Brief at 47-53; Cornerstone's Posthearing Brief, Appendix A, at 17-18; Corey's Posthearing Brief, Exh. 1, at 6-9.

[141] Corey's Posthearing Brief at 3-4.

[142] Canadian Respondents' Posthearing Brief at 10-12.

[143] Government of Canada's Posthearing Brief at 2-5.

[144] Chinese Respondents' Prehearing Brief at 19.

[145] We observe that these investigations involve affirmative findings of dumping from Commerce regarding FSS from Canada, China, and Mexico, and affirmative findings of subsidization from Commerce regarding FSS from China and Mexico. Additionally, as previously discussed, imports from different Mexican producers are subject to Commerce's final affirmative dumping and subsidy findings. Consequently, any decision to cumulate imports from all subject sources in these investigations will involve "cross-cumulating" dumped imports with subsidized imports. We have previously explained why we are continuing our longstanding practice of cross-cumulating. *See Polyethylene Terephthalate*

Fungibility. A substantial majority of U.S. producers reported that the domestic like product and subject imports from Canada, China, and Mexico are always interchangeable and that imports from all three subject countries are always interchangeable with each other.[146] A substantial majority of U.S. importers and a majority of U.S. purchasers reported that the domestic like product and subject imports from Canada, China, and Mexico were always or frequently interchangeable, and that imports from all three subject countries are always or frequently interchangeable with each other.[147] Majorities of purchasers reported that the domestic like product was comparable with subject imports from Canada and Mexico in each of 25 specified purchasing factors. Majorities or pluralities of purchasers reported that the domestic like product and subject imports from China were comparable in 18 of the 25 factors.[148]

The record indicates appreciable percentages of U.S. shipments of the domestic like product and imports from each subject country of "all other FSS" (FSS other than process plant modules, solar beams, and FSS components of PEMBs) during the POI.[149] In 2018, "all other FSS" accounted for *** percent of U.S. shipments of the domestic like product, *** percent of U.S. shipments of subject imports from Canada, *** percent of U.S. shipments of subject imports from China, and *** percent of U.S. shipments of subject imports from Mexico.[150] Thus, the record indicates overlap in the reported U.S. shipments of the domestic like product and imports from each subject country of "all other FSS," the largest share of the U.S. market.[151]

There was also overlap in the reported U.S. shipments of imports from the three subject countries and the domestic like product in 2018 by type of application, with appreciable percentages of shipments from all four sources in several types of applications. Although there were differences in concentration, FSS from all four sources was present in the "industrial"

(PET) Resin from Canada, China, India, and Oman, Inv. Nos. 701-TA-531-532 and 731-TA-1270-1273 (Final), USITC Pub. 4604 at 9-11 (April 2016). *See also Circular Welded Carbon Quality Steel Pipe from India, Oman, the United Arab Emirates, and Vietnam*, Inv. Nos. 701-TA-482-484 (Final), USITC Pub. 4362 at 12 n.59 (Dec. 2012); *Softwood Lumber from Canada,* Inv. Nos 701-TA-414 and 731-TA- 928 (Final), USITC Pub. 3059 at 29-31 (May 2009)*; Bingham & Taylor v. United States*, 815 F.2d 982 (Fed. Cir. 1987).

[146] CR/PR at Table II-12.

[147] CR/PR at Table II-12.

[148] CR/PR at Table II-11.

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

[150] CR/PR at Table IV-5

[151] CR/PR at Table IV-5. Combined U.S. producers' and importers' U.S. shipments of "all other FSS" represented *** percent of the U.S. market in 2018. *Id.*

applications portion of the market,[152] the "sports and entertainment" applications portion,[153] and the "all other" applications portion.[154]

Moreover, the bid data collected by the Commission indicate that subject suppliers competed head-to-head with each other and domestic producers for specific projects in the U.S. market.[155]

Channels of Distribution. FSS from all sources is shipped primarily to end users at the jobs site. U.S. producers and importers of subject merchandise from Canada and Mexico reported that *** of their U.S. commercial shipments over the POI went to end users at the job site and *** shipments went to distributors.[156] Importers of subject merchandise from China reported that the vast majority of their U.S. commercial shipments over the POI went to end users at the job site, with a substantial percentage in 2018 going to FSS manufacturers, and only a very small percentage of their U.S. shipments over the POI going to distributors.[157] [158]

[152] Industrial applications accounted for *** percent of U.S. shipments of the domestic like product in 2018, *** percent of U.S. shipments of subject imports from Canada, *** percent of subject imports from China, and *** percent of subject imports from Mexico. CR/PR at Table IV-4.

[153] Sports and entertainment applications accounted for *** percent of U.S. shipments of the domestic like product in 2018, *** percent of U.S. shipments of subject imports from Canada, *** percent of subject imports from China, and *** percent of subject imports from Mexico. CR/PR at Table IV-4.

[154] Other applications accounted for *** percent of U.S. shipments of the domestic like product in 2018, *** percent of U.S. shipments of subject imports from Canada, *** percent of U.S. shipments of subject imports from China, and *** percent of U.S. shipments of subject imports from Mexico. CR/PR at Table IV-4.

[155] *See, e.g.,* CR/PR at Appendix I-1 (***) and Appendix I-18 (***); *see also id.* at Appendix I-17 (***); Appendix I-22 (***).

[156] CR/PR at Table II-1.

[157] CR/PR at Table II-1. Domestic producers reported that *** percent to *** percent of their U.S. shipments went to end users during each calendar year and interim period of the POI. Importers of subject merchandise from Canada reported that *** percent to *** percent of their U.S. shipments went to end users during each calendar year and interim period of the POI, importers of subject merchandise from China reported that *** percent to *** percent of their U.S. shipments went to end users during each calendar year and interim period of the POI, and importers of subject merchandise from Mexico reported that *** percent to *** percent of their U.S. shipments during each calendar year and interim period during the POI went to end users. *Id.*

[158] Mexican Respondents argue that this factor weighs against cumulating imports from Mexico because they contend that the *** of U.S. shipments from Mexico reported were manufactured to order by a U.S. affiliate, whether from ***. Mexican Respondents Prehearing Brief at 50-51. Notwithstanding this point, we find, as explained below, that the evidence as to all factors on balance weighs in favor of a finding of "reasonable overlap."

Geographic Overlap. The domestic like product and subject imports from all three sources were sold in every region of the contiguous United States.[159] We find these data more pertinent to the question of geographic overlap than data indicating the port of entry for subject imports.[160]

Simultaneous Presence in Market. Subject imports from all three sources were present in the U.S. market in each month of the POI.[161] It is undisputed that the domestic like product was present in the market throughout the POI.

Conclusion. The record indicates substantial fungibility between the domestic like product and subject imports from Canada, China, and Mexico. The domestic like product and subject imports from all three sources also share overlapping applications and channels of distribution. The domestic like product and subject imports from all three subject countries were simultaneously present in the U.S. market throughout the POI and FSS from all sources was sold in all regions of the contiguous United States. Consequently, the record indicates that there is a reasonable overlap of competition between and among subject imports and the domestic like product. We accordingly analyze subject imports from Canada, China, and Mexico on a cumulated basis for the purposes of our analysis of whether there is material injury by reason of subject imports.

V. No Material Injury by Reason of Subject Imports

Based on the record in the final phase of these investigations, we find that an industry in the United States is not materially injured by reason of cumulated subject imports from Canada, China, and Mexico.[162]

A. Legal Standards

In the final phase of antidumping and countervailing duty investigations, the Commission determines whether an industry in the United States is materially injured or threatened with material injury by reason of the imports under investigation.[163] 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

[159] CR/PR at Table II-2.

[160] *See* CR/PR at Table IV-6.

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

[162] Commissioners Schmidtlein and Karpel find that an industry in the United States is materially injured by reason of subject imports from Canada, China, and Mexico. They join subsections A-B of this section.

[163] 19 U.S.C. §§ 1671d(b), 1673d(b).

like product, but only in the context of U.S. production operations.[164] The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant."[165] In assessing whether 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.[166] 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."[167]

Although the statute requires the Commission to determine whether the domestic industry is "materially injured or threatened with material injury by reason of" unfairly traded imports,[168] it does not define the phrase "by reason of," indicating that this aspect of the injury analysis is left to the Commission's reasonable exercise of its discretion.[169] 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.[170]

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

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[164] 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).

[165] 19 U.S.C. § 1677(7)(A).

[166] 19 U.S.C. § 1677(7)(C)(iii).

[167] 19 U.S.C. § 1677(7)(C)(iii).

[168] 19 U.S.C. §§ 1671d(b), 1673d(b).

[169] *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).

[170] 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).

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.[171] In performing its examination, however, the Commission need not isolate the injury caused by other factors from injury caused by unfairly traded imports.[172] Nor does the "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.[173] It is

[171] 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.

[172] 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 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.").

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

clear that the existence of injury caused by other factors does not compel a negative determination.[174]

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."[175] The Commission ensures that it has "evidence in the record" to "show that the harm occurred 'by reason of' the LTFV imports," and that it is "not attributing injury from other sources to the subject imports." [176] The Federal Circuit has examined and affirmed various Commission methodologies and has disavowed "rigid adherence to a specific formula."[177]

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 evidence standard.[178] Congress has delegated this factual finding to the Commission because of the agency's institutional expertise in resolving injury issues.[179]

B. Conditions of Competition and the Business Cycle

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

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[174] *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.").

[175] *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*.

[176] *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.

[177] *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.").

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

[179] *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.").

1. Captive Production

These investigations have raised the issue of the applicability of the statutory captive production provision.[180] Petitioner argues that the Commission should apply the captive production provision, asserting that domestic FSS producers internally consumed a large portion of their FSS production (PEMBs components) during the POI for production of PEMB systems (the downstream article) and also sold PEMBs components in the merchant market.[181] Cornerstone and BlueScope argue that the captive production provision does not apply, asserting that FSS components of PEMBs are not captively consumed, stating that producers of FSS components of PEMBs such as NCI and BlueScope produce components rather than complete PEMBs, and that no PEMBs components are transferred for "production of a downstream article" within the meaning of the statute.[182]

The threshold criterion addresses whether domestic producers internally transfer significant production of the domestic like product for the production of a downstream article and sell significant production of the domestic like product in the merchant market. The record indicates that domestic producers sell significant production of the domestic like product in the merchant market, because *** percent of large U.S. producers' shipments in 2018 were commercial shipments to the merchant market.[183] In accordance with Commission staff instructions, PEMBs component producers reported as "internal consumption" the FSS that

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[180] The captive production provision, 19 U.S.C. § 1677(7)(C)(iv), as amended by the Trade Preferences Extension Act of 2015, provides:

(iv) CAPTIVE PRODUCTION – If domestic producers internally transfer significant production of the domestic like product for the production of a downstream article and sell significant production of the domestic like product in the merchant market, and the Commission finds that-

> (I) the domestic like product produced that is internally transferred for processing into that downstream article does not enter the merchant market for the domestic like product, and
> (II) the domestic like product is the predominant material input in the production of that downstream article.

The SAA indicates that where a domestic like product is transferred internally for the production of another article coming within the definition of the domestic like product, such transfers do not constitute internal transfers for the production of a "downstream article" for purposes of the captive production provision. SAA at 853.

[181] Petitioner's Prehearing Brief at 64-66; Petitioner's Posthearing Brief, Exh. 1, at 91-94.

[182] Cornerstone's Posthearing Brief at 6-8 and Appendix A at 15-17; BlueScope's Posthearing Brief at 13-15.

[183] CR/PR at Table III-7.

they produce for ultimate sale of complete PEMBs (which is an out-of-scope product).[184] In-scope PEMBs components are combined with out-of-scope components (including non-FSS items such as doors and windows) to produce a "kit" for a complete PEMB system, which the producer sells to the builder.[185] The record indicates that, in nearly all instances, it is not the producers of FSS components of PEMBS that produce a finished PEMB; rather it is the builders that construct a complete PEMB from the various components in the kit, or by combining the in-scope components it purchases from the producer with other materials that it purchases separately.[186] Thus, the producers of PEMBs components do not internally transfer production of the domestic like product for use in the production of the finished PEMBs.[187] Rather, the producers aggregate in-scope components with out-of-scope components which are later assembled by other entities into a finished PEMBs at a job site. In our view, this does not constitute "production of a downstream article."[188]

Accordingly, we determine that the threshold criterion for application of the captive production provision has not been met, and we find that the captive production provision is inapplicable in these investigations.[189]

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[184] CR/PR at III-22 n.12. Given this reporting by these firms, *** percent of large U.S. producers' U.S. shipments in 2018 were reported as internal consumption, while *** percent were reported as transfers to related firms. CP/PR at Table III-7.

[185] CR/PR at Table E-9 (Comments of ***), I-26 to I-27, III-20 n.9, III-22 n.12; Hearing Tr. at 198 (Golladay); 204 (Pasley); BlueScope's Posthearing Brief at Exh. 2, affidavit of Greg Pasley, at paragraph 15; Teleconference notes of ***, February 7, 2020, at 2 (EDIS Document No. 702682).

[186] Hearing Tr. at 204 (Pasley) (after BlueScope ships the FSS components of PEMBs to the building site, "the FSS is ultimately assembled by the builder into a completed building"). BlueScope reported that ***. CR/PR at III-22 n.12, Table E-9 (Comments of ***; NCI's Posthearing Brief, Appendix A, at 16-17.

[187] Hearing Tr. at 204 (Pasley) ("BlueScope does not internally transfer any of its FSS it produces to make a downstream product"). Although BlueScope indicates that it sells a complete building, we consider that it sells unassembled components of PEMBs (or PEMB kits), not finished PEMBs. BlueScope reported that ***. CR/PR at III-22 n.12.

[188] The legislative history of the captive production provision indicates that it is intended to apply when there is "{a} downstream article {that} is an article distinct from that product but is *produced* from that product." SAA at 852 (emphasis added). Aggregation of components, without any assembly by the domestic producer, is not tantamount to a downstream product "produced" from in-scope articles.

[189] Moreover, given the nature of the "internal transfer" involved, we do not find that captive consumption, as we normally consider that term, is a pertinent condition of competition.

2. Demand Considerations

U.S. demand for FSS is driven by demand in the construction sector, particularly nonresidential construction.[190] Most U.S. producers and a plurality of importers and purchasers reported an increase in U.S. demand for FSS over the POI.[191] Apparent U.S. consumption increased by 5.9 percent between 2016 and 2018, increasing from 2.9 million short tons in 2016 and 2017 to 3.1 million short tons in 2018; it was 2.3 million short tons in both interim 2018 and interim 2019.[192]

A number of market participants, including a majority of responding U.S. producers, reported that the U.S. market for FSS is subject to business cycles.[193] Petitioner contends that the U.S. FSS market was at the "peak" of the business cycle during the POI, with optimal demand conditions.[194] Although the parties disagree as to likely trends in future U.S. demand and thus whether the market has been at its peak, they agree that demand was strong during the POI.[195]

3. Supply Considerations

The U.S. market was supplied by the domestic industry, subject imports, nonsubject imports, and two U.S. producers excluded from the domestic industry under the related party provision.

The domestic industry is extremely fragmented, with over a thousand fabricators that have considerable variation in their operations.[196] The *** producers in the domestic industry are NCI, Nucor Buildings Group ("Nucor"), and BlueScope, all of which

[190] CR/PR at II-10 to II-11, IV-23.

[191] CR/PR at Table II-6.

[192] CR/PR at Tables IV-8, C-4.

[193] CR/PR at II-14 to II-15.

[194] Petitioner's Prehearing Brief at 59-63 and Exh. 1 at 21-23; Petitioner's Posthearing Brief, Exh. 1, at 62-63.

[195] *See* Joint Respondents' Prehearing Brief at 6-7. Petitioner states that consumption began to level off in interim 2019, reflecting a market slowdown that is expected to continue into 2020. Petitioner's Prehearing Brief at 94-95. Canadian Respondents dispute petitioner's contention that U.S. FSS demand is dropping, asserting that industry forecasts continue to project steady growth in the non-residential sector over the next few years. Canadian Respondents' Posthearing Brief at 3-4, 15 and Exh. 13 (forecast by the American Institute of Architects indicating, however, that growth in demand may be slower than it was in recent years). Mexican Respondents likewise contend that the upward trend in FSS demand will continue for the foreseeable future. Mexican Respondents' Prehearing Brief at 27-28 and Exhs. 19-23.

[196] *Preliminary Determinations*, USITC Pub. 4878 at 25; September 3, 2019 Comments from Petitioner on Draft Questionnaires at 2 (EDIS Document No. 687029).

produce FSS components of PEMBs, but the industry primarily consists of a large number of small- to medium-sized producers.[197] In order to facilitate obtaining usable questionnaire data from as many domestic producers as possible, the Commission's U.S. producer questionnaire asked firms to identify themselves as "small" producers (if they produced less than 5,000 short tons of FSS in each year during the POI) or "medium to large" producers (if they produced 5,000 short tons or more of FSS in at least one year during the POI or annualized interim 2019). Small U.S. producers were permitted to submit a short-form questionnaire providing limited general trade, financial, and employment data, while medium to large (hereinafter "large") U.S. producers were asked to complete the entire questionnaire, which requested more detailed financial data.[198] The Commission received usable questionnaire responses from *** large U.S. producers, accounting for *** percent of net sales by quantity of all responding U.S. producers, and *** small U.S. producers, accounting for *** percent of net sales by quantity of all responding U.S. producers.[199] Based on petitioner's estimate of U.S. production of FSS, responding firms accounted for approximately 62.8 percent of total U.S. production of FSS in 2018.[200]

The parties disagree regarding the capacity of the domestic industry. The domestic industry's reported capacity increased by *** percent between 2016 and 2018,[201] while its reported capacity utilization rate increased by *** percentage points.[202] Petitioner contends that the domestic industry has sufficient capacity to supply the U.S. market and that the Commission's questionnaire data accurately reflect that the domestic industry had substantial available capacity and a low capacity utilization rate during the POI.[203] Respondents argue that the domestic industry's reported capacity data are inflated and unreliable, based on unrealistic assumptions as to the amount of labor hours required to produce a ton of FSS, and that its actual capacity utilization rate is substantially higher than indicated in the questionnaire

[197] CR/PR at VI-2 to VI-3 and nn.9-11.

[198] CR/PR at III-2, VI-1.

[199] CR/PR at III-2, VI-1.

[200] CR/PR at I-5, III-1 n.1.

[201] The domestic industry's capacity increased from *** short tons in 2016 to *** short tons in 2017 and 2018; it was *** short tons in interim 2018 and higher, at *** short tons, in interim 2019. CR/PR at Table C-4.

[202] The domestic industry's capacity utilization declined from *** percent in 2016 to *** percent in 2017, and then rose to *** percent in 2018; it was *** percent in interim 2018 and lower, at *** percent, in interim 2019. CR/PR at Table C-4.

[203] Petitioner's Prehearing Brief at 56-59; Petitioner's Posthearing Brief at 4-6 and Exh. 1 at 77-88.

responses.[204] Indeed, FSS production involves skilled labor-intensive activities such as welding, and the hours to complete a project can vary substantially depending on the scale of the project and the extent of those labor-intensive activities.[205] Twenty-four firms reported that skilled labor is a production constraint.[206] Although there is evidence of individual producers experiencing periods of tight capacity due to the project-specific nature of this market, most responding U.S. producers and importers reported that they had not refused, declined, or been unable to supply FSS during the POI, and most responding purchasers reported that they had not been refused or declined FSS during the POI.[207]

The domestic industry was the largest supplier of FSS to the U.S. market throughout the POI. Its share of apparent U.S. consumption increased from *** percent in 2016 to *** percent in 2017 and *** percent in 2018; it was *** percent in interim 2018 and lower, at *** percent, in interim 2019.[208]

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[204] Joint Respondents' Prehearing Brief at 49-55; Canadian Respondents' Posthearing Brief, Appendix A at 56-66.

[205] CR/PR at III-18. The parties disagree as to whether availability of skilled workers was a significant production constraint for the domestic industry during the POI. Petitioner argues the availability of labor was not an actual constraint during the POI, and that the industry is able to increase its hiring of skilled workers when a decline in subject import competition allows it to pay higher wages, as occurred in interim 2019. Petitioner's Prehearing Brief at 56-59; Petitioner's Posthearing Brief at 4-6 and Exh. 1 at 77-88. Respondents argue that there is an acute nationwide shortage of skilled labor to perform the welding and other complex tasks involved in fabricating customized FSS, that this shortage is reflected in the questionnaire responses of U.S. producers and publications of the AISC, and that the necessity of meeting project scheduling requirements with sufficient skilled labor at the right time provides further supply constraints. Joint Respondents' Prehearing Brief at 9-21; Mexican Respondents' Prehearing Brief at 28-30; Canadian Respondents' Prehearing Brief at 4-7; Canadian Respondents' Posthearing Brief, Appendix A at 61-63, and Appendix B at 1-3; Corey's Posthearing Brief, Exh. 1 at 1-2.

[206] CR/PR at II-8, III-18, III-34.

[207] *See* Hearing Tr. at 167-168 (Labbe); 168-169 (Cooper); 169-170 (Zalesene); 215-216, 256-257 (Rooney) 256 (Pasley); 257 (Golladay); CR/PR at II-8.

[208] CR/PR at Table C-4. Because the questionnaire data account for an estimated 62.8 percent of 2018 U.S. FSS production, domestic industry market share data are likely understated.

The combined market share of the two domestic producers excluded as related parties (ADF and Ocean) was *** percent in 2016, *** percent in 2017, and *** percent in 2018; it was *** percent in interim 2018 and *** percent in interim 2019. CR/PR at Table C-4. Given the very small combined market share of the two excluded related parties, the market share of the domestic industry is very similar to the market share of all domestic producers (including the two related parties), for which the data can be reported publicly. The market share of all domestic producers was 65.9 percent in 2016, 66.9 percent in 2017, and 67.5 percent in 2018; it was 66.4 percent in interim 2018 and 65.6 percent in interim 2019. CR/PR at Table C-1.

The cumulated subject imports' market share was essentially flat between 2016 and 2018, declining from 25.3 percent of apparent U.S. consumption in 2016 to 25.0 percent in 2017, and then increasing to 25.2 percent in 2018; it was 26.3 percent in interim 2018 and lower, at 21.2 percent, in interim 2019.[209]

Nonsubject imports' market share declined from 8.8 percent of apparent U.S. consumption in 2016 to 8.1 percent in 2017 and 7.3 percent in 2018; it was 7.3 percent in interim 2018 and higher, at 13.2 percent, in interim 2019.[210] The leading sources of nonsubject imports during the POI were Germany, Italy, Korea, Taiwan, and UAE, and nonsubject Canadian producer Canatal.[211]

4. Substitutability and Other Conditions

We find that there is a moderate-to-high degree of substitutability between cumulated subject imports and the domestic like product.[212] As previously discussed, substantial majorities of U.S. producers reported that the domestic like product and subject imports from Canada, China, and Mexico were always interchangeable.[213] Substantial majorities of U.S. importers and majorities of U.S. purchasers reported that the domestic like product and subject imports from Canada, China, and Mexico were always or frequently interchangeable.[214] Majorities of purchasers reported that the domestic like product was comparable with subject imports from Canada and Mexico in each of 25 specified purchasing factors, while majorities or pluralities of purchasers reported that the domestic like product and subject imports from China were comparable in 18 of the 25 factors.[215] Majorities or pluralities of U.S. producers and

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[209] CR/PR at Tables IV-9, C-4. The likely understatement in the domestic industry's market share would likely result in overstated market shares of both subject imports and nonsubject imports.

In addition, there may be other disparities between the official import statistics we have used and actual subject imports because imports entering under the three primary HTS numbers listed in Commerce's scope from which import data in the Commission report were compiled may also include products not within the scope of the investigations, while minor amounts of imports of in-scope merchandise may enter under other HTS categories. CR/PR at IV-2 n.2.

[210] CR/PR at Tables IV-9, C-4.

[211] CR/PR at Table II-7 and n.8.

[212] Our finding takes into account that substitutability of the domestic like product and subject imports may vary somewhat by subject country. The record indicates that due to the importance of the scheduling of deliveries and lead times, the level of substitutability between domestically produced FSS and FSS imported from China may be somewhat lower than the substitutability between the domestic like product and subject imports from Canada and Mexico. *See* CR/PR at II-19.

[213] CR/PR at Table II-12.

[214] CR/PR at Table II-12.

[215] CR/PR at Table II-11.

U.S. importers reported that non-price differences were never significant in comparisons between the domestic like product and subject imports from Canada, China, and Mexico.[216] The responses of purchasers were mixed, with majorities of purchasers reporting that non-price differences were sometimes or never important in comparisons of the domestic like product and subject imports from Canada, but were always or frequently important in comparisons between the domestic like product and subject imports from China and Mexico.[217] While all responding purchasers reported that FSS produced in the United States, Canada, and Mexico always or usually met minimum quality standards, five of 11 responding purchasers reported that FSS from China only sometimes meets minimum quality specifications.[218]

We find that price is an important factor in purchasing decisions for FSS, but that other factors are also important. The top three factors for purchasing decisions for FSS that purchasers reported were price/cost (25 firms), an ability to meet the project schedule (24 firms), and quality (15 firms); price/cost was the most frequently cited first-most important factor.[219] Purchasers were asked to rate the importance of 25 factors in their purchasing decisions. Certainty of delivery time, price of the overall contract, and availability were rated as very important by nearly all (30 or more) of the reporting purchasers, while erection safety record, price of the FSS, reliability of supply, the supplier's available production capacity, and product consistency were also reported as very important by the vast majority (27 or more) of responding purchasers.[220]

FSS is primarily produced-to-order, resulting in low inventory levels for both the domestic like product and subject imports. U.S. producers reported that 99.0 percent of their commercial shipments were produced-to-order, with the remaining shipments being sold from inventories. Importers reported that 99.3 percent of their commercial shipments were produced-to-order, while less than one percent of importers' shipments were from inventories of importers or foreign producers.[221]

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[216] CR/PR at Table II-14.

[217] CR/PR at Table II-14. A number of purchasers and other market participants testified of the importance of timely delivery of FSS in accordance with the construction schedule for a project, noting that contracts for some projects contain substantial penalties in the event of late delivery. Hearing Tr. at 206-208 (Kelly); 209-210, 263 (Kanner); 222-223 (Zhang); 288 (Dickerson); Transcript of Conference at 231-232 (Posteraro).

[218] CR/PR at Table II-13.

[219] CR/PR at Table II-8.

[220] CR/PR at Table II-9.

[221] CR/PR at II-19.

Most FSS is sold through a multi-stage competitive bidding process.[222] Purchasers request bids from firms that they expect to have the expertise and facilities to be able to provide the necessary FSS.[223] The contracts on which fabricators bid typically include design work (at least part of which must be done before the bid is accepted), the FSS, and installation.[224] The number of rounds of bidding for a project tends to vary based on the size of the project. Most responding U.S. producers and foreign producers reported that bids typically have one to three rounds of bidding.[225] Clarification of the project bids and qualification issues of suppliers are resolved through multiple rounds, and bids are awarded in the final rounds on the "best and final" bids submitted.[226] Purchasers often rely on multiple suppliers, with domestic producers sometimes working in conjunction with subject producers.[227]

Bids may be presented as a single lump-sum figure covering all aspects of the bid, or may be presented on a unit price basis, which includes prices for the expected fabricated parts of the project.[228] Most responding U.S. producers reported that their bids included erection and installation services, and 12 foreign producers reported providing bids that included services.[229] More than half of the responding purchasers (17 of 32) reported that the bids that they receive are not itemized.[230]

As previously discussed, regardless of a structure's commercial or industrial end use, FSS is usually designed to meet AISC's *Steel Construction Manual* specifications. Additionally, the MBMA publishes the standards used to manufacture PEMBs.[231]

The production of FSS requires a variety of raw materials, including steel plate, steel structural shapes (such as beams, channels, angle, and hollow steel sections), steel bars, and

[222] CR/PR at V-4 to V-6. FSS components of PEMBs are sold through a network of associated builders, and prices may be a result of negotiations. *Id.* at V-6.

[223] CR/PR at V-6.

[224] CR/PR at V-7.

[225] CR/PR at V-7.

[226] CR/PR at V-8.

[227] Purchaser *** reported that it awarded contracts to domestic fabricators who "in some instances subcontracted components of fabrication to Mexico, China, and Thailand." CR/PR at V-12 n.47. U.S. purchaser *** reported that its largest purchase was a ***. *Id.* at n.48. U.S. producer *** stated that scheduling during projects is not linear and that in certain phases of a project, capacity requirements may be too large and must be subcontracted out. CR/PR at II-9.

[228] CR/PR at V-9.

[229] CR/PR at V-9.

[230] CR/PR at V-10.

[231] CR/PR at I-18, I-20.

other steel mill products, as well as numerous small metal fasteners.[232] Most responding U.S. producers and almost half of responding importers reported that raw material prices had increased since 2016, while a number of U.S. producers and importers reported that raw material prices had fluctuated.[233] Prices for flat steel products increased overall during the POI, but faced cyclical decreases at the end of each year.[234] Prices for certain long steel products increased as well, but to a lesser degree than those for flat steel products.[235] Prices of fasteners were largely unchanged from 2016 to mid-2018, when the prices tended to increase.[236] Overall raw material costs for the domestic industry increased as a share of the total cost of goods sold (COGS) from *** percent in 2016 to *** percent in 2018.[237]

Additional duties were imposed on imports of FSS or its raw material inputs in 2018.[238] On March 8, 2018, the President issued Proclamations under Section 232 of the Trade Expansion Act of 1962, as amended,[239] providing for additional duties of 25 percent *ad valorem* on imports of steel mill and aluminum articles, effective March 23, 2018 ("section 232 tariffs"). The section 232 tariffs do not cover imports of FSS, but do apply to imports of the raw material inputs for FSS, including steel mill products such as beams and plate.[240] Section 301 of the Trade Act of 1974, as amended,[241] authorizes the Office of the U.S. Trade Representative ("USTR"), at the direction of the President, to take appropriate action to respond to a foreign country's unfair trade practices. Imports of FSS from China became subject to an additional 25 percent *ad valorem* duty under section 301, effective August 23, 2018 ("section 301 tariffs").[242] [243]

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[232] CR/PR at V-1.

[233] CR/PR at V-1.

[234] CR/PR at V-1; Figure V-1.

[235] CR/PR at V-1; Figure V-2.

[236] CR/PR at V-1; Figure V-3.

[237] Derived from CR/PR at Table VI-3 (with data from *** excluded).

[238] In addition, antidumping and/or countervailing duties were imposed in 2017 on imports of steel cut-to-length plate from 12 countries. *See Carbon and Alloy Steel Cut-to-Length Plate from Austria, Belgium, France, Germany, Italy, Japan, Korea, and Taiwan,* Inv. Nos. 701-TA-561 and 731-TA-1317-1318, 1321-1325, and 1327 (Final), USITC Pub. 4691 (May 2017); CR/PR at II-17 n.34.

[239] 19 U.S.C. § 1862.

[240] CR/PR at I-17, Appendix D.

[241] 19 U.S.C. § 2411.

[242] CR/PR at I-17 to I-18; Appendix D.

[243] Commissioners Schmidtlein and Karpel have reached affirmative determinations and do not join the remainder of this opinion. *See* their Separate and Dissenting Views.

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."[244]

Cumulated subject imports had a relatively steady presence in the U.S. market during the POI, with some annual fluctuations. The volume of cumulated subject imports declined from 740,627 short tons in 2016 to 730,723 short tons in 2017, and then increased to 779,706 short tons in 2018.[245] The volume of cumulated subject imports declined from 740,627 short tons in 2016 to 730,723 short tons in 2017, when apparent U.S. consumption was flat, and then increased to 779,706 short tons in 2018, in line with an increase in apparent U.S. consumption, thereby retaining subject import market share but not capturing any additional share from the domestic industry.[246] The volume of cumulated subject imports was 20.2 percent lower in interim 2019 than in interim 2018; it was 612,588 short tons in interim 2018 and 488,946 short tons in interim 2019.[247] We find that the reduced cumulated subject import volume in 2019 was not due to the pendency of these investigations, and that the lower cumulated subject import volume in interim 2019 than in interim 2018 was entirely attributable to the decline in subject import volume from China that occurred almost immediately after the section 301 tariffs were imposed, which was more than five months before the filing of these petitions in February 2019.[248]

The market share of cumulated subject imports was stable between 2016 and 2018, declining slightly from 25.3 percent in 2016 to 25.0 percent in 2017, and then increasing slightly to 25.2 percent in 2018.[249] The market share of cumulated subject imports was 5.1 percentage

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[244] 19 U.S.C. § 1677(7)(C)(i).

[245] CR/PR at IV-5, Table IV-2.

[246] CR/PR at IV-5, Tables IV-2, IV-9.

[247] CR/PR at IV-5, Table IV-2.

[248] The record indicates that following the imposition of the section 301 tariffs on August 23, 2018, the monthly volume of subject imports from China declined by over 50 percent between August 2018 and September 2018, declined even further in late 2018, and for the rest of the POI remained consistently far below the monthly level of subject imports from China prior to September 2018. CR/PR at Table IV-7. By contrast, subject imports from neither Canada nor Mexico experienced any particular decline in volume in late 2018 or in 2019, with subject import volumes from each country fluctuating monthly. *Id.* We consequently reject petitioner's argument that the reduced subject import volumes in interim 2019 were due to the pendency of the investigations, and we do not reduce the weight we accord to the data for interim 2019. *See* 19 U.S.C. § 1677(7)(I).

[249] CR/PR at Tables IV-9, C-4.

points lower in interim 2019 than in interim 2018; it was 26.3 percent in interim 2018 and 21.2 percent in interim 2019.[250]

We find that the volume of cumulated subject imports is significant in absolute terms and relative to consumption in the United States. We further find, however, that there was not a significant increase in the volume of cumulated subject imports during the POI, given their relatively stable market share and the increase in the domestic industry's market share and that, for the reasons discussed below, the cumulated subject imports did not have significant price effects or a significant impact on the domestic industry.

D. Price Effects of the Subject Imports

Section 771(7)(C)(ii) of the Tariff Act provides that, in evaluating the price effects of the subject imports, 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.[251]

As previously discussed in section V.B.4, we find that the domestic like product and cumulated subject imports have a moderate-to-high degree of substitutability, and that price is one of several important factors in purchasing decisions for FSS.

In the preliminary phase of these investigations, the Commission requested quarterly pricing data from U.S. producers and importers on sales of six FSS products broadly defined by the type of project or end use. However, much of the pricing data that the Commission obtained was unusable because of the difficulties that firms had in completing the questionnaire responses, as well as irregularities and apparent inaccuracies in the reported data. The Commission obtained usable pricing data from only five of 57 domestic producers that submitted questionnaire responses.[252] The Commission characterized the available pricing data as "limited," observed that the petitioner proposed that data be collected on a different

[250] CR/PR at Tables IV-9, C-4.

[251] 19 U.S.C. § 1677(7)(C)(ii).

[252] CR/PR at V-11 to V12 n.41; *Preliminary Determinations,* USITC Pub. 4878 at 30-31, V-8 to V-9 and nn.40-43.

basis in the final phase, and requested parties' comments on the draft final phase questionnaires to address the best method for collecting pricing data in these investigations.[253] After considering these comments,[254] the Commission did not request further pricing product data from the parties in its final phase questionnaires; instead, as discussed further below, it collected bid data. While petitioner argues that we should give weight to the preliminary phase pricing data in our underselling analysis,[255] given the irregularities, inaccuracies, and very limited coverage in the pricing product data, we find that those data do not provide a sufficient basis to make findings about the relative price levels of the cumulated subject imports and the domestic like product.[256]

In light of the limitations of the pricing data collected in the preliminary phase investigations, in the final phase of these investigations, the Commission requested U.S. purchasers to provide the bid data for their five largest purchases of FSS since January 1, 2016 that involved at least one bid from a U.S. producer and least one bid from a supplier of FSS produced in Canada, China, or Mexico. Fourteen purchasers provided usable bid data – in other words, containing bids for both domestic and subject FSS – for 40 different projects.[257] Some

[253] *Preliminary Determinations*, USITC Pub. 4878 at 31-32.

[254] In its comments on the Commission's draft final phase questionnaires, petitioner requested that the Commission collect bid data in the final phase of the investigations, but also requested that the Commission again collect pricing product data as well. However, despite the problems described above with the very limited usable pricing data obtained in the preliminary phase investigations, petitioner requested that the Commission collect pricing product data for exactly the same six products originally listed in the petitions for which the Commission had attempted to collect data in the preliminary phase investigations, as well as a seventh product consisting of "all FSS." September 3, 2019 Comments from Petitioner on Draft Questionnaires at 8-9 (EDIS Document No. 687029); *see* Petitions, Volume 1, at 27-28; *Preliminary Determinations*, USITC Pub. 4878 at 30-31 n.172. Thus, petitioner's comments on the Commission's draft final phase questionnaires did little to address the problems with the pricing product data that the Commission had encountered in the preliminary phase of the investigations.

[255] Petitioner's Posthearing Brief at 9.

[256] While petitioner urged the Commission to collect pricing product data in the preliminary phase investigations, it acknowledged in the petitions that the customized nature of FSS and the bid process imposed limitations on the usefulness of both pricing product data and bid data for FSS: "most all FSS is custom-made for a specific project that is awarded through a bid process. … Given the nature of FSS, as well as the bidding process, bid price data and pricing products data both present certain limitations." Petitions, Volume 1, at 27. The petitions specifically cited a previous investigation in which the Commission had explained that its "conventional {pricing product} approach to pricing" was "not useful" in that investigation given the custom nature of the products and the bidding process through which they were sold. *Id.* at 27 n. 60 (quoting *Large Power Transformers from Korea*, Inv. No. 731-TA-1189 (Preliminary), USITC Pub. 4256 at 16 (Sept. 2011)).

[257] CR/PR at V-11 to V-12. Of these 40 projects, 19 bids were awarded to subject producers (CR/PR at Appendices I-1, I-8, I-10 to I-11, I-14 to I-21; I-23 to I-27, I-33, I-41); 16 bids were awarded to

purchasers only solicit bids from domestic sources, and purchasers reported that the vast majority (95 percent) of the projects they put up for bid during the POI involved offers from only domestic producers.[258]

In 18 of the 19 bids won by subject imports, the total bid by the supplier of subject imports was lower than that by the supplier of the domestic like product, and in one bid the total bid by the subject import supplier was higher.[259] The available bid data (based on total cost including services, and not limited to FSS cost) show that bids from subject sources were lower in total costs than those by the domestic industry in 28 instances and higher in 9 instances.[260] However, in many cases the lowest total bid did not prevail. One bid was awarded to a supplier of subject imports although its total bid was higher than that of a supplier of the domestic like product.[261] In seven projects, a higher total bid from a U.S. supplier was successful against a lower bid from a subject supplier.[262] Moreover, in two other

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U.S. FSS producers (*id.* at Appendices I-2 to I-3, I-5, I-9, I-12 to I-13, I-22, I-32, I-34, I-37 to I-40, I-42 to 44); three bids were awarded to nonsubject producers (*id*. at Appendices I-4, I-6 to I-7); and two bids were awarded in part to a U.S. producer and in part to a subject producer *(id.* at Appendices I-35 to I-36). The record contains four projects where bid quantity information was supplied but not bid cost/price information, and thus the bid data were unusable. *Id.* at Appendices I-28 to I-31. The record also contains 16 other projects containing bids by only domestic or only subject producers. *Id.* at Appendices I-45 to I-60.

[258] CR/PR at V-13. The record indicates some doubt as to the proper allocation in this analysis of the projects reported by one large purchaser. *See* *** Purchaser Questionnaire Response at V-7 and p. 38 (EDIS Document No. 694348) (indicating that it was ***). However, even if *** projects, with only domestic bidders for almost all (*** percent) of its projects, are excluded, nearly three-quarters of the projects (72 percent) over the POI reported by purchasers involved domestic only offers. CR/PR at V-13 and n.49; *** Purchaser Questionnaire Response at V-7 and pp. 30, 38 (EDIS Document No. 694348).

[259] CR/PR at Table V-2.

[260] CR/PR at V-13 and Table V-3.

[261] CR/PR at Appendix I-33 (***).

[262] *See* CR/PR at Appendix I-12 (***); Appendix I-22 (***); Appendix I-32 (***); Appendix I-36 (***); Appendix I-37 (***); Appendix I-39 (***

projects where a U.S. producer was successful against competition from subject bidders, the prevailing U.S. bidder won the bid despite a lower total bid from another U.S. producer.[263] Similarly, in two projects where a subject producer was successful against competition from U.S. bidders, the prevailing subject bidder won the bid despite a lower total bid from another subject supplier.[264] In addition, in three other projects not involving bids by subject producers, the prevailing U.S. bidder was successful against a lower-priced U.S. bidder,[265] while in one other project not involving bids by any U.S. producer, the prevailing subject bidder was successful against a lower-priced subject bidder.[266] Consequently, one limitation to use of the total bid data in our underselling analysis here is that while there is some correlation between being the lowest total bidder and being the successful bidder, lowest total bids do not always win the sale.

There is a second important limitation to the bid data in the record. We find that the available data concerning total bids do not provide sufficient information to permit us to make a conclusion about the relative price levels of the domestic and subject FSS included in the bids. Most responding U.S. producers (94 of 116) reported that their bids include erection and installation services.[267] More than half of responding purchasers (17 of 32) reported that the bids they receive are not itemized, while an itemized bid may be itemized only by value per area of the project, without an itemization of the FSS component.[268] Thus, purchasers frequently do not know what portion of the total bid reflects the FSS.[269] Petitioner contends that the costs of erection/installation are essentially the same for all bidders for a particular

***); Appendix I-42 (***).

[263] *See* CR/PR at Appendix I-9 (***); Appendix I-46 (***).

[264] *See* CR/PR at Appendix I-23 (***); I-41 (***).

[265] *See* CR/PR at I-48 (***); I-49 (***); I-58 (***).

[266] *See* CR/PR at I-47 (***).

[267] CR/PR at V-9 to V-10.

[268] CR/PR at V-10.

[269] With respect to bid data, the Commission's purchaser questionnaire included a checkbox question that allowed purchasers to report if they did not know the price of the FSS included in the bid. *See* Blank Purchaser Questionnaire at Question V-8 (EDIS Document No. 690155). According to petitioner's analysis of the bid data, which is confirmed by the data in the Commission Report, "the large majority of responding firms reported they do not know." Petitioner's Prehearing Brief, Exh. 1, at 11 n.45; *see* CR/PR at Appendix I-1 to Appendix I-60.

project, and that the FSS component accounts for the majority of the cost of a project and for any variation in individual bids for the project.[270]

The record indicates otherwise. Fabricators and erectors testified that different fabricators have different approaches to the erection services component of a project, which can result in the costs of erection varying substantially between different bids on the same project.[271] The limited bid data collected by the Commission that contain information from purchasers specifying the price of the FSS in individual bids confirm this. These data also permit computation of the residual portion of those bids reflecting the non-FSS components (including erection services and possibly other services). Contrary to petitioner's contention that the non-FSS cost is essentially the same for all bidders for a particular project, the available bid data show substantial variations in both the percentage of the total bid that particular bidders on a project allocate to the erection/non-FSS components of the bids and the dollar value of these components.[272]

Additionally, bidders on a particular project may differ substantially on the tonnage of the FSS in their bids, raising questions about the comparability of the prices in the total bids of those bidders.[273] The available data further indicate that when a bid is not itemized, FSS does not necessarily constitute a majority or a fixed proportion of the total bid. For those bids in the

[270] Petitioner's Posthearing Brief at 2-4 and Exh. 1 at 10-19.

[271] Hearing Tr. at 339-340 (Rooney); 340-341 (Guile); 287, 342 (Koppelaar).

[272] For example, in the *** project, the price of the non-FSS components of the bids for the *** reported bidders ranged between $*** and $***. CR/PR at Appendix I-18 (***). In the *** project, the price of the non-FSS components of the bids ranged from $*** to $***, a spread of *** percent). Appendix I-21 (***). S*ee also* CR/PR at Appendix I-15 (***); Appendix I-16 (***); Appendix I-50 (***). As discussed below, in some of these projects with bid data from ***, the variation in the price of the non-FSS components is exactly the same as the variation in the price of the FSS components, raising questions about the reliability of the data submitted.

[273] *See, e.g.,* bid data from *** on the *** project, indicating *** CR/PR at Appendix I-18; bid data from *** on the *** project indicating *** CR/PR at Appendix I-37; bid data from *** on the *** project indicating *** CR/PR at Appendix I-38; bid data from *** on the *** project indicating *** CR/PR at Appendix I-41; *see also* CR/PR at Appendices I-1 to I-3, I-32 to I-36; I-39 to I-40, I-42 to I-43, I-45, I-62.

record indicating both the total bid and a separate, and lesser, value for the FSS included in the total, FSS ranged from *** percent to *** percent of the total bid cost.[274] In response to a Commission request, Canadian Respondents submitted internal bid documents from several Canadian producers showing that FSS has ranged between 29 percent and 66 percent of the total bid, while erection services have ranged between 27 percent and 59 percent.[275] Furthermore, AISC publications cite a variation in the estimated cost share of FSS ranging from 25 percent to 75 percent, depending on the scope of the project. Consequently, we do not conclude that differences in total bid values necessarily reflect differences in the value of FSS included in the bid.

The record includes bid data for a very limited number of projects in which the price of the FSS included in the bids was itemized and there were bids by both domestic and subject producers. Petitioner states that there are five of these projects in the Commission's data: *** projects with data from purchaser ***, one with data from purchaser ***, and one with data from purchaser ***, and contends that these projects demonstrate underselling by subject imports.[276] However, *** questionnaire reported that ***, and thus ***.[277] Accordingly, given the questions about the reliability of the bid data regarding the price of the FSS for three of

[274] *See* CR/PR at Appendix I-1 (approximately *** percent); Appendix I-15 (*** percent for all bidders); Appendix I-16 (*** percent for all bidders); Appendix I-18 (ranging between *** percent and *** percent); Appendix I-21 (approximately *** percent); Appendix I-32 (*** percent for winning bidder); Appendix I-33 (*** percent for winning bidder) Appendix I-34 (*** percent for winning bidder); Appendix I-35 (*** percent for winning bidder); Appendix I-36 (*** percent for winning bidder); Appendix I-50 (*** percent for all bidders).

[275] Canadian Respondents' Posthearing Brief, Appendix A, at 25-26 and Appendix B, at 9-13 and Exhs. 2-3, 6, 20, 25; See Hearing Tr. at 290-291 (Dussault).

[276] CR/PR at Appendix I-15 (***); Appendix I-16 (***); Appendix I-17 (***); Appendix I-18 (***); Appendix I-21 (***); *see* Petitioner's Posthearing Brief, Exh. 1 at 11-12 and Exh. 3.

[277] *** Purchaser Questionnaire Response at Question V-6(a) (EDIS Document No. 695000). As Canadian Respondents note, ***. CR/PR at Appendix I-15 (***); Appendix I-16 (***); Appendix I-17 (***); *see* Canadian Respondents' Final Comments at 9-10.

these five projects, these data provide limited probative value to evaluate the relative prices of subject imports and the domestic like product.[278]

Petitioner argues that a comparison of the AUVs for U.S. shipments of subject imports and the domestic industry by end-use application and by several product types provides evidence that subject imports undersold the domestic like product, because the AUVs for subject imports are generally lower than those for the domestic like product.[279] However, given the project-specific nature of FSS production, and the many different types of FSS projects within these relatively broad end-use and product categories, we do not believe that differences in AUVs necessarily reflect differences in FSS prices between subject imports and the domestic like product.[280] Thus, while they may have some limited utility in analyzing price trends, we do not find these AUV data probative for an analysis of underselling by subject imports.

We have also considered lost sales data in our underselling analysis, based on questionnaire responses from 33 purchasers.[281] Eighteen purchasers reported that they had purchased subject imports instead of the domestic like product.[282] Fifteen of those 18 purchasers reported that subject import prices were lower than those of the domestic like

[278] As previously discussed, the *** on the *** project, and *** raise questions about the comparability of the FSS bid price data for this project. CR/PR at Appendix I-18 (***).

[279] Petitioner's Posthearing Brief at 9 and Exh. 6 (comparing AUV data for U.S. shipments by application in CR/PR at Tables F-1 (large U.S. producers) and F-3 (import sources) and for U.S. shipments by specific product type in CR/PR at Tables F-2 (large U.S. producers) and F-4 (import sources)).

[280] Moreover, we note that the much of the available AUV data shows large annual variations in the AUVs within particular categories for both subject imports and the domestic like product, suggesting that the AUVs by category can vary greatly according to the nature of the particular projects reported in a given year and how these projects were categorized. For example, the AUV for U.S. shipments of subject imports in industrial applications increased from $*** per short ton in 2016 to $*** per short ton in 2017, and then declined to $*** per short ton in 2018; it was $*** per short ton in interim 2018, and lower, at $*** per short ton, in interim 2019. CR/PR at Table F-3. The AUV for U.S. shipments of subject imports in sports and entertainment applications declined from $*** per short ton in 2016 to $*** per short ton in 2017, and then increased to $*** per short ton in 2018; it was $*** per short ton in interim 2018, and higher, at $*** per short ton, in interim 2019. *Id.* The AUV for U.S. shipments by large U.S. producers of solar beams increased from $*** per short ton in 2016 to $*** per short ton in 2017, and then declined to $*** per short ton in 2018; it was $*** per short ton in interim 2018, and lower, at $*** per short ton, in interim 2019. CR/PR at Table F-2.

[281] Based on lost sales allegations from responding U.S. producers, staff contacted 128 purchasers and received responses from 33 purchasers. CR/PR at V-16.

[282] CR/PR at V-18.

product, and 13 purchasers reported that price was a primary reason for purchasing subject imports rather than the domestic like product.[283] However, as discussed earlier, more than half of responding purchasers (17 of 32) reported that the bids they receive are not itemized, indicating that purchasers frequently do not know what portion of the total bid reflects the FSS.[284] Therefore, it is unclear whether any of the data can be attributed to a lost sale due to price of FSS. Moreover, while petitioner argues that these data show significant price underselling by subject imports,[285] the reported lost sales accounted for a small volume. The quantity of subject imports purchased by these 13 purchasers was *** short tons,[286] which was less than the increase in the domestic industry's shipments between 2016 and 2018.[287] More significantly, these lost sales did not correspond to any loss of market share by the domestic industry to cumulated subject imports. As previously discussed, the domestic industry's market share increased from 2016 to 2018, and its reduction in market share between interim 2018 and interim 2019 was considerably less than the reduction in cumulated subject imports' market share.[288] Accordingly, the record does not support a finding that lower prices caused subject imports to gain significant sales at the expense of the domestic industry.[289]

[283] CR/PR at V-18, Table V-5.

[284] CR/PR at V-10.

[285] Petitioner's Posthearing Brief at 9-10.

[286] CR/PR at Tables V-5 to V-6.

[287] The domestic industry's U.S. shipments increased from *** short tons in 2016 and 2017 to *** short tons in 2018, an increase of *** short tons. Derived from CR/PR at Table C-4.

[288] *See* CR/PR at Table C-4.

[289] An examination of the specific reported lost sales indicates that there are substantial ambiguities in the data. For example, in the largest volume reported lost sale (*** short tons), which was reported by ***, the bid data ***. *Compare* CR/PR at Table V-6 *with id*. at Appendix I-1. In the second largest volume reported lost sale (*** short tons), which was reported by ***, the bid data show that ***. *Compare* CR/PR at Table V-6 *with id*. at Appendix I-18.

We note that by far the ***. *See* Petitions at Exhibit I-16. However, the record indicates that the Rams stadium project bid was initially awarded to a joint venture of two domestic fabricators, and not to a subject producer in China. *See* CR/PR at Appendix I-42 to I-43. It is the two producers in the domestic industry that, after winning the bid, chose to subcontract some of the fabrication work on the project to Chinese suppliers to help those domestic producers meet their contractual obligations on the project. Hearing Tr. at 219-22, 281-282 (Dickerson). Thus, notwithstanding ***

Thus, examining the various data sources cited by petitioner – preliminary phase pricing product data, overall bid data, itemized bid data, AUV data, and lost sales data – the record does not indicate that subject imports were priced consistently lower than the domestic like product, although it suggests that the prices of subject imports were competitive with those of the domestic like product. The record consequently does not support a finding that the subject imports significantly undersold the domestic like product.

There is no evidence of price depression on this record. While the AUVs are of limited utility, they exhibit trends of increasing domestic prices during the POI. The AUVs of the domestic industry's U.S. shipments increased by *** percent between 2016 and 2018, while the AUV of the domestic industry's net sales increased by *** percent.[290] Moreover, the AUVs of the domestic industry's U.S. shipments and net sales were both higher in interim 2019 than in interim 2018.[291] Accordingly, we do not find that cumulated subject imports depressed the domestic industry's prices to a significant degree.[292]

The domestic industry's ratio of COGS to net sales increased from *** percent in 2016 to *** percent in 2017 and *** percent in 2018; it was *** percent in interim 2018 and lower, at *** percent, in interim 2019.[293] While the data show an increase in the industry's COGS to net sales ratio between 2016 and 2018, we find that this relatively small increase (*** percentage points) was not significant, given the conditions of competition in this market and the substantial variability in projects and in individual U.S. producers' COGS/net sales ratios[294]

*** was not a lost sale for the domestic industry and has not been included in our data as such.

[290] CR/PR at Table C-4. As previously explained, we do not find the available AUV data reliable for purposes of making price comparisons between subject imports and the domestic like product, and we acknowledge that there are certain anomalies in annual comparisons of the category-specific AUV data. We nevertheless conclude that the industry-wide AUV data constitute the best information available concerning price trends for the domestic like product over the course of the POI.

[291] CR/PR at Table C-4. The AUV of the domestic industry's U.S. shipments increased from $*** per short ton in 2016 to $*** per short ton in 2017 and $*** per short ton in 2018; it was $*** per short ton interim 2018 and higher, at $*** per short ton, in interim 2019. *Id.* The AUV of the domestic industry's net sales increased from $*** per short ton in 2016 to $*** per short ton in 2017 and $*** per short ton in 2018; it was $*** per short ton interim 2018 and higher, at $*** per short ton, in interim 2019. *Id.*

[292] Moreover, only three of 33 reporting purchasers reported that domestic producers reduced prices to compete with lower-priced subject imports. CR/PR at V-23.

[293] CR/PR at Table C-4.

[294] *See* CR/PR at Table G-1. As noted earlier, the domestic industry is extremely fragmented, with over a thousand fabricators that have considerable variation in their operations. *See Preliminary Determinations*, USITC Pub. 4878 at 25. The record contains specific financial data for a limited number of U.S. producers. Appendix G presents selected company-specific financial data of the ten largest U.S.

and that the industry saw improvement in this ratio in interim 2019. We note that, despite the small increase in the industry's COGS to net sales ratio between 2016 and 2018, the industry's revenues increased by more than its COGS on both an overall and per-unit basis.[295]

Furthermore, the record indicates that while the domestic industry's raw material costs were increasing between 2016 and 2018,[296] it was able to substantially increase its prices during this period by more than the increase in raw material costs, well before the filing of the petitions.[297] Thus, while some domestic producers reported that they were unable to pass on increased raw material costs to their customers,[298] the record lacks evidence to support those claims.[299] Furthermore, out of 33 responding purchasers (and 128 contacted by staff), only

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producers based on 2018 production, indicating tremendous variability across firms in their COGS to net sales ratios, the trends in those ratios, unit raw material costs, and the trends in those costs. *Id.* That variability became clear during the hearing, when one of petitioner's industry witnesses disputed the contention that the industry's raw material costs had increased significantly during the POI, asserted to the contrary that raw material prices had remained within a "fairly narrow band" for a decade, and concluded that fluctuations in the domestic industry's raw material costs were not significant, but were rather "a relatively level – a relatively neutral factor" in the Commission's analysis. *See* Hearing Tr. at 142-143 (Zalesne). Thus, the *** percentage point increase in the domestic industry's COGS to net sales ratio appears to be particularly insignificant in light of these conditions.

[295] The domestic industry's COGS increased from $*** in 2016 to $*** in 2018, an increase of $***, while its revenues increased from $*** in 2016 to $*** in 2018, an increase of $***, which was $*** greater than the increase in its COGS. CR/PR at Table C-4. Similarly, the industry's unit COGS increased from $*** per short ton in 2016 to $*** per short ton in 2018, an increase of $*** per short ton, while its net sales AUV increased from $*** per short ton in 2016 to $*** per short ton in 2018, an increase of $*** per short ton, which was $*** per short ton greater than the increase in its unit COGS. *Id.*

[296] Domestic producers reported that their raw material costs increased during the POI as a result of the section 232 tariffs imposed in March 2018 and overall changes in demand. CR/PR at V-1 and n.6.

[297] The domestic industry's unit raw material cost increased from $*** per short ton in 2016 to $*** per short ton in 2017, and $*** per short ton in 2018; it was $*** per short ton in interim 2018 and lower, at $*** per short ton in interim 2019. Derived from CR/PR at Table VI-3 (with data for *** excluded). The industry's net sales AUV increased from $*** per short ton in 2016 to $*** per short ton in 2017, and $*** per short ton in 2018; it was $*** per short ton in interim 2018 and higher, at $*** per short ton, in interim 2019. CR/PR at Table C-4.

[298] CR/PR at V-1.

[299] When provided for on the record, the Commission examines contemporaneous evidence in support of price suppression, particularly where the pricing product data, lost sales and revenue evidence, and other aggregated data may be inconclusive. While petitioner submitted an exhibit to demonstrate that a domestic producer had ***, there is no additional documentation suggesting that the *** was due to subject import pricing. Rather, the record indicates that the ***

three reported that U.S. producers had reduced prices in order to compete with lower-priced subject imports.[300] Moreover, as described above, the domestic industry as a whole was able to pass on the vast majority of its increases in raw material costs. Therefore, we are not persuaded by petitioner's price suppression arguments. Thus, we do not find the increase in the domestic industry's COGS to net sales ratio between 2016 and 2018 to be significant, nor do we have evidence that any cost-price squeeze was attributable to subject imports. Accordingly, we do not find that cumulated subject imports prevented price increases for the domestic industry, which otherwise would have occurred, to a significant degree.

Accordingly, we do not find that cumulated subject imports caused significant price effects.

E. Impact of the Subject Imports[301]

Section 771(7)(C)(iii) of the Tariff Act provides that examining the impact of subject imports, the Commission "shall evaluate all relevant economic factors which have a bearing on

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***. *See* Petitioners' Posthearing Brief, Exh. 4.

[300] CR/PR at V-23. Petitioner submitted an exhibit to demonstrate that a domestic producer had ***, without any additional documentation suggesting that the *** was due to subject import pricing. *See* Petitioners' Posthearing Brief, Exh. 4.

[301] The statute instructs the Commission to consider the "magnitude of the dumping margin" in an antidumping proceeding as part of its consideration of the impact of imports. 19 U.S.C. § 1677(7)(C)(iii)(V). In its final determination of sales at less value with respect to subject imports from Canada, Commerce found a *de minimis* dumping margin of 0.00 percent for Canatal and a dumping margin of 6.70 percent for Les Constructions Beauce-Atlas, Inc. and all other Canadian producers and exporters. *Certain Fabricated Structural Steel From Canada: Final Determination of Sales at Less Than Fair Value*, 85 Fed. Reg. 5373, 5374 (Jan. 30, 2020). In its final determination with respect to subject imports from China, Commerce found dumping margins of 61.71 percent for Jinhuan Construction Group, 90.52 percent for Wison (Nantong) Heavy Industry Co., Ltd./Wison Offshore & Marine (Hong Kong) Limited, 154.14 percent for Modern Heavy Industries (Taicang) Co., Ltd, 72.19 percent for companies eligible for a separate rate, and 154.14 percent for all other Chinese producers and exporters. *Certain Fabricated Structural Steel From the People's Republic of China: Final Determination of Sales at Less Than Fair Value*, 85 Fed. Reg. 5376, 5378 (Jan. 30, 2020). In its final determination with respect to subject imports from Mexico, Commerce found a *de minimis* dumping margin of 0.00 percent for Corey S.A. de C.V./Industrias Recal S.A. de C.V., and dumping margins of 8.47 percent for Building Systems de Mexico, S.A. de C.V., 30.58 percent for Acero Technologia, S.A. de C.V., Construcctiones Industriales Tapia S.A. de C.V., Estructuras Metalicas la Popular S.A. de C.V./MSCI, and Operadora CICSA, S.A. de C.V. Swecomex—Guadalajara, and 8.47 percent for all other Mexican producers and exporters. *Certain Fabricated Structural Steel From Mexico: Final Determination of Sales at Less Than Fair Value*, 85 Fed. Reg. 5390, 5392 (Jan. 30, 2020).

the state of the industry."[302] 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 debts, 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."[303]

The performance of the domestic industry was generally strong during the POI. There were substantial increases between 2016 and 2018 in capacity, production, capacity utilization, net sales quantity, U.S. shipments, market share, productivity, revenues, gross profit, operating income, and net income, and capital expenditures.[304]

We take into account in our analysis the fact that Commerce has made final findings that subject producers in Canada, China, and Mexico are importing FSS at less than fair value. In addition to this consideration, our impact analysis has considered other factors affecting domestic prices. Our analysis of the lack of significant price effects of subject imports, described in both the price effects discussion and below, is particularly probative to an assessment of the impact of the subject imports.

[302] 19 U.S.C. § 1677(7)(C)(iii); *see also* SAA at 851 and 885 ("In material injury determinations, the Commission considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they also may demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports.").

[303] 19 U.S.C. § 1677(7)(C)(iii). This provision was amended by the Trade Preferences Extension Act of 2015, Pub. L. 114-27.

[304] Petitioner argues that the Commission should exclude the questionnaire data submitted by domestic producers NCI and BlueScope, contending that those producers reported substantial volumes of out-of-scope merchandise in their responses. Petitioner's Final Comments at 9-12. BlueScope argues that the Commission should exclude the questionnaire data from domestic producer Nucor, contending that its questionnaire response was untimely and unreliable. BlueScope's Final Comments at 3-6. Notwithstanding these arguments, we have included the data submitted by BlueScope, NCI, and Nucor in our analysis. Commission staff reviewed the questionnaire responses of these producers closely and examined the data they submitted in light of what Commerce indicated in its final scope definition was within or outside the scope. *Certain Fabricated Structural Steel From Mexico: Final Determination of Sales at Less Than Fair Value,* 85 Fed. Reg. 5390. 5392-5394 (Jan. 30, 2020); Department of Commerce memorandum, *Fabricated Structural Steel from Canada, Mexico, and the People's Republic of China: Final Scope Decision Memorandum*, January 23, 2020, at 25-27 (EDIS Document No. 702277).

Following the Commission's hearing, Commission staff emailed counsel for BlueScope, NCI, and Nucor with respect to the questionnaire responses with the instruction "If you produce or import out-of-scope PEMB components, *do not* include such products in either production or imports – even if assembled into Pre-Engineered Metal Buildings that you sell." Email from Commission staff to counsel for BlueScope, NCI, and Nucor Buildings Group, January 29, 2020 (EDIS Document No. 701026) (emphasis in original). Commission staff received responses to this email from BlueScope and NCI ***. Email from counsel for BlueScope to Commission staff, January 31, 2020 (EDIS Document No. 701737); email from counsel for NCI to Commission staff,

The domestic industry's capacity increased by *** percent between 2016 and 2018, increasing from *** short tons in 2016 to *** short tons in 2017 and 2018; it was *** short tons in interim 2018 and higher, at *** short tons, in interim 2019.[305] Production increased by *** percent from 2016 to 2018, increasing from *** short tons in 2016 and 2017 to *** short tons in 2018; it was *** short tons in interim 2018 and lower, at *** short tons, in interim 2019.[306] Capacity utilization declined slightly from *** percent in 2016 to *** percent in 2017, and then rose to *** percent in 2018; it was *** percent in interim 2018 and lower, at *** percent, in interim 2019.[307]

Net sales quantity increased by *** percent from 2016 to 2018, increasing from *** short tons in 2016 and 2017 to *** short tons in 2018; it was *** short tons in interim 2018 and lower, at *** short tons, in interim 2019.[308] U.S. shipments increased by *** percent from 2016 to 2018, increasing from *** short tons in 2016 and 2017 to *** short tons in 2018; they were *** short tons in interim 2018

January 31, 2020 (EDIS Document No. 701708). In addition, the Commission received the U.S. producer questionnaire response from Nucor on February 4, 2020. (EDIS Document No. 701704).

Commission staff then followed up by email with counsel for BlueScope, NCI, and Nucor to obtain shipment data from each firm on the specific PEMBs components at issue, to determine what specific components each producer had included in its U.S. producers questionnaire response as in-scope merchandise, and what components each producer had chosen not to include in its responses as out-of-scope merchandise. Email from Commission staff to counsel for BlueScope, NCI, and Nucor, February 7, 2020 (EDIS Document No. 702351). The Commission received email responses from each producer providing this information. Email from counsel for BlueScope to Commission staff, February 10, 2020 (EDIS Document No. 702352); email from counsel for NCI to Commission staff, February 10, 2020 (EDIS Document No. 702354); email from counsel for Nucor to Commission staff, February 10, 2020 (EDIS Document No. 702353); *see* CR/PR at III-22 n.12. Thus, Commission staff ensured that the reporting PEMBs component producers *** the Commission's instruction that production of out-of-scope merchandise was not to be included in these firms' U.S. producer questionnaire responses, and staff followed up by clarifying with each firm exactly what PEMBs components those firms had included in their questionnaire responses. Commission staff also conducted a verification with respect to the financial data submitted to the Commission by NCI. *See* Verification Report for NCI Group, Inc. by Joanna Lo, February 5, 2020 (EDIS Document No. 702556). Thus, Commission staff thoroughly reviewed these questionnaire responses (and more than one hundred others) to ensure that they did not include data for production of any products that were clearly excluded from Commerce's scope, as set forth in Commerce's final determinations and further explained in Commerce's final scope decision memorandum.

[305] CR/PR at Table C-4.

[306] CR/PR at Table C-4.

[307] CR/PR at Table C-4.

[308] CR/PR at Table C-4.

and interim 2019.[309] The domestic industry's share of apparent U.S. consumption increased from *** percent in 2016 to *** percent in 2017 and *** percent in 2018; it was *** percent in interim 2018 and lower, at *** percent, in interim 2019.[310] Ending inventories increased by *** percent from 2016 to 2018, increasing from *** short tons in 2016 to *** short tons in 2017 and *** short tons in 2018; they were *** short tons in interim 2018 and lower, at *** short tons, in interim 2019.[311]

Most employment-related indicators showed either relatively small fluctuations or increases over the POI. The number of production-related workers (PRWs) declined by *** percent between 2016 and 2018, falling from *** PRWs in 2016 to *** PRWs in 2017, and then increasing to *** PRWs in 2018; there were *** PRWs in interim 2018 and a greater number, *** PRWs, in interim 2019.[312] Hours worked declined by *** percent from 2016 to 2018, declining from *** in 2016 to *** in 2017, and then increasing to *** in 2018; hours worked were *** in interim 2018 and higher, at ***, in interim 2019.[313] Wages paid increased by *** percent from 2016 to 2018, increasing from $*** in 2016 and 2017 to $*** in 2018; they were $*** in interim 2018 and higher, at $***, in interim 2019.[314] Productivity increased by *** percent from 2016 to 2018, increasing (in short tons per thousand hours) from *** in 2016 to *** in 2017 and *** in 2018; it was *** short tons per thousand hours in interim 2018 and lower, at *** short tons per thousand hours, in interim 2019.[315]

The industry's revenues and profits increased during the POI. Revenues rose by *** percent from 2016 to 2018, increasing from $*** in 2016 to $*** in 2017 and $*** in 2018; they were $*** in interim 2018 and lower, at $*** in interim 2019.[316] Gross profit rose by *** percent from 2016 to 2018, increasing from $*** in 2016 and 2017 to $*** in 2018; it was $*** in interim 2018 and interim 2019.[317] Operating income rose by *** percent from 2016 to 2018, increasing from $*** in 2016 to $*** in 2017 and $*** in 2018; it was $***

[309] CR/PR at Table C-4.
[310] CR/PR at Table C-4.
[311] CR/PR at Table C-4.
[312] CR/PR at Table C-4.
[313] CR/PR at Table C-4.
[314] CR/PR at Table C-4.
[315] CR/PR at Table C-4.
[316] CR/PR at Table C-4.
[317] CR/PR at Table C-4.

*** in interim 2018 and higher, at $***, in interim 2019.[318] The industry's operating income margin declined from *** percent in 2016 to *** percent in 2017 and 2018; it was *** percent in interim 2018 and reached a period high, at *** percent, in interim 2019.[319] Net income rose by *** percent between 2016 and 2018, increasing from $*** in 2016 to $*** in 2017, and then falling to $*** in 2018; it was $*** in interim 2018 and lower, at $***, in interim 2019.[320] Capital expenditures rose by *** percent between 2016 and 2018, increasing from $*** in 2016 to $*** in 2017 and $*** in 2018; they were $*** in interim 2018 and higher, at $*** in interim 2019.[321]

As previously discussed, apparent U.S. consumption increased by 5.9 percent between 2016 and 2018.[322] During the POI, the domestic industry saw gains in many of its indicators that substantially exceeded this increase in apparent U.S. consumption: production increased by *** percent; net sales quantity increased by *** percent; U.S. shipments increased by *** percent; productivity increased by *** percent; net sales value increased by *** percent; gross profit increased by *** percent; operating income increased by *** percent; net income increased by *** percent; and capital expenditures increased by *** percent. Moreover, the domestic industry gained *** percentage points of market share between 2016 and 2018 and its capacity utilization rate improved by *** percentage points. We emphasize that the domestic industry achieved all these improvements before the petitions were filed, and thus the improvements are not a result of the pendency of the investigations.

Petitioner argues that industry's condition should have improved even more during the POI than it did, in light of the conditions of competition. The record, however, does not indicate that subject imports materially precluded the domestic industry from achieving an improved performance, given the industry's ability to gain market share and the lack of price effects by the subject imports. Moreover, when cumulated subject import volume and market share were at reduced levels in interim 2019 as compared to interim 2018, the domestic industry was unable to improve its performance by capturing market share. Instead, the

[318] CR/PR at Table C-4.

[319] CR/PR at Table C-4.

[320] CR/PR at Table C-4.

[321] CR/PR at Table C-4. The domestic industry incurred research and development ("R&D") expenses of $*** in 2016, $*** in 2017, and $*** in 2018. R&D expenses were $*** in interim 2018 and $*** in interim 2019. *Id.*

[322] CR/PR at Table C-4.

domestic industry's market share was lower in interim 2019 than in interim 2018, and the market share of nonsubject imports was higher.[323]

In the same vein, petitioner contends that the Commission should use AISC data from 2006-08 to provide a benchmark to show that in light of the business cycle for the FSS industry, the domestic industry should have performed much better during the current POI but for subject import competition.[324] However, while this is a cyclical market, the record does not indicate that the AISC data from that earlier period are directly comparable to the Commission questionnaire data collected in these investigations, or that the conditions of competition were similar during 2006-08 to those prevailing during the POI.[325] Thus, we find that the data supplied by petitioner pertaining to developments in the FSS industry over a decade ago add limited value to our analysis of the performance of the domestic industry during the POI.

In view of the foregoing, we do not find that cumulated subject imports are having a significant impact on the domestic industry. Accordingly, we find that the domestic industry is not materially injured by reason of cumulated subject imports of FSS from Canada, China, and Mexico.

[323] CR/PR at Table C-4. While subject sources' share of the U.S. market declined by 5.1 percentage points in interim 2019, compared to interim 2018, the domestic industry's market share was *** percentage points lower and nonsubject imports' market share was 5.9 percentage points higher for the same period. *Id.* at Tables IV-9, C-4.

[324] Petitioner's Prehearing Brief at 85-87; Petitioner's Posthearing Brief at 14-15 and Exh. 1 at 54-66.

[325] The financial data provided by petitioner for the 2006-2008 period are from the AISC itself and are not Commissioner questionnaire data, and the Commission has thus been unable to verify the underlying information from individual producers, determine the assumptions made by AISC in compiling the data, or ascertain the coverage and representativeness of the data submitted. Moreover, the AISC data may contain information from U.S. producers of out-of-scope merchandise, such as producers of FSS for bridges. Furthermore, the record contains very limited information about the conditions of competition for U.S. FSS producers in the 2006 to 2008 period, including general macroeconomic conditions, demand conditions, conditions relating to raw materials and other costs for the industry, availability of skilled workers, production constraints, import levels, the bidding process and other methods for purchases of FSS, and various other relevant conditions as they existed during that earlier time period. *See* Petitioners' Prehearing Brief at 85-87 and Exh. 1 at 20-29 (and attachments 2-8); Petitioner's Posthearing Brief at 15 and Exh. 1 at 54-66; Canadian Respondents' Posthearing Brief, Appendix A, at 2-18. We note that petitioner acknowledges that some conditions were different during the 2006-2008 period. Petitioner's Posthearing Brief, Exh. 1 at 59-60 (significant difference in raw material costs in the 2006 to 2008 period as compared to the current POI).

VI. No Threat of Material Injury by Reason of Subject Imports

A. Legal Standard

Section 771(7)(F) of the Tariff Act directs the Commission to determine whether the U.S. industry is threatened with material injury by reason of the subject imports by analyzing 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."[326] The Commission may not make such a determination "on the basis of mere conjecture or supposition," and considers the threat factors "as a whole" in making its determination whether dumped or subsidized imports are imminent and whether material injury by reason of subject imports would occur unless an order is issued.[327] In making our determination, we consider all statutory threat factors that are relevant to these investigations.[328]

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[326] 19 U.S.C. § 1677(7)(F)(ii).

[327] 19 U.S.C. § 1677(7)(F)(ii).

[328] These factors are as follows:

(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,

(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,

…

(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).

19 U.S.C. § 1677(7)(F)(i). To organize our analysis, we discuss the applicable statutory threat factors using the same volume/price/impact framework that applies to our material injury analysis.

B. Cumulation for Threat

Under section 771(7)(H) of the Tariff Act, the Commission may "to the extent practicable" in its threat analysis cumulatively assess the volume and price effects of subject imports from all countries as to which petitions were filed on the same day if the requirements for cumulation in the material injury context are satisfied.[329] Accordingly, for purposes of our analysis of threat of material injury by reason of subject imports, subject imports from Canada, China, and Mexico are eligible for cumulation.

Petitioner argues that the Commission should cumulate subject imports from Canada, China, and Mexico for its analysis of threat of material injury, asserting that the trends for imports from all three subject countries are similar, including trends in import AUVs.[330] Canadian Respondents and the Government of Canada argue that the Commission should exercise its discretion not to cumulate subject imports from Canada with subject imports from China and Mexico for threat purposes. They argue that there are distinct differences between products from the three subject countries, and that subject imports from Canada compete on a different basis and in different markets in the United States than imports from the other two subject sources.[331] The Government of Canada contends that Commerce's finding that imports from Canada are not subsidized indicates that subject producers in Canada compete differently from subject producers in China and Mexico.[332] Mexican Respondents argue that the Commission should not cumulate subject imports from Mexico with subject imports from Canada and China for threat purposes, given the different role that subject imports from Mexico play in the U.S. market.[333]

We found in our discussion of cumulation above that there is a reasonable overlap of competition among subject imports from all three countries and between subject imports from each country and the domestic like product. The considerations discussed above apply to our decision to cumulate subject imports for the purposes of our threat determinations. The record does not indicate that there would likely be any significant difference in the

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Statutory threat factors (I), (II), (III), (V), and (VI) are discussed in the analysis of subject import volume. Statutory threat factor (IV) is discussed in the analysis of subject import price effects. Statutory factors (VIII) and (IX) are discussed in the analysis of impact. Statutory factor (VII) concerning agricultural products is inapplicable to these investigations.

[329] 19 U.S.C. § 1677(7)(H).

[330] Petitioner's Prehearing Brief at 92-93.

[331] Canadian Respondents' Prehearing Brief at 26-34; Canadian Respondents' Posthearing Brief at 10-12; Government of Canada's Posthearing Brief at 7-11.

[332] Government of Canada's Posthearing Brief at 7.

[333] Mexican Respondents' Prehearing Brief at 53-55.

likely conditions of competition between subject imports from Canada, China, or Mexico. We acknowledge, as described in section IV.B. above, that there are some differences in the types of products imported from each of the subject countries; we are also aware that subject imports from China displayed a different volume trend than subject imports from Canada and Mexico in interim 2019. Nevertheless, after examining these differences, we find that they are not significant enough to warrant not cumulating all subject imports. For these reasons, we exercise our discretion to cumulate subject imports from Canada, China, and Mexico for the purposes of our threat analysis.

C. Analysis

1. Likely Volume

As previously discussed, cumulated subject imports had a relatively steady presence in the U.S. market during most of the POI: from 2016 to 2018, their quantity increased by 5.3 percent while their market share varied between 25.0 and 25.3 percent.[334] Subject import presence was at lower levels in interim 2019, when its quantity was 20.2 percent lower and market share was 5.1 percentage points lower than in interim 2018.[335] Thus, there was no significant rate of increase in either the volume or the market share of the subject imports during the POI. Moreover, as previously discussed in section V.C, the lower subject import volume and market share in interim 2019 were unrelated to the filing of the petitions. Thus, given the absence of any rapid increase in cumulated subject import volume during the POI, a significant increase in subject import volume or market share is unlikely in the imminent future.

Reported capacity, capacity utilization, and production of the cumulated subject industries all fluctuated during the POI, and are projected to increase by a small amount in 2020.[336] Nevertheless, the unused capacity in the subject industries during the POI did not

[334] The volume of subject imports declined from 740,627 short tons in 2016 to 730,723 short tons in 2017, and then increased to 779,706 short tons in 2018; it was 612,588 short tons in interim 2018 and 488,946 short tons in interim 2019. CR/PR at IV-5, Table IV-2.

[335] CR/PR at IV-5, Table IV-9.

[336] Reported capacity of the cumulated subject industries increased from *** short tons in 2016 to *** short tons in 2017, and then declined to *** short tons in 2018; it was *** short tons in interim 2018 and higher, at *** short tons, in interim 2019. It is projected to be *** short tons in 2019 and higher, at *** short tons, in 2020. CR/PR at Table VII-18. The reported production of FSS by the cumulated subject industries increased from *** short tons in 2016 to *** short tons in 2017, and then declined to *** short tons in 2018; it was *** short tons in interim 2018 and higher, at *** short tons, in interim 2019. It is projected to be *** short tons in 2019 and higher, at *** short tons, in 2020. *Id.* The reported capacity

result in any surge of subject imports.[337] By the same token, subject imports did not increase rapidly during the POI notwithstanding the export orientation of the subject producers, as well as their focus on exporting to the U.S. market.[338] In 2017, Canada imposed antidumping and countervailing duty orders on imports of fabricated industrial steel components from China.[339] In short, while we acknowledge that the record indicates that the cumulated subject industries

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utilization rate of the cumulated subject industries increased from *** percent in 2016 to *** percent in 2017 and then declined to *** percent in 2018; it was *** percent in interim 2017 and higher, at *** percent, in interim 2018. It is projected to be *** percent in 2019 and higher, at *** percent, in 2020. *Id.*

We acknowledge that foreign producer questionnaire coverage was not complete for any of the three subject countries – just as questionnaire coverage was not complete for the domestic industry – and that coverage was relatively lower for the industry in China than for those in the other two subject countries. *See* CR/PR at VII-3-4, VII-16, VII-23-24. Petitioner requests that we draw adverse inferences against the non-responding Chinese producers. Petitioner's Prehearing Brief at 96-97. We decline to do so. We observe that petitioner, in its request that the Commission take adverse inferences, did not suggest that there were sources of data concerning the FSS industry in China other than those provided in the Commission report. *Compare* 19 U.S.C. § 1677e(b) (requiring that adverse inferences be based on data included in the record). Instead petitioner simply cited two news articles reporting overcapacity and increased production in the broader steel industry in China. Petitioner's Prehearing Brief at 97.

Consequently, we have relied on the facts otherwise available in the record concerning the FSS industry in China, which indicates that that the subject industry in China has unused capacity and is export oriented. *See* CR/PR at Table VII-10. Our analysis also takes into account that subject import volume from China declined during the latter portion of the POI for reasons unrelated to the filing of the petitions, as discussed above in section V.C.

[337] Unused capacity of the cumulated subject industries increased from *** short tons in 2016 to *** short tons in 2017 and *** short tons in 2018; it was *** short tons in interim 2018 and higher, at *** short tons, in interim 2019. It was projected to be *** short tons in 2019 and lower, at *** short tons, in 2020. Derived from CR/PR at Table VII-18.

[338] Total export shipments accounted for *** percent of total shipments by subject producers in 2016, *** percent in 2017, and *** percent in 2018; they were *** percent in interim 2018 and *** percent in interim 2019. They are projected to account for *** percent of total shipments in 2019 and *** percent of total shipments in 2020. CR/PR at Table VII-18.

Exports to the United States accounted for *** percent of total shipments by subject producers in 2016; *** percent in 2017; *** percent in 2018; they accounted for *** percent in interim 2018 and *** percent in interim 2019. Exports to the United States are projected to account for *** percent of total shipments by subject producers in 2019 and *** percent in 2020. CR/PR at Table VII-18. Exports to all other markets accounted for *** percent of total shipments by subject producers in 2016, *** percent in 2017, and *** percent in 2018; they accounted for *** percent in interim 2018 and *** percent in interim 2019. Exports to all other markets are projected to account for *** percent of total shipments by subject producers in interim 2019 and *** percent in interim 2020. *Id.*

[339] CR/PR at VII-35 to VII-36.

are likely to have the ability to increase exports to the United States, these conditions of competition existed during the POI and did not result in a significant increase in such exports.

Inventories of subject merchandise by both subject producers and U.S. importers were at low levels during the POI.[340] As the parties agree, inventories are of very limited importance in the FSS market given that over 99 percent of the commercial shipments by both U.S. producers and importers are produced-to-order.[341] While some subject producers reported the ability to produce out-of-scope product (*e.g.* FSS for bridges and bridge sections) on the same equipment they use to produce in-scope FSS, they also reported factors limiting any product shifting (e.g., ***).[342]

Thus, the record shows that cumulated subject imports did not increase sharply during the POI and had a reduced presence in the U.S. market at the conclusion of the POI for reasons unrelated to the petition. Moreover, there is no indication of changes in conditions of competition that will likely cause the import volume trends observed during the POI to change in the imminent future.

Accordingly, we do not find a likelihood of substantially increased subject imports in the imminent future.[343]

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[340] End-of-period inventories by subject producers increased from *** short tons in 2016 to *** short tons in 2017 and *** short tons in 2018; they were *** short tons in interim 2018 and higher, at *** short tons, in interim 2019. They are projected to be *** short tons in 2019 and lower, at *** short tons, in 2020. CR/PR at Table VII-18. Subject producers had inventories equivalent to *** percent of production in 2016 and 2017, and *** percent in 2018. Their projected inventories are equivalent to *** percent of projected production in 2019 and *** percent in 2020. *Id.*

U.S. importers' inventories of subject merchandise from all subject sources increased from *** short tons in 2016 to *** short tons in 2017, and then declined to *** short tons in 2018; they were *** short tons in interim 2018 and lower, at *** short tons, in interim 2019. CR/PR at Table VII-19. The ratio of U.S. importers' inventories of subject merchandise to U.S. shipments of subject imports was *** percent in 2016, *** percent in 2017, and *** percent in 2018; it was *** percent in interim 2018 and interim 2019. *Id.*

[341] CR/PR at II-19. *See* Petitioner's Prehearing Brief at 114-115; Joint Respondents' Prehearing Brief at 68-69.

[342] CR/PR at II-6 to II-7, VII-12 to VII-13, VII-20 to VII-21, VII-27, Tables VII-5, VII-11, VII-16.

[343] In our analysis, we have considered the nature of the subsidies Commerce has found to be countervailable, particularly whether the countervailable subsidies are ones described in Articles 3 or 6.1 of the WTO Agreement on Subsidies and Countervailing Measures, and whether imports of the subject merchandise are likely to increase. 19 U.S.C. § 1677(7)(F)(i)(I). We observe that In its final countervailing duty determination concerning FSS from China, Commerce found the following subsidy programs to be countervailable: Government Policy Lending; Provision of Hot-Rolled Steel for Less than

2. Likely Price Effects

We found above in section V.D that cumulated subject imports did not engage in significant underselling, depress prices to a significant degree, or prevent price increases that would otherwise have occurred to a significant degree during the POI. The record provides no indication that the pricing of cumulated subject imports is likely to be different during the imminent future than during the POI. Our finding that there is not a likelihood of significantly increased cumulated subject imports in the imminent future further supports a conclusion that pricing patterns for cumulated subject imports are unlikely to change appreciably in the imminent future.

Accordingly, we find that cumulated imports of subject merchandise are unlikely to enter at prices that are likely to have a significant depressing or suppressing effect on domestic prices, or are likely to increase demand for such imports.

3. Likely Impact

As discussed above, we have found that the volume of cumulated subject imports is not likely to increase significantly in the imminent future. Furthermore, subject imports are not likely to enter at prices that are likely to have a significant depressing or suppressing effect on domestic prices.

Given the strong performance of the domestic industry during the POI, as detailed in section V.E., we do not find that the industry is vulnerable to material injury from subject imports. While petitioner contends that U.S. demand for FSS is declining,[344] we find that the

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Adequate Remuneration ("LTAR"); Provision of Wide Flange Beams for LTAR; Provision of Steel Channels for LTAR; Provision of Steel Angles for LTAR; Provision of Hollow Structural Shapes for LTAR; Provision of Electricity for LTAR; Provision of Land Use Rights to Favored Industries for LTAR; EBC Program; and Other Subsidies. CR/PR at I-8 n.20; *see* Department of Commerce Memorandum*, Issues and Decision Memorandum for the Final Determination of the Countervailing Duty Investigation of Certain Fabricated Structural Steel from the People's Republic of China,* C-570-103 at 14-15 (Jan. 23, 2020) (EDIS Document No. 702737). In its final countervailing duty determination concerning FSS from Mexico, Commerce found the following subsidy programs to be countervailable: Eight Rule Permit Program; and Program of Sectoral Promotion. CR/PR at I-8 n.19; *see* Department of Commerce Memorandum, *Issues and Decision Memorandum for the Final Determination of the Countervailing Duty Investigation of Certain Fabricated Structural Steel from Mexico,* C-201-851, at 4 (Jan. 23, 2020) (EDIS Document No. 702737). We have taken these subsidy findings into account in our analysis of likely subject import volume. As discussed in the text, however, the fact that the subject industries may cumulatively have the ability or incentive to increase exports to the United States does not make further subject imports likely in light of the pertinent conditions of competition.

[344] Petitioner's Prehearing Brief at 62, 94-95.

record overall does not support that contention, in that the relevant industry data do not show likely declining demand, but rather that the rate of growth in demand for nonresidential construction may be slowing.[345]

We also find that subject imports are not likely to have an actual or potential negative effect on the domestic industry's existing development and production efforts. We note that the domestic industry's capital expenditures increased by *** percent between 2016 and 2018, and were higher in interim 2019 than in interim 2018, suggesting that the industry's existing development and production efforts were quite robust during the POI and will continue to be so in the imminent future.[346]

In view of the foregoing, we find that an industry in the United States is not threatened with material injury by reason of cumulated subject imports from Canada, China, and Mexico.

VII. Conclusion

For the reasons stated above, we determine that an industry in the United States is not materially injured by reason of subject imports of FSS from Canada, China, and Mexico that are sold in the United States at less than fair value and subsidized by the governments of China and Mexico.

[345] *See* Canadian Respondents' Posthearing Brief at 3-4, 15 and Exh. 13 (forecast by the American Institute of Architects); Mexican Respondents' Prehearing Brief at 27-28 and Exhs. 19-23.

[346] Capital expenditures increased from $*** in 2016 to $*** in 2017 and $*** in 2018; they were $*** in interim 2018 and higher, at $*** in interim 2019. CR/PR at Table C-4. We acknowledge that majorities of producers reported that the subject imports caused negative effects on investment or growth and development during the POI, and that 51 of 62 responding producers anticipated that the subject imports would have negative effects. *See* CR/PR at Tables VI-10 and H-1. Nevertheless, we cannot accord these perceptions controlling weight in light of the other data in the record indicating that subject Imports did not have a significant adverse impact on the growing domestic industry during the POI, are not likely to increase significantly in the imminent future, and have not caused and are unlikely to cause significant price effects.

Separate and Dissenting Views of Commissioners Rhonda K. Schmidtlein and Amy A. Karpel

Based on the record in the final phase of these investigations, we determine that an industry in the United States is materially injured by reason of imports of fabricated structural steel ("FSS") from Canada, China, and Mexico found by the U.S. Department of Commerce ("Commerce") to be sold in the United States at less than fair value and subsidized by the governments of China and Mexico.

I. Material Injury

We concur with our colleagues on the issues of background, domestic like product, domestic industry, cumulation, legal standards, and conditions of competition and the business cycle. Therefore, we adopt and incorporate the majority's finding and analysis regarding those issues. As explained below, we also find that the volume of subject imports was significant, both in absolute terms and relative to apparent U.S. consumption, and that these imports undersold the domestic like product and prevented price increases that otherwise would have occurred to a significant degree. This significant volume of low-priced subject imports had an adverse impact on the domestic industry's output and financial indicators, and the industry would have performed better if not for the subject imports. Therefore, we find that the domestic industry producing fabricated structural steel is materially injured by reason of subject imports.

A. 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."[1]

Cumulated subject imports had a relatively steady presence in the U.S. market during the POI, with some annual fluctuations. The volume of cumulated subject imports declined from 740,627 short tons in 2016 to 730,723 short tons in 2017, and then increased to 779,706 short tons in 2018.[2] The volume of cumulated subject imports was 20.2 percent lower in

[1] 19 U.S.C. § 1677(7)(C)(i).

[2] Confidential Report ("CR")/Public Report ("PR") at IV-5, Table IV-2.

interim 2019 than in interim 2018; it was 612,588 short tons in interim 2018 and 488,946 short tons in interim 2019.[3]

The market share of cumulated subject imports was relatively stable between 2016 and 2018, declining from 25.3 percent in 2016 to 25.0 percent in 2017, and then increasing to 25.2 percent in 2018.[4] The market share of cumulated subject imports was 5.1 percentage points lower in interim 2019 than in interim 2018; it was 26.3 percent in interim 2018 and 21.2 percent in interim 2019.[5]

We find that the volume of cumulated subject imports is significant in absolute terms and relative to consumption in the United States.

B. Price Effects of the Subject Imports

Section 771(7)(C)(ii) of the Tariff Act provides that, in evaluating the price effects of the subject imports, 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.[6]

As explained in the majority's views, there is a moderate-to-high degree of substitutability between subject imports and domestically produced FSS. The record also shows that the price of FSS and the overall contract price are very important factors used in purchasing decisions.[7]

Given the predominant use of competitive bidding processes in this industry, the Commission requested U.S. purchasers to provide the bid data for their five largest purchases of fabricated structural steel since January 1, 2016, that involved at least one bid from a U.S.

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[3] CR/PR at IV-5, Table IV-2. We note that this decline in subject import volume was driven by a decline in imports of FSS from China, which faced the imposition of the Section 301 tariffs on August 23, 2018. *See* CR/PR at Table IV-7 (showing the monthly volume of subject imports from China declining by more than 50 percent between August 2018 and September 2018, declining even further in late 2018, and for the rest of the POI remaining consistently below the monthly level of subject imports from China prior to September 2018).

[4] CR/PR at Tables IV-9 and C-4.

[5] CR/PR at Tables IV-9 and C-4.

[6] 19 U.S.C. § 1677(7)(C)(ii).

[7] CR/PR at II-22.

producer and at least one bid from an FSS supplier in Canada, China, or Mexico.[8] Fourteen purchasers provided bids for a total of more than 40 projects, though not all projects involved both a U.S. producer and a subject supplier.[9] These bid data show that the lowest bid usually wins and that purchasers reported price or cost as being a determinative factor in a substantial number of instances. Looking specifically at the projects where there was head-to-head competition between U.S. producers and suppliers from the subject countries, the bid data also show that the subject suppliers underbid domestic producers in the vast majority of instances. In 33 comparisons, subject suppliers underbid the domestic producers on 25 projects and won 19 of those projects.[10]

We recognize that the bid data provided to the Commission are generally lump sum bids that include other cost components, such as erection services. However, the Commission did receive some bids where the FSS component was broken out separately.[11] In addition, roughly half of responding purchasers reported that they receive itemized bids.[12] The record shows that FSS accounts for a substantial share of the total bid price.[13] Although the total non-FSS component of a bid likely varies based on the complexity of the project, the American Institute of Steel Construction estimates that FSS accounts for about 74 percent of the total cost of a structural steel project.[14] The data available also show that the lowest total bid price generally

[8] CR/PR at V-11.

[9] *See* CR/PR at Appendix I.

[10] *See* CR/PR at Appendix I. These bid comparisons involve projects where there was at least one domestic producer and at least one subject supplier, where there appeared to be comparable prices, and where either a domestic producer or subject supplier won the bid.

[11] *See* CR/PR at V-12; CR/PR at Appendix I.

[12] CR/PR at V-10. Fifteen of 32 purchasers reported that they receive itemized bids.

[13] Of the reported bid data, there were 20 projects that had at least one bid where the FSS component of the bid was broken out. Of the bids for those 20 projects that broke out the FSS component, 30 individual bids had an FSS component of between 70-100 percent; four had an FSS component of 50-55 percent, and six had an FSS component of less than 50 percent. (An additional nine bids had an FSS component of 0.1 percent or less. We do not consider those bids for purposes of the analysis in this footnote as it appears those bids reported total costs for the entire building not just costs for the FSS and related services.) Derived from CR/PR at Appendix I. Thus, of the 40 bids for which the FSS component was broken out, 30 of those had an FSS component of greater than 70 percent (including some where the FSS component comprised 100 percent of the bid price). Further, when averaged, FSS accounted for 78.3 percent of the total bid price for those 40 bids. This supports the conclusion that FSS accounts for a substantial share of the total bid price.

[14] *See* Petitioner's Final Comments at 3; Petitioner's Posthearing Brief at 2, Exh. 2. While respondents provided evidence showing a wide range of erection costs for different projects, some of which included FSS components below 50 percent of the total bid price, we do not find that these specific instances are necessarily inconsistent with AISC's estimate of 74 percent, which is based on

correlates to the lowest FSS price.[15] Thus, regardless of whether every purchaser knew the specific price of FSS, the record supports the conclusion that the lowest bids are the result of low-priced FSS.

In addition to the bid data, which show that subject suppliers frequently underbid domestic producers and that those lower prices resulted in domestic producers losing sales, purchasers also confirmed lost sales to subject imports because of price. Eighteen purchasers reported that they purchased the subject imports instead of the domestic product since 2016, with 15 of those purchasers reporting that the subject imports were priced lower than the domestic like product, and 13 reporting that price was a primary reason for purchasing the imported product.[16] Thus, a substantial number of purchasers clearly considered the subject imports to be lower priced than the domestic like product and acknowledged that this lower price was a driving factor in their purchasing decisions.[17]

The Commission also collected AUV data for domestic producers' and importers' U.S. shipments to specific end-use segments of the market (*e.g.*, industrial, commercial, residential, sports and entertainment). These data show that, with few exceptions, the shipment AUVs of subject imports were below the domestic industry's AUVs in each of these different end-use segments and in nearly all years of the period of investigation ("POI").[18] While we acknowledge that these data may be subject to some differences in product mix, we still find them instructive. First, because the quantities used to calculate AUVs were in short tons, potential product mix issues related to the size of the FSS may be mitigated. Second, the AUV data are segregated by application, which likely limits potential differences in the projects' complexity. We find the consistency of the subject imports' lower AUVs to be persuasive, particularly given

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national average data that would include both the complex and less complex projects that make up this market. *See* CISC Posthearing Brief, Appendix A at 26; Petitioner's Posthearing Brief, Exh. 2.

[15] Petitioner's Posthearing Brief, Exh. 1 at 10 and Exh 3. Of the reported bid data, there were 10 projects for which the winning bid and competing bids had the FSS component broken out. Of those, the winning bid was the bid with the lowest FSS price with one exception. Derived from CR/PR at Appendix I.

[16] CR/PR at V-18.

[17] The respondents criticize these data because certain purchasers that reported they purchased the subject imports because of price also reported that they did not receive itemized bids and did not know the price of the FSS. *See* CISC Posthearing Brief, Appendix A at 36. While this may be true for some, it does not apply to all purchasers. *See* CR/PR at Table V-6 and Appendix I (showing purchasers that confirmed lost sales also reported itemized bid data). Moreover, this argument ignores the fact that FSS generally accounts for a substantial portion of the total bid and that the lowest total bid price likely correlates to the lowest FSS component, as explained above.

[18] *See* CR/PR at F-3 and F-12.

that the difference between the domestic industry's AUVs and the subject imports' AUVs is frequently substantial.[19]

Taken together, we find that this evidence supports a finding that the subject imports significantly undersold the domestic like product during the POI and that this underselling resulted in lost sales for the domestic industry.

We have also considered price trends in the market, though we note that the customized nature of FSS and the lack of pricing product data in the record make price trends more difficult to discern for this industry. The available information show that the domestic industry's net sales AUV increased by *** percent during 2016-2018 and was higher in interim 2019 than in interim 2018.[20] The industry's U.S. shipment AUV also increased by *** percent during 2016-2018 and was higher in interim 2019 than in interim 2018.[21] The AUV of cumulated subject imports also increased during the POI, *** than the domestic industry's AUVs.[22]

Despite increases in the domestic industry's net sales and shipment AUVs, the industry's ratio of COGS (cost of goods sold) to net sales increased from *** percent in 2016 to *** percent in 2017 and *** percent in 2018.[23] The record shows that although domestic producers were generally able to raise prices to cover their increasing costs,[24] the industry's gross profit margin declined from *** percent in 2016 to *** percent in 2017 and *** percent in 2018.[25] Thus, despite strong demand, the industry was unable to maintain its profitability, let alone increase its profitability, during the POI.[26] Given the increase in the industry's ratio of COGS to net sales and consequent decline in its gross profit margin, the

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[19] *See* CR/PR at F-3 and F-12.

[20] CR/PR at Table C-4.

[21] CR/PR at Table C-4. On a disaggregated basis, the domestic industry's U.S. shipment AUVs to specific end-use sectors also show consistent increases during 2016-2018 and were higher in interim 2019 than in interim 2018. CR/PR at Table F-1.

[22] CR/PR at Table C-4 (showing that the cumulated subject imports' AUV increased by 8.2 percent during 2016-2018 and was higher in interim 2019 than in interim 2018).

[23] CR/PR at Table C-4. This ratio was lower in January-September ("interim") 2019, after the petitions were filed, than in interim 2018; the ratio was *** percent in interim 2018 and *** percent in interim 2019. *Id.*

[24] *See* CR/PR at Table C-4. The domestic industry's total COGS increased by *** per ton during 2016-2018 while the industry's net sales AUV increased by *** per ton. The industry's total COGS were *** per ton higher in interim 2019 than in interim 2018 while its net sales AUV was *** per ton higher during the same period. *Id.*

[25] *Derived from* CR/PR at Table C-4. The industry's gross profit ratio was higher in interim 2019, at *** percent, than in interim 2018, at *** percent. *Id.*

[26] Apparent U.S. consumption increased by 5.9 percent during 2016-2018. CR/PR at Table C-4.

strong demand for FSS, and the significant volume of low-priced subject imports in the market throughout the POI that were competing head-to-head with domestic producers, we find that the subject imports prevented price increases that otherwise would have occurred to a significant degree.

For the foregoing reasons, we find that the significant volume of subject imports have had significant adverse price effects on the domestic industry.

C. Impact of the Subject Imports[27]

Section 771(7)(C)(iii) of the Tariff Act provides that examining the impact of subject imports, the Commission "shall evaluate all relevant economic factors which have a bearing on the state of the industry."[28] These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, gross profits, net profits, operating

[27] The statute instructs the Commission to consider the "magnitude of the dumping margin" in an antidumping proceeding as part of its consideration of the impact of imports. 19 U.S.C. § 1677(7)(C)(iii)(V). In its final determination of sales at less than fair value with respect to subject imports from Canada, Commerce found a *de minimis* dumping margin of 0.00 percent for Canatal and a dumping margin of 6.70 percent for Les Constructions Beauce-Atlas, Inc. and all other Canadian producers and exporters. *Certain Fabricated Structural Steel From Canada: Final Determination of Sales at Less Than Fair Value*, 85 Fed. Reg. 5373, 5374 (Jan. 30, 2020). In its final determination with respect to subject imports from China, Commerce found dumping margins of 61.71 percent for Jinhuan Construction Group, 90.52 percent for Wison (Nantong) Heavy Industry Co., Ltd./Wison Offshore & Marine (Hong Kong) Limited, 154.14 percent for Modern Heavy Industries (Taicang) Co., Ltd, 72.19 percent for companies eligible for a separate rate, and 154.14 percent for all other Chinese producers and exporters. *Certain Fabricated Structural Steel From the People's Republic of China: Final Determination of Sales at Less Than Fair Value*, 85 Fed. Reg. 5376, 5378 (Jan. 30, 2020). In its final determination with respect to subject imports from Mexico, Commerce found a *de minimis* dumping margin of 0.00 percent for Corey S.A. de C.V./Industrias Recal S.A. de C.V., and dumping margins of 8.47 percent for Building Systems de Mexico, S.A. de C.V., 30.58 percent for Acero Technologia, S.A. de C.V., Construcctiones Industriales Tapia S.A. de C.V., Estructuras Metalicas la Popular S.A. de C.V./MSCI, and Operadora CICSA, S.A. de C.V. Swecomex—Guadalajara, and 8.47 percent for all other Mexican producers and exporters. *Certain Fabricated Structural Steel From Mexico: Final Determination of Sales at Less Than Fair Value*, 85 Fed. Reg. 5390, 5392 (Jan. 30, 2020). We take into account in our analysis the fact that Commerce has made final findings that subject producers in Canada, China, and Mexico are selling subject imports in the United States at less than fair value. In addition to this consideration, our impact analysis has considered other factors affecting domestic prices. Our analysis of the significant underselling and price effects of subject imports, described in both the price effects discussion and below, is particularly probative to an assessment of the impact of the subject imports.

[28] 19 U.S.C. § 1677(7)(C)(iii); *see also* SAA at 851 and 885 ("In material injury determinations, the Commission considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they also may demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports.").

profits, cash flow, return on investment, return on capital, ability to raise capital, ability to service debts, 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."[29]

The domestic industry's performance indicators generally were positive during the period of investigation, some outpacing increases in apparent U.S. consumption, which increased by 5.9 percent from 2016 to 2018.[30] Production increased by *** percent from 2016 to 2018.[31] U.S. shipments increased by *** percent from 2016 to 2018.[32] The domestic industry's end-of-period inventories grew by *** percent from 2016 to 2018.[33] Average capacity grew by *** percent from 2016 to 2018,[34] and capacity utilization increased by *** percentage points from 2016 to 2018.[35] The domestic industry's market share increased by *** percentage points from 2016 to 2018.[36]

The domestic industry's employment indicators were mixed during the period of investigation. Wages paid increased by *** percent from 2016 to 2018,[37] and hourly wages

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[29] 19 U.S.C. § 1677(7)(C)(iii). This provision was amended by the Trade Preferences Extension Act of 2015, Pub. L. 114-27.

[30] CR/PR at Table C-4. Apparent U.S. consumption was 2,924,186 short tons in 2016, 2,924,091 short tons in 2017, and 3,096,687 short tons in 2018. CR/PR at Table C-4. It was 2,328,279 short tons in interim 2018 and 2,308,342 short tons in interim 2019. CR/PR at Table C-4.

[31] CR/PR at Table C-4. U.S. producers' production volume was *** short tons in 2016, *** short tons in 2017, and *** short tons in 2018. CR/PR at Table C-4. It was *** short tons in interim 2018 and *** short tons in interim 2019. CR/PR at Table C-4.

[32] CR/PR at Table C-4. The domestic industry's U.S. shipment volume was *** short tons in 2016, *** short tons in 2017, and *** short tons in 2018. CR/PR at Table C-4. It was *** short tons in interim 2018 and *** short tons in interim 2019. CR/PR at Table C-4.

[33] CR/PR at Table C-4. U.S. producers' end-of-period inventories were *** short tons in 2016, *** short tons in 2017, and *** short tons in 2018. CR/PR at Table C-4. They were *** short tons in interim 2018 and *** short tons in interim 2019. CR/PR at Table C-4.

[34] CR/PR at Table C-4. Average capacity was *** short tons in 2016, *** short tons in 2017, and *** short tons in 2018. CR/PR at Table C-4. It was *** short tons in interim 2018 and *** short tons in interim 2019. CR/PR at Table C-4.

[35] CR/PR at Table C-4. Capacity utilization was *** percent in 2016, *** percent in 2017, and *** percent in 2018. CR/PR at Table C-4. It was *** percent in interim 2018 and *** percent in interim 2019. CR/PR at Table C-4.

[36] CR/PR at Table C-4. The domestic industry's market share was *** percent in 2016, *** percent in 2017, and *** percent in 2018. CR/PR at Table C-4. It was *** percent in interim 2018 and *** percent in interim 2019. CR/PR at Table C-4.

[37] CR/PR at C-4. The domestic industry's wages paid ($1,000s) were *** in 2016, *** in 2017, and *** in 2018. CR/PR at Table C-4. They were *** in interim 2018 and *** in interim 2019. CR/PR at Table C-4.

increased by *** percent from 2016 to 2018.[38] Productivity also increased by *** percent from 2016 to 2018.[39] However, the total number of production-related workers ("PRWs") decreased by *** percent from 2016 to 2018,[40] and total hours worked decreased by *** percent from 2016 to 2018.[41] Unit labor costs decreased by *** percent from 2016 to 2018.[42]

The domestic industry's financial indicators were also mixed during the period of investigation. Net sales revenue increased by *** percent from 2016 to 2018.[43] Gross profit increased by *** percent from 2016 to 2018.[44] Total COGS increased by *** percent from 2016 to 2018.[45] The COGS to net sales ratio increased by *** percentage points from 2016 to 2018.[46] Operating income increased by *** percent from 2016 to 2018.[47] The domestic industry's ratio of operating income to net sales was *** in 2016, *** in 2017, and *** in

[38] CR/PR at Table C-4. The domestic industry's hourly wages (dollars/hour) were *** in 2016, *** in 2017, and *** in 2018. CR/PR at Table C-4. They were *** in interim 2018 and *** in interim 2019. CR/PR at Table C-4.

[39] CR/PR at Table C-4. The domestic industry's productivity (short tons/1,000 hours) was *** in 2016, *** in 2017, and *** in 2018. CR/PR at Table C-4. It was *** in interim 2018 and *** in interim 2019. CR/PR at Table C-4.

[40] CR/PR at Table C-4. The domestic industry's number of PRWs was *** in 2016, *** in 2017, and *** in 2018. CR/PR at Table C-4. It was *** to interim 2018 and *** in 2019. CR/PR at Table C-4.

[41] CR/PR at Table C-4. The domestic industry's total hours worked (1,000s) was *** in 2016, *** in 2017, and *** in 2018. CR/PR at Table C-4. It was *** in interim 2018 and *** in interim 2019. CR/PR at Table C-4.

[42] CR/PR at Table C-4. The domestic industry's unit labor costs (dollars/short ton) were *** in 2016, *** in 2017, and *** in 2018. CR/PR at Table C-4. They were *** in interim 2018 and *** in interim 2019. CR/PR at Table C-4.

[43] CR/PR at Table C-4. Total net sales revenue ($1,000s) was *** in 2016, *** in 2017, and *** in 2018. CR/PR at Table C-4. It was *** in interim 2018 and *** in interim 2019. CR/PR at Table C-4.

[44] CR/PR at Table C-4. Gross profit ($1,000) was *** in 2016, *** in 2017, and *** in 2018. CR/PR at Table C-4. It was *** in interim 2018 and *** in interim 2019. CR/PR at Table C-4.

[45] CR/PR at Table C-4. The domestic industry's total COGS ($1,000s) was *** in 2016, *** in 2017, and *** in 2018. CR/PR at Table C-4. It was *** in interim 2018 and *** in interim 2019. CR/PR at Table C-4.

[46] CR/PR at Table C-4. The domestic industry's COGS to net sales ratio was *** percent in 2016, *** percent in 2017, *** percent in 2018. CR/PR at Table C-4. It was *** percent in interim 2018 and *** percent in interim 2019. CR/PR at Table C-4.

[47] CR/PR at Table C-4. The domestic industry's operating income ($1,000s) was *** in 2016, *** in 2017, and *** in 2018. CR/PR at Table C-4. It was *** in interim 2018 and *** in interim 2018. CR/PR at Table C-4.

2018.[48] The ratio of gross profit to net sales was *** percent in 2016, *** percent in 2017, and *** percent in 2018.[49] Net income increased by *** percent from 2016 to 2018.[50] Capital expenditures increased by *** percent from 2016 to 2018.[51]

More than half of responding U.S. producers reported that subject imports had a negative effect on their firm's investments and growth and development.[52]

As discussed above, the record shows lost sales due to lower priced subject imports and that the subject imports prevented price increases for domestic producers that otherwise would have occurred to a significant degree. Because the domestic industry lost sales to lower-priced subject imports and because subject imports suppressed domestic producer prices, the domestic industry lost revenues it otherwise would have obtained. As a result, although many of the domestic industry's financial indicators were positive during the POI, the domestic industry's ratio of gross profit to net sales decreased throughout the period of investigation from *** percent in 2016 to *** percent in 2017 and *** percent in 2018 despite it being a period of rising demand. Operating margins also declined over the POI, and the majority of domestic producers reported negative effects on investment, growth and development. Indeed, despite a period of strong demand when the total number of production-related workers would be expected to increase, the total number of workers in this domestic industry

[48] CR/PR at Table VI-1 and Table C-4. It was *** in interim 2018 and *** in interim 2018. CR/PR at Table VI-1 and Table C-1.

[49] Derived from CR/PR at Table C-4. It was *** in interim 2018 and *** in interim 2019. Derived from CR/PR at Table C-4.

[50] CR/PR at Table C-4. The domestic industry's net income ($1,000s) was *** in 2016, *** in 2017, and *** in 2018. CR/PR at Table C-4. It was *** in interim 2018 and *** in interim 2019. CR/PR at Table C-4.

[51] CR/PR at Table C-4. The domestic industry's capital expenditures ($1,000s) were *** in 2016, *** in 2017, and *** in 2018. CR/PR at Table C-4. They were *** in interim 2018 and *** in interim 2019. CR/PR at Table C-4.

[52] CR/PR at VI-21. Thirty-five out of 60 producers reported negative effects on investment and 30 out of 57 producers reported negative effects on growth and investment.

actually declined over the full years of the POI. [53] [54] Accordingly, we find that subject imports had a significant adverse impact on the domestic industry.

II. Conclusion

For the reasons stated above, we determine that an industry in the United States is materially injured by reason of imports of fabricated structural steel from Canada, China, and Mexico that are sold in the United States at less than fair value and subsidized by the governments of China and Mexico.

[53] The statute defines material injury for purposes of our analysis as "harm which is not inconsequential, immaterial, or unimportant." 19 U.S.C. § 1677(7)(A). We consider that the harm identified above—lost revenue that the domestic industry would have obtained but for significant volumes of low-priced subject imports underselling the domestic like product and suppressing prices—is harm which is not inconsequential, immaterial, or unimportant. The presence of generally positive performance indicators, as well as certain positive financial indicators, does not render lost revenues inconsequential, immaterial, or unimportant. The statute is clear on this point: "The Commission may not determine that there is no 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." 19 U.S.C. § 1677(7)(J).

[54] We have also considered whether there are other factors that may have had an impact on the domestic industry during the POI to ensure that we are not attributing injury from such other factors to subject merchandise. We have considered the role of nonsubject imports and demand in the U.S. market. As noted, demand increased during the full years of the POI and is therefore not a cause of injury to the domestic industry. Nonsubject imports had a smaller presence in the U.S. market during the POI than either domestic product or subject imports, and nonsubject imports declined from 2016 to 2018. CR/PR at Table C-4. Nonsubject imports share of apparent consumption was *** in 2016, *** percent in 2017, and *** percent in 2018. *Id.* AUVs of nonsubject imports were significantly higher than AUVs of subject imports in 2016, 2017, and 2018. *Id.* Thus, the relatively small and declining volume of nonsubject imports does not explain the domestic industry's inability to raise prices sufficiently to maintain its profitability during the full years of the POI nor does it explain the industry's confirmed lost sales to the subject imports. While the volume of nonsubject imports and their market share were larger in interim 2019 than in interim 2018 and their AUVs were lower, the industry's COGS to net sales ratio and its operating margin improved as the volume of subject imports in the market declined. *Id.* We therefore find that nonsubject imports cannot explain the injury we find with respect to the domestic industry.

Part I: Introduction

Background

These investigations result from petitions filed with the U.S. Department of Commerce ("Commerce") and the U.S. International Trade Commission ("USITC" or "Commission") by the American Institute of Steel Construction, LLC ("AISC") Full Member Subgroup,[1] Chicago, Illinois, on February 4, 2019, alleging that an industry in the United States is materially injured and threatened with material injury by reason of subsidized and less-than-fair-value ("LTFV") imports of fabricated structural steel[2] from Canada, China, and Mexico. The following tabulation provides information relating to the background of these investigations.[3] [4]

[1] The AISC is a not-for-profit technical institute and trade association established in 1921 to serve the structural steel design community and construction industry in the United States. It is the primary trade association for domestic fabricated structural steel producers. More information on AISC's Full Member Subgroup is available in Petitioner's "Response to Respondents' Request to Reject APO Application," February 19, 2019, pp. 3-4.

[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 for the witnesses appearing at the Commission's hearing.

Effective date	Action
February 4, 2019	Petitions filed with Commerce and the Commission; institution of Commission investigations (84 FR 3245, February 11, 2019)
February 25, 2019	Commerce's notice of initiation of antidumping duty investigations (84 FR 7330, March 4, 2019) and countervailing duty investigations (84 FR 7339, March 4, 2019)
March 22, 2019	Commission's preliminary determinations (84 FR 11554, March 27, 2019)
July 12, 2019	Commerce's preliminary countervailing duty determinations (84 FR 33224, 84 FR 33227, 84 FR 33232)
September 10, 2019	Commerce's preliminary antidumping duty determinations (84 FR 47481, 84 FR 47487, 84 FR 47491); scheduling of final phase of Commission investigations (84 FR 49765, September 23, 2019)
January 28, 2020	Commission's hearing
January 30, 2020	Commerce's affirmative final antidumping duty determinations (85 FR 5373, 85 FR 5376, 85 FR 5390), affirmative final countervailing duty determinations with regards to China and Mexico (85 FR 5381, 85 FR 5384), and negative final countervailing duty determinations with regards to Canada (85 FR 5387)
January 30, 2020	Commission's termination of CVD investigation on fabricated structural steel from Canada (85 FR 8321, February 13, 2020)
February 25, 2020	Commission's vote
March 16, 2020	Commission's views

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.

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.

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

Organization of report

Part I of this report presents information on the subject merchandise, subsidy/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

Fabricated structural steel consists of steel mill products that have been fabricated and are suitable for erection or assembly into a variety of structures, including buildings (commercial, office, institutional, and multi-family residential), industrial and utility projects, parking decks, arenas and convention centers, medical facilities, and ports, transportation and infrastructure facilities.[7]

Apparent U.S. consumption of fabricated structural steel totaled approximately 3.1 million short tons ($9.0 billion) in 2018. Responding U.S. producers' U.S. shipments of fabricated structural steel totaled 2.0 million short tons ($6.4 billion) in 2018, and accounted for 67.5 percent of apparent U.S. consumption by quantity and 70.8 percent by value. U.S. imports from subject sources totaled 779,706 short tons ($1.8 billion) in 2018 and accounted for 25.2

[7] In the Petition, the "technical characteristics and uses" section observed that "…all FSS is intended to provide structural support and ensures that the structure can bear certain loads or weight." Petition, p. 7. Commerce considered arguments made by parties in the course of its investigations to include the language "provide structural support" in the scope definition. Commerce did not modify its final scope definition to include this language. Commerce states, "The petitioner has also answered the question of whether {fabricated structural steel} must be load bearing or provide structural support in order to be covered by the scope. The petitioner noted that the scope explicitly covers 'steel products that have been fabricated for erection or assembly into structures' with no limitations regarding whether or not the FSS is essential to support the design loads of the structure." *Fabricated Structural Steel from Canada, Mexico, and the People's Republic of China: Final Scope Decision Memorandum*, pp. 26-27. In its posthearing responses to Commission questions, Petitioner stated that it: "…continues to believe that FSS is generally intended to provide structural support, though this is not an express requirement of the scope." Petitioner's posthearing brief, "Answers to Commissioner Questions" p. 128. See the section titled "Commerce's scope" below for the complete scope definition.

percent of apparent U.S. consumption by quantity and 20.4 percent by value. U.S. imports from nonsubject sources totaled 226,275 short tons ($784.4 million) in 2018 and accounted for 7.3 percent of apparent U.S. consumption by quantity and 8.7 percent by value.

The leading U.S. producers of fabricated structural steel in 2018 reportedly include BlueScope Buildings North America ("BlueScope"), Cives Corporation ("Cives"), FabSouth LLC, NCI Group, Inc. ("NCI"), Nucor Buildings Group ("Nucor"), and SteelFab, Inc., while leading producers outside the United States include Canam and Supreme Steel of Canada; Shanghai Cosco Kawasaki and Shanghai Matsuo of China; and Corey S.A. de C.V. ("Corey") and Building Systems de Mexico of Mexico. The leading U.S. importers of fabricated structural steel from subject sources include ***, while leading importers from nonsubject countries include ***.[8] Most U.S. purchasers of fabricated structural steel are construction and/or erection firms that solicit bids for structural projects from fabricators of structural steel. The largest purchasers that were able to report their purchases of fabricated structural steel include ***.[9]

Summary data and data sources

A summary of data collected in these investigations is presented in appendix C. Except as noted, U.S. industry data are based on questionnaire responses of *** firms that accounted for an estimated 62.8 percent of U.S. production of fabricated structural steel during 2018.

The Commission issued importer questionnaires to 245 firms believed to be importers of subject fabricated structural steel, as well as to all recipients of U.S. producer questionnaires. Usable questionnaire responses were received from 74 companies. One hundred and nine firms reported that they did not import fabricated structural steel into the United States. The response coverage, based on *** for imports under the primary HTS numbers, by quantity, for the 183 firms responding affirmatively or negatively to the Commission's questionnaire was the following:

[8] ***.

[9] Not all purchasers were able to estimate their purchases over the period. Please see Part II for further information.

- 54.4 percent of subject U.S. imports from Canada;
- 43.5 percent of U.S. imports from China;
- 71.4 percent of U.S. imports from Mexico;
- 54.7 percent of U.S. from subject sources;
- 100.0 percent of nonsubject U.S. imports from Canada;
- 41.1 percent of U.S. imports from all other sources;
- 42.7 percent of U.S. imports from nonsubject sources; and
- 52.4 percent of U.S. imports from all countries.

Based on a comparison of foreign producers' questionnaire data from 43 firms with official U.S. official imports, as adjusted, Canadian producers submitting usable questionnaire responses accounted for *** percent, Chinese producers for 15.7 percent, and Mexican producers for *** percent of U.S. imports of subject product from their respective countries.

Previous and related investigations[10]

Section 332 investigation

In 1984, at the request of the Subcommittee on Trade, House Committee on Ways and Means, and in accordance with section 332(b) of the Tariff Act of 1930, the Commission conducted a study of *Conditions of Competition Between Certain Domestic and Imported Fabricated Structural Steel Products, Inv. No. 332-181*. The study assessed the factors affecting the competitive position of U.S. fabricators of structural steel for buildings, bridges, offshore oil platforms, transmission towers, and other related products, compared the structural characteristics of the U.S. industry with those of principal foreign competitors (primarily Canada, Japan, and Korea), and described U.S. and foreign government policies and regulations affecting the fabricated structural steel industry.[11]

[10] For information related to recent tariff actions under Section 232 of the Trade Expansion Act of 1962, as amended, and under Section 301 of the Trade Act of 1974 please see the section entitled "Sections 232 and 301 tariff treatment" below.

[11] *Conditions of Competition Between Certain Domestic and Imported Fabricated Structural Steel Products, Inv. No. 332-181*, USITC Publication 1601, November 1984, pp. 1, ix, and xi-xii.

Offshore platform jackets and piles from Korea and Japan

In May 1986, the Commission determined that industries in the United States were materially injured by reason of imports of offshore platform jackets and piles from Korea and Japan.[12] Those orders were revoked in October 1987.[13] The Commission noted in its subsequent 1988 preliminary phase investigation on certain fabricated structural steel from Canada that the offshore platform jackets and piles, which are of fabricated structural steel, were excluded from the investigations on certain fabricated structural steel from Canada, because the 1988 preliminary phase investigation covered only certain fabricated structural steel for use in buildings.[14]

Certain fabricated structural steel from Canada

In January 1988, a petition was filed on behalf of AISC alleging that an industry in the United States was materially injured by dumped imports of certain fabricated structural steel from Canada. In February 1988, following a preliminary phase investigation, the Commission determined that there was no reasonable indication of material injury or threat thereof to the domestic industry and thus no antidumping duty order was issued.[15]

Steel safeguard

Following receipt of a request from the United States Trade Representative ("USTR") on June 22, 2001, the Commission instituted Investigation No. TA-201-73, Steel, under section 202 of the Trade Act of 1974 (19 U.S.C. 2252) to determine whether certain steel products, including carbon and alloy fabricated structural units, were being imported into the United States in such increased quantities as to be a substantial cause of serious injury, or the threat thereof, to the domestic industry producing an article like or directly competitive with the

[12] *Offshore Platform Jackets and Piles from the Republic of Korea and Japan, Invs. Nos. 701-TA-248 (Final) and 731-TA-259-260 (Final)*, USITC Publication 1848, May 1986, p. 1.

[13] *Offshore Platform Jackets & Piles from Japan*, 52 FR 41604, October 29, 1987; *Offshore Platform Jackets & Piles from the Republic of Korea*, 52 FR 41603, October 29, 1987; and *Offshore Platform Jackets & Piles from the Republic of Korea*, 52 FR 41606, October 29, 1987.

[14] *Certain Fabricated Structural Steel from Canada, Inv. No. 731-TA-387 (Preliminary)*, USITC Publication 2062, February 1988, p. A-2.

[15] *Certain Fabricated Structural Steel from Canada, Inv. No. 731-TA-387 (Preliminary)*, USITC Publication 2062, February 1988, p. 1.

imported article.[16] The carbon and alloy fabricated structural units included in that investigation were described as structures (excluding prefabricated buildings) and parts of structures (i.e., bridges and bridge sections, lock gates, towers, lattice masts, roofs, roofing frameworks, pillars, and columns) made from iron or steel plates, rods, angles, shapes, sections, tubes, and the like. Also included were sheet-metal roofing, siding, flooring, and roofing drainage equipment. Excluded were doors, windows, their frames and thresholds, and architectural and ornamental work. For purposes of the safeguard investigation, fabricated products were provided for in the following HTS subheadings: 7308.10.0000, 7308.20.0000, 7308.40.0000, 7308.90.3000, 7308.90.6000, 7308.90.7000, 7308.90.9530, and 7308.90.9590.[17]

The Commission unanimously determined that fabricated structural units were not being imported into the United States in such increased quantities as to be a substantial cause of serious injury or threat of serious injury to the domestic industry.[18]

Nature and extent of subsidies and sales at LTFV

Subsidies

On January 30, 2020, Commerce published notices in the *Federal Register* of its affirmative final determinations of countervailable subsidies for producers and exporters of fabricated structural steel from China[19] and Mexico.[20] Commerce also issued a negative final countervailing duty determination with regard to producers and exporters of fabricated

[16] *Steel, Investigation No. TA-201-73, Volume I: Determinations and Views of Commissioners*, USITC Publication 3479, December 2001, pp. 7-8.

[17] Ibid., p. 13.

[18] Ibid., pp. 1 and 25-26.

[19] 85 FR 5384, January 30, 2020. Commerce determined the following programs to be countervailable with respect to Mexico: Eighth Rule Permit Program; Program of Sectoral Promotion. See Issues and Decision Memorandum for the Final Determination of the Countervailing Duty Investigation of Certain Fabricated Structural Steel from Mexico, p. 4.

[20] 85 FR 5381, January 30, 2020. Commerce determined the following programs to be countervailable with respect to China: Government Policy Lending; Provision of Hot-Rolled Steel for Less than Adequate Remuneration ("LTAR"); Provision of Wide Flange Beams for LTAR; Provision of Steel Channels for LTAR; Provision of Steel Angles for LTAR; Provision of Hollow Structural Shapes for LTAR; Provision of Electricity for LTAR; Provision of Land Use Rights to Favored Industries for LTAR; EBC Program; and Other Subsidies. See Issues and Decision Memorandum for the Final Determination of the Countervailing Duty Investigation of Certain Fabricated Structural Steel from the People's Republic of China, pp. 14-15.

structural steel from Canada.[21] Tables I-1 through I-3 present Commerce's respective subsidy rates for fabricated structural steel in Canada, China, and Mexico.

Table I-1
Fabricated structural steel: Commerce's subsidy determinations with respect to imports from Canada

Entity	Preliminary countervailable subsidy rate (percent)	Final countervailable subsidy rate (percent)
Les Constructions Beauce-Atlas Inc.	0.12 *(de minimis)*	0.22 *(de minimis)*
Les Industries Canatal Inc.	0.45 *(de minimis)*	0.32 *(de minimis)*

Source: 84 FR 33232, July 12, 2019; 85 FR 5387, January 30, 2020.

Table I-2
Fabricated structural steel: Commerce's subsidy determinations with respect to imports from China

Entity	Preliminary countervailable subsidy rate (percent)	Final countervailable subsidy rate (percent)
Hongju Metals Co., Ltd	177.43	206.49
Huaye Steel Structure Co	177.43	206.49
Jiangsu Kingmore Storage Equipment	177.43	206.49
Jiangsu Zhengchang Cereal Oil & Feed	177.43	206.49
Modern Heavy Industries (Taicang) Co., Ltd	30.30	27.34
Ningbo Jiangbei Huarentai Trade	177.43	206.49
Ningbo Win Success Machinery Co., Ltd	177.43	206.49
Shangdong Taipeng Home Products Co	177.43	206.49
Shanghai Matsuo Steel Structure Co., Ltd	36.07	34.70
Sinopec Engineering (Group) Co., Ltd	177.43	206.49
Sunjoy Industrial Group Limited	177.43	206.49
Sunjoy Industries (Jiashan) Co., Ltd	177.43	206.49
Wuxi Huishan Metalwork Technology Co., Ltd	177.43	206.49
Yueqing Yihua New Energy Technology	177.43	206.49
All others	32.64	30.28

Source: 84 FR 33224, July 12, 2019; 85 FR 5384, January 30, 2020.

[21] 85 FR 5387, January 30, 2020.

Table I-3
Fabricated structural steel: Commerce's subsidy determinations with respect to imports from Mexico

Entity	Preliminary countervailable subsidy rate (percent)	Final countervailable subsidy rate (percent)
Building Systems de Mexico, S.A. de C.V	0.01	0.01
Corey S.A. de C.V.	13.62	13.62
Acero Technologia, S.A. de C.V	74.01	68.87
Construcciones Industriales Tapia S.A. de C.V	74.01	68.87
Estructuras Metalicas la Popular S.A. de C.V./MSCI	74.01	68.87
Operadora CICSA, S. A. de C. V. Swecomex—Guadalajara	74.01	68.87
Preacero Pellizzari Mexico S.A. de C.V	74.01	68.87
All others	13.62	13.62

Source: 84 FR 33227, July 12, 2019; 85 FR 5381, January 30, 2020.

Sales at LTFV

On January 30, 2020, Commerce published notices in the *Federal Register* of its final affirmative determinations of sales at less than fair value ("LTFV") with respect to imports from Canada,[22] China,[23] and Mexico.[24] Tables I-4 through I-6 present Commerce's respective dumping margins for imports of fabricated structural steel from Canada, China and Mexico.

Table I-4
Fabricated structural steel: Commerce's weighted-average LTFV margins with respect to imports from Canada

Entity	Preliminary dumping margin (percent)	Final dumping margin (percent)
Les Constructions Beauce-Atlas Inc	0.69 *(de minimis)*	6.70
Canatal Industries, Inc	0.00 *(de minimis)*	0.00
All-Others	N/A	6.70

Source: 84 FR 47481, September 10, 2019; 85 FR 5373, January 30, 2020.

[22] 85 FR 5373, January 30, 2020.
[23] 85 FR 5376, January 30, 2020.
[24] 85 FR 5390, January 30, 2020.

Table I-5
Fabricated structural steel: Commerce's weighted-average LTFV margins with respect to imports from China

Exporter	Producer	Preliminary dumping margin (percent)	Final dumping margin (percent)
Jinhuan Construction Group Co., Ltd	Jinhuan Construction Group Co., Ltd	57.86	61.71
Modern Heavy Industries (Taicang) Co., Ltd	Modern Heavy Industries (Taicang) Co., Ltd	0.00	154.14
Wison (Nantong) Heavy Industry Co., Ltd. or Wison Offshore & Marine (Hong Kong) Limited	Wison (Nantong) Heavy Industry Co., Ltd	52.09	90.52
Non-Individually Examined Exporters Receiving Separate Rates {See 'Note' below}	Producers Supplying the Non-Individually-Examined Exporters Receiving Separate Rates {See 'Note' below}	55.76	72.19
China-Wide Entity		141.38	154.14

Note: Appendix III of the referenced *Federal Register* notice lists these companies in full.

Source: 84 FR 47491, September 10, 2019; 85 FR 5376, January 30, 2020.

Table I-6
Fabricated structural steel: Commerce's weighted-average LTFV margins with respect to imports from Mexico

Exporter/Producer	Preliminary dumping margin (percent)	Final dumping margin (percent)
Building Systems de Mexico, S.A. de C.V	10.58	8.47
Corey S.A. de C.V./Industrias Recal S.A. de C.V	0	0
Acero Technologia, S.A. de C.V	30.58	30.58
Construcciones Industriales Tapia S.A. de C.V	30.58	30.58
Estructuras Metalicas la Popular S.A. de C.V./MSCI	30.58	30.58
Operadora CICSA, S. A. de C. V. Swecomex—Guadalajara	30.58	30.58
All others	10.58	8.47

Source: 84 FR 47487, September 10, 2019; 85 FR 5390, January 30, 2020.

The subject merchandise

Commerce's scope

In the current proceeding, Commerce has defined the scope as follows:[25]

> *The merchandise covered by the investigation is carbon and alloy fabricated structural steel. Fabricated structural steel is made from steel in which: (1) Iron predominates, by weight, over each of the other contained elements; and (2) the carbon content is two percent or less by weight. Fabricated structural steel products are steel products that have been fabricated for erection or assembly into structures, including, but not limited to, buildings (commercial, office, institutional, and multi-family residential); industrial and utility projects; parking decks; arenas and convention centers; medical facilities; and ports, transportation and infrastructure facilities. Fabricated structural steel is manufactured from carbon and alloy (including stainless) steel products such as angles, columns, beams, girders, plates, flange shapes (including manufactured structural shapes utilizing welded plates as a substitute for rolled wide flange sections), channels, hollow structural section (HSS) shapes, base plates, and plate-work components. Fabrication includes, but is not limited to cutting, drilling, welding, joining, bolting, bending, punching, pressure fitting, molding, grooving, adhesion, beveling, and riveting and may include items such as fasteners, nuts, bolts, rivets, screws, hinges, or joints.*
>
> *The inclusion, attachment, joining, or assembly of non-steel components with fabricated structural steel does not remove the fabricated structural steel from the scope.*
>
> *Fabricated structural steel is covered by the scope of the investigation regardless of whether it is painted, varnished, or coated with plastics or other metallic or non-metallic substances and regardless of whether it is assembled or partially assembled, such as into modules, modularized construction units, or sub-assemblies of fabricated structural steel.*
>
> *Subject merchandise includes fabricated structural steel that has been assembled or further processed in the subject country or a third country, including but not limited to painting, varnishing, trimming, cutting, drilling, welding, joining, bolting, punching, bending, beveling, riveting,*

[25] 85 FR 5373, January 30, 2020; 85 FR 5376, January 30, 2020; 85 FR 5390, January 30, 2020.

galvanizing, coating, and/or slitting or any other processing that would not otherwise remove the merchandise from the scope of the investigation if performed in the country of manufacture of the fabricated structural steel.

All products that meet the written physical description of the merchandise covered by the investigation are within the scope of the investigation unless specifically excluded or covered by the scope of an existing antidumping duty order.

Specifically excluded from the scope of the investigation are:

1. Fabricated steel concrete reinforcing bar (rebar) if: (i) It is a unitary piece of fabricated rebar, not joined, welded, or otherwise connected with any other steel product or part; or (ii) it is joined, welded, or otherwise connected only to other rebar.

2. Fabricated structural steel for bridges and bridge sections that meets American Association of State and Highway and Transportation Officials (AASHTO) bridge construction requirements or any state or local derivatives of the AASHTO bridge construction requirements.

3. Pre-engineered metal building systems, which are defined as complete metal buildings that integrate steel framing, roofing and walls to form one, pre-engineered building system, that meet Metal Building Manufacturers Association guide specifications. Pre-engineered metal building systems are typically limited in height to no more than 60 feet or two stories.

4. Steel roof and floor decking systems that meet Steel Deck Institute standards.

5. Open web steel bar joists and joist girders that meet Steel Joist Institute specifications.

6. Also excluded from the scope of the investigation is scaffolding, and parts and accessories thereof, that comply with ANSI/ASSE A10.8—2011—Scaffolding Safety Requirements, and/or Occupational Safety and Health Administration regulations at 29 CFR part 1926 subpart L—Scaffolds. The outside diameter of the scaffold tubing covered by this exclusion ranges from 25mm to 150mm.

7. Excluded from the scope of the investigation are access flooring systems panels and accessories, where such panels have a total thickness ranging from 0.75 inches to 1.75 inches and consist of concrete, wood, other non-steel materials, or hollow space permanently attached to a top and bottom layer of galvanized or painted steel sheet or formed coil steel, the whole of which has been formed into a square or rectangle having a measurement of 24 inches on each side +/− 0.1 inch; 24 inches by 30 inches +/− 0.1 inch; or 24 by 36 inches +/− 0.1 inch.

8. Excluded from the investigation are the following types of steel poles, segments of steel poles, and steel components of those poles:

- *Steel Electric Transmission Poles, or segments of such poles, that meet (1) the American Society of Civil Engineers (ASCE)—Design of Steel Transmission Pole Structures, ASCE/SEI 48 or (2) the USDA RUS bulletin 1724E-214 Guide specification for standard class Steel Transmission Poles. The exclusion for steel electric transmission poles also encompasses the following components thereof: Transmission arms which attach to poles; pole bases; angles that do not exceed 8" x 8" x 0.75"; steel vangs, steel brackets, steel flanges, and steel caps; safety climbing cables; ladders; and steel templates.*

- *Steel Electric Substation Poles, or segments of such poles, that meet the American Society of Civil Engineers (ASCE)—Manuals and Reports on Engineering Practice No. 113. The exclusion for steel electric substation poles also encompasses the following components thereof: Substation dead end poles; substation bus stands; substation mast poles, arms, and cross-arms; steel brackets, steel flanges, and steel caps; pole bases; safety climbing cables; ladders; and steel templates.*

- *Steel Electric Distribution Poles, or segments of such poles, that meet (1) American Society of Civil Engineers (ASCE)—Design of Steel Transmission Pole Structures, ASCE/SEI 48, (2) USDA RUS bulletin 1724E-204 Guide specification for steel single pole and H-frame structures, or (3) ANSI 05.1 height and class requirements for steel poles. The exclusion for steel electric distribution poles also encompasses the following components thereof: Distribution arms and cross-arms; pole bases; angles that do not exceed 8" x 8" x 0.75"; steel vangs, steel brackets, steel flanges, and steel caps; safety climbing cables; ladders; and steel templates.*

- *Steel Traffic Signal Poles, Steel Roadway Lighting Poles, Steel Parking Lot Lighting Poles, and Steel Sports Lighting Poles, or segments of such poles, that meet (1) the American Association of State Highway and Transportation Officials (AASHTO)—Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, (2) any state or local derivatives of the AASHTO highway sign, luminaries, and traffic signals requirements, or (3) American National Standard Institute (ANSI) C136—American National Standard for Roadway and Area Lighting Equipment standards. The exclusion for steel traffic signal poles, steel roadway lighting poles, steel parking lot lighting poles, and steel sports lighting poles also encompasses the following components thereof: Luminaire arms; hand hole rims; hand hole covers; base plates that connect to either the shaft or the arms; mast arm clamps; mast arm tie rods; transformer base boxes; formed full base covers that hide anchor bolts; step lugs; internal cable guides; lighting cross arms; lighting service platforms; angles that do not exceed 8" x 8" x 0.75"; stainless steel hand hole door hinges and wind restraints; steel brackets, steel flanges, and steel caps; safety climbing cables; ladders; and steel templates.*

- *Communication Poles, or segments of such poles, that meet (1) Telecommunications Industry Association (TIA) ANSI/TIA-222 Structural Standards for Steel Antenna Towers and Antenna Supporting Structures, or (2) American Association of State Highway and Transportation Officials (AASHTO)—Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals. The exclusion for communication poles also encompasses the following components thereof: Luminaire arms; hand hole rims; hand hole covers; base plate that connects the pole to the foundation or arm to the pole; safety climbing cables; ladders; service ground platforms; step lugs; pole steps; steel brackets, steel flanges, and steel caps; angles that do not exceed 8" x 8" x 0.75", coax, and safety brackets; subcomponent kits for antenna mounts weighing 80 lbs. or less; service platforms; ice bridges; stainless steel hand hole door hinges and wind restraints; and steel templates.*

- *OEM Round or Polygonal Tapered Steel Poles, segments or shaft components of such poles, that meet the (1) ASCE 48 or AASHTO, (2) ANSI/TIA 222, (3) ANSI 05.1, (4) RUS bulletin 1724E-204, or (5) RUS bulletin 1724E-214. The exclusion for OEM round or polygonal tapered steel poles also encompasses the following components thereof: Subcomponent kits for antenna mounts weighing 80 lbs.*

or less; mounts and platforms; steel brackets, steel flanges, and steel caps; angles that do not exceed 8" x 8" x 0.75"; bridge kits; safety climbing cables; ladders; and steel templates.

The inclusion or attachment of one or more of the above-referenced steel poles in a structure containing fabricated structural steel (FSS) does not remove the FSS from the scope of the investigation. No language included in this exclusion should be read or understood to have applicability to any other aspect of this scope or to have applicability to or to exclude any product, part, or component other than those specifically identified in the exclusion.

9. Also excluded from the scope of the investigation are Shuttering, Formworks, Propping and Shoring and parts and accessories thereof that comply with ANSI/ASSE A10.9—Safety Requirements for Concrete and Masonry Work and ACI-347—Recommended Practice for Concrete Formwork. For Shoring and propping made from tube, the outside diameter of the tubing covered by this exclusion ranges from 48mm to 250mm. For Shuttering and Formworks, the panel sizes covered by this exclusion range from 25mm x 600mm to 3000mm x 3000mm.

10. Also excluded from the scope of the investigation are consumer items for do-it-yourself assembly that are prepackaged for retail sale. For the purposes of this exclusion, prepackaged for retail sale means that, at the time of importation, all components necessary to assemble the merchandise, including all steel components, all accessory parts (e.g., screws, bolts, washers, nails), and instructions providing guidance on the assembly of the finished merchandise or directions on where to find such instructions, are enclosed in retail packaging, such that an end-use, retail consumer could assemble the completed product with no additional components. The items may enter the United States in one or in multiple retail packages as long as all of the components are imported together.

Tariff treatment

Based upon the scope set forth by the Department of Commerce, information available to the Commission indicates that the merchandise subject to these investigations is imported under the following provisions of the Harmonized Tariff Schedule of the United States ("HTS"): 7308.90.3000, 7308.90.6000, and 7308.90.9590 ("primary HTS numbers"—see Part IV). The merchandise subject to these investigations may also be imported under the following HTS statistical reporting numbers: 7216.91.0010, 7216.91.0090, 7216.99.0010, 7216.99.0090, 7222.40.6000, 7228.70.6000, 7301.10.0000, 7301.20.1000, 7301.20.5000, 7308.40.0000,

7308.90.9530, and 9406.90.0030 ("non-primary HTS numbers"). The 2019 general rate of duty is "Free" for HTS subheadings 7216.91.00, 7216.99.00, 7222.40.6000, 7228.70.60, 7301.10.00, 7301.20.10, 7301.20.50, 7308.40.00, 7308.90.30, 7308.90.60, and 7308.90.95.[26] The 2019 general rate of duty is 2.9 percent ad valorem for HTS 9406.90.00.[27] Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

Sections 232 and 301 tariff treatment

HTS subheadings 7216.99.00, 7222.40.60, 7228.70.60, and 7301.10.00 (but not HTS subheading 7216.91.00) were included in the enumeration of iron and steel articles subject to the additional 25-percent *ad valorem* national-security duties under Section 232 of the *Trade Expansion Act of 1962*, as amended.[28] The primary HTS subheading for fabricated structural steel, 7308.90, was not included in the enumeration of iron and steel articles subject to the additional 25-percent *ad valorem* national-security duties under Section 232 of the *Trade Expansion Act of 1962*, as amended.[29] See U.S. notes 16(a) and 16(b), subchapter III of chapter 99.[30] The initial exemptions from these additional 25-percent duties were not continued after May 31, 2018 for the enumerated iron and steel articles originating from Canada, Mexico, or the European Union member states.[31] However, exemptions were reinstated for articles from Mexico and Canada on May 20, 2019.[32]

Products of China imported under HTS subheadings 7308.90.30, 7308.90.60, and 7308.90.95 became subject to an additional initial 25-percent *ad valorem* duty (annexes A and

[26] *HTSUS (2019) Revision 19*, USITC Publication No. 5005, December 2019, pp. 72-21, 72-36, 72-43, 73-2, 73-24.

[27] *HTSUS (2019) Revision 19,* USITC Publication No. 5005, December 2019, p. 94-19.

[28] *Adjusting Imports of Steel Into the United States*, Presidential Proclamation 9705, March 8, 2018, 83 FR 11625, March 15, 2018.

[29] *Adjusting Imports of Steel Into the United States*, Presidential Proclamation 9705, March 8, 2018, 83 FR 11625, March 15, 2018.

[30] *HTSUS (2019) Revision 19*, USITC Publication No. 5005, December 2019, pp. 99-III-5 - 99-III-6.

[31] *Adjusting Imports of Steel Into the United States*, Presidential Proclamation 9740, April 30, 2018, 83 FR 20683, May 7, 2018; *Adjusting Imports of Steel Into the United States*, Presidential Proclamation 9759, May 31, 2018, 83 FR 25857, June 5, 2018.

[32] *Adjusting Import of Steel Into the United States,* Presidential Proclamation 9894, May 19, 2019, 84 FR 23421, May 23, 2019.

B of 83 FR 40823) on August 23, 2018, under Section 301 of the *Trade Act of 1974*.[33] See U.S. notes 20(c) and 20(d) to subchapter III of chapter 99.[34]

Products of China imported under HTS subheadings 7216.91.00, 7301.20.10, 7301.20.50, 7308.40.00, and 9406.90.00 became subject to an additional initial 10-percent *ad valorem* duty (annexes A and C of 83 FR 47974) on September 24, 2018, under Section 301 of the *Trade Act of 1974*.[35] See U.S. notes 20(e) and 20(f), subchapter III of chapter 99.[36] [37]

The product

Description and applications

Fabricated structural steel is a fabricated product erected or assembled into a wide variety of commercial and industrial facilities. Commercial facilities include commercial, office, institutional, and multi-family residential buildings. Industrial facilities include refineries, petrochemical plants, drill-rig platforms, and utility plants. Other facilities include parking decks; sporting arenas, entertainment centers, and convention centers; medical facilities; and ports, transportation, and other infrastructure facilities. Because it is typically custom-manufactured for a specific construction project, fabricated structural steel for one project will differ from that designed for another due to differing engineering and design requirements.[38]

Regardless of a structure's commercial or industrial end use, fabricated structural steel is designed to meet AISC's *Steel Construction Manual* specifications. Generally, no additional codes or standards exist for fabricated structural steel in industrial applications. There is no requirement that all fabricated structural steel used in the U.S. market be produced by AISC-certified firms, although many U.S. producers have such certification. The AISC Quality Certification verifies that the fabricator has the processes, equipment, manpower, commitment, and experience to perform the necessary work and meet a minimum level of

[33] *Notice of Action Pursuant to Section 301: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 83 FR 40823, August 16, 2018.

[34] *HTSUS (2019) Revision 19*, USITC Publication No. 5005, December 2019, pp. 99-III-18–99-III-21.

[35] *Notice of Modification of Section 301 Action: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 83 FR 47974, September 21, 2018.

[36] *HTSUS (2019) Revision 19*, USITC Publication No. 5005, December 2019, pp. 99-III-21–9-III-44.

[37] Summaries of trade actions under these statutes are available in appendix D.

[38] Petition, p. 7; petitioner's postconference brief, Exhibit 1: Answers to Commission questions, p. 14.

industry accepted quality standards. However, AISC no longer provides certification for the quality of pre-engineered metal buildings.[39]

Fabricated structural steel is assembled predominantly from heavy steel sections, especially heavy parallel flange beams, but also from angles, channels, and hollow structural shapes ("HSS"), as well as steel plates. Heavy parallel flange beams used in fabrication typically have holes drilled into them as well as other fabricated components welded or fastened on to them (see figure I-1). Some of the equipment used in the fabrication process includes handling equipment such as cranes, bridge cranes, and gantries, and some of the equipment used in the production process includes plate drills, plasma punch plate machines, anglemasters, structural saws, beam splitters, shot blast machines, and welding equipment.[40]

Figure I-1
Fabricated structural steel: Flange beam welded with other fabricated products

Source: Structural Steel Services, Inc. https://www.structuralsteelservice.com/services/steel-fabrication/ retrieved December 12, 2019.

As discussed in greater detail below, fabricated structural steel may also be used as a component part in pre-engineered metal building systems ("PEMBs") and process plant modules ("PPMs").

[39] Rigidbuilding.com, https://www.rigidbuilding.com/about-rigid-building/rigid-certifications/ (accessed February 4, 2020).

[40] ***.

PEMBs are typically one or two-story buildings, (see figure I-2). Each system has benefits such as durability, speed of construction, design flexibility, attractive appearance, energy efficiency, and a cost benefit associated with its construction and maintenance. PEMBs range in type and size, however, a majority utilize a custom engineered structural steel frame and a high-performance metal roof.[41] Common parts in PEMBs include primary rigid frames, secondary members including wall girts and roof purlins, cladding and bracing, all of which are engineered and designed to act as an integrated building system.[42]

Figure I-2
Fabricated structural steel: Pre-engineered building system

Source: K-Con.com, https://kconinc.com/what-is-pre-engineered-metal-building/ (January 31, 2020).

PEMBs are used in industrial applications such as production facilities, warehouses and distribution centers, retail stores, shopping centers, motels, automobile dealerships, office complexes, airplane hangars and arenas.

The Metal Building Manufacturers Association ("MBMA") publishes the standards used to manufacture PEMBs. MBMA standards govern PEMB construction as opposed to AISC standards, which govern conventional steel construction.[43] The 2012 Metal Building Systems Manual includes specific standards such as:

[41] Metal Building Manufacturers Association, https://www.mbma.com/Introduction.html (accessed January 31, 2020).

[42] Buildusingsteel.org, https://www.buildusingsteel.org/build-using-steel/metal-building-systems (accessed January 31, 2020).

[43] Hearing transcript, p. 199 (Detwiler).

- A Design Practice and Load Application chapter with guidance on the applications of loads to metal buildings from the 2012 International Building Code (IBC) and ASCE 7-10 standard.

- A Climatological Data by County chapter with guidance on tabulated wind, seismic, snow and rain load data provided by the 2012 IBC, ASCE 7-10 standard. In addition, rainfall intensity loads provided by the National Oceanic and Atmospheric Administration.

- The Fire Protection chapter includes additional fire rated wall assemblies that will provide 1- and 2-hour fire resistance rating of metal building exterior walls.

- All major metal building system manufacturers utilize CADD tools to custom design each building system and all building components depending on the customer's needs and specifications and on the local and national building codes.

- The Common Industry Practices section of the manual describes the typical terminology and transactions in the industry.

Fabricated structural steel may also be used as a component part in process plant modules ("PPMs"). In a modular plant, the process equipment, which includes instrumentation, valves, wiring and other components are mounted within a structural steel frame known as a module, (see figure I-3). Each module is often constructed offsite. Some modular plants can contain many unit operations on a single module or multiple modules can be connected to form a system. Once the modules are completed, they are shipped to the site to be erected and integrated. Modules typically require more steel than traditional construction because they are designed and built to withstand the stresses of transportation, lifting and erection. Thus, offsite modules are often structurally stronger than those units constructed onsite.[44]

[44] Aiche.org, https://www.aiche.org/resources/publications/cep/2017/may/consider-modular-plant-design (accessed January 31, 2020).

Figure I-3
Fabricated structural steel: Process plant module

Source: Epic Pilot Plants https://pilotplantdesign.com/sizes/pilot-plants/cost (January 31, 2020).

Commerce's scope specifically excludes certain steel products. The following excluded products differ from fabricated structural steel in terms of the steel mill-product input types; being available in standard sizes that are sold as stock items from inventory or through distributors;[45] conforming to non-AISC technical standards;[46] and not generally being produced by steel fabricators,[47] but in such exceptions, rather in separate facilities, by different production processes, and dedicated employees.[48] These excluded products are as follows:

1. Fabricated steel concrete reinforcing bar ("rebar")— consists of rebar strands that are cut to length, bent to shape, and assembled together either with wire ties or by welding.

2. Fabricated structural steel for bridges and bridge sections— steel plate, more so than steel sections, is the predominant input in bridges and bridge sections, and the plate for bridge sections is generally longer, larger, and stronger than that for fabricated structural steel. Steel for bridges is produced to meet AASHTO bridge construction requirements rather than the

[45] Petitioner's postconference brief, Exhibit 1: Answers to Commission questions, pp. 25-26; Exhibit 41: ARCO Building Systems website excerpts; Exhibit 42: Corrugated metal website excerpts; Exhibit 43: O'Donnell Metal Deck website excerpts.

[46] Petitioner's postconference brief, Exhibit 1: Answers to Commission questions, p. 26; Exhibit 45: Metal Building Manufacturers Association website excerpts; Exhibit 46: Steel Deck Institute website excerpts; Exhibit 47: Steel Joist Institute website excerpts.

[47] Petitioner's postconference brief, Exhibit 1: Answers to Commission questions, p. 28; Exhibit 45: Metal Building Manufacturers Association website excerpts; Exhibit 46: Steel Deck Institute website excerpts; Exhibit 47: Steel Joist Institute website excerpts.

[48] Petitioner's postconference brief, Exhibit 1: Answers to Commission questions, p. 28; Exhibit 48: Canam website excerpts.

AISC's *Steel Construction Manual* specifications for fabricated structural steel. Given the size and weight differences, fabricating steel for bridge components generally requires heavier lifting cranes and larger production facilities; but fewer man-hours of labor and a lesser mix of work tasks compared to producing fabricated structural steel. There are 1,114 facilities certified to fabricate steel into buildings but only 370 facilities certified to fabricate steel into bridge sections.[49] For producers of fabricated steel for both bridges and fabricated structural steel, the fabrication is performed in either dedicated facilities or separate production lines, and with dedicated workers.

3. Pre-engineered metal building systems— coiled steel sheet is the predominant input material; such systems must conform to the Metal Building Manufacturers Association guide specifications.

4. Steel roof and floor decking systems— coiled steel sheet is the predominant input material for both roof and floor decking systems; such systems must conform to the Steel Deck Institute standards.

5. Open web steel bar joists and joist girders— in addition to heavy structural sections, plate, hot-rolled coiled sheet, and wire are the predominant input materials; such systems must conform to the Steel Joist Institute specifications.

6. Scaffolding—the basic components of scaffolding are tubes, couplers and boards. The tubes are usually made either of steel or aluminum. Boards provide a working surface for scaffold users. They are seasoned wood and come in different sizes. Couplers are the fittings which hold the tubes together. The most common are called scaffold couplers, and there are three basic types: right-angle couplers, putlog couplers and swivel couplers.

7. Flooring panel systems—a common type of flooring panel system is the raised floor system. In raised floor systems, the structural floor is composed of panels on a grid supported by adjustable vertical pedestals. The pedestals are affixed to the subfloor through either mechanical fixings or adhesives. Panels are typically 2 feet by 2 feet and are normally composed of a cement or wood core clad in steel or aluminum.

8. Poles—coiled steel sheet is the predominant input material of welded poles while molten steel is the predominant input material of seamless poles. Depending on the application, poles must conform to certain technical standards.

9. Shuttering, Formworks, Propping and Shoring and parts and accessories thereof—shuttering and formworks are types of temporary or permanent molds into which concrete or

[49] CISC's postconference brief, Exhibit 2: AISC, Structural Steel: An Industry Overview, August 2018, p. 4.

other materials are poured. Propping and shoring is the process of temporarily supporting a building, structure, or trench in danger of collapse, during construction, repairs, or alterations.

10. Consumer items for do-it-yourself assembly—prepackaged items for retail sale which includes all the components necessary to assemble the merchandise including all accessory parts and instructions, or directions on where to find the instructions, providing guidance on the assembly of the finished merchandise enclosed in retail packaging.

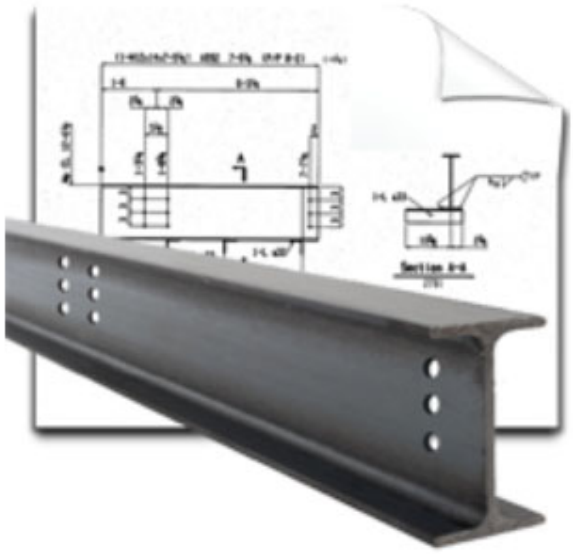
Manufacturing processes

Fabricated structural steel is typically produced on a project-by-project basis, after a contract is awarded to the bid-winning fabricated structural steel producer(s). After the design and architectural plans are finalized, the fabricated structural steel fabrication work begins with procurement of the steel mill products, support materials (e.g., fasteners, steel strand and rope), welding materials (e.g., cutting and welding gasses, welding wire, and fluxes), and other input (e.g., galvanizing, painting, insulating, and lubricating) materials. Although some fabricators do maintain some materials in inventory, others do not.[50]

The manufacturing process follows a general set of steps. First, the main component of the fabricated structural steel piece, typically a beam or a plate, is cut to the desired length. Once it is cut, it is moved to a precision drilling machine where holes are perforated based on the specific design of the piece (figure I-4). For beams and other thick pieces of steel, drilling machines can perforate multiple holes, in one motion, on top as well as on the side of the steel.

[50] ***.

Figure I-4
Fabricated structural steel: Flange beam with drilled holes according to design



Source: Macon Metal Fabricators, http://macoincorporated.com/structural-steel/ (retrieved December 12, 2019).

Smaller components of the fabricated structural steel piece are then bent, cut, or drilled to the designed size. Once all the individual parts are produced to the desired dimensions, the welding, joining, and or bolting process begins. The components are fitted and welded according to customer specifications. Throughout the fabrication process, each piece is inspected to specifications to ensure that it meets the design requirements of the customer. When the welding step is complete, the fabricated structural steel then moves to the finishing stage where the piece is grinded and/or smoothed out. Some fabricators use sandblasting while others use angle grinders during the finishing stage to smooth out and remove excess material. Additionally, at the request of a customer, fabricators can coat the fabricated structural steel piece with paint, galvanize or fireproof it.[51] Once a batch of fabricated structural steel is ready, according to a production schedule, it is transported for erection and installation at the work site.

Domestic and subject producers generally utilize the same manufacturing processes and equipment to fabricate structural steel. Canadian steel fabricating capabilities vary by size, with smaller facilities being limited by production capacity and product range. By contrast, larger,

[51] ***.

more vertically integrated Canadian fabricators are capable of handling the larger, more complex jobs requiring more extensive work and heavier pieces of steel. Only the three AISC-certified Mexican steel fabricators produce the full range of fabricated structural steel, compared to the less certain capabilities of most Mexican steel fabricators, being small-to-medium sized firms that produce for the domestic market.[52] Moreover, in general, the specific manufacturing equipment utilized and floor layout of the production facility may be tailored to the types of fabricated structural steel being produced.[53]

Based upon the design and architectural plans, highly skilled welders, crane operators, and machine operators fabricate the steel mill products into fabricated structural steel components by various cutting, drilling, punching, bending, welding, joining, bolting, pressure fitting, molding, and adhesion steps, as well as various finishing and coating procedures along with partial assembly operations to the extent possible at the fabricator's production facility.

Most fabrication steps are generally performed with the assistance of mechanized and automated equipment but some must be partially or wholly performed manually. Fabricating structural steel components is a highly labor-intensive process, requiring 15 to 30 man-hours per ton with more complex projects requiring additional man-hours per ton.[54] Finally, if the completed fabricated structural steel component is not prepared for shipment to either a marshalling yard or to the actual job site, it is stored until shipment.

The follow section describes manufacturing processes for PEMBs, PMM, and solar steel beams.

Pre-engineered metal building systems ("PEMBs")[55] [56] [57]

PEMB components include primary rigid frames, secondary members including wall girts and roof purlins, cladding and bracing, all of which are engineered and designed to act as an integrated building system. PEMB components are often fabricated with an automated one-

[52] Corey's postconference transcript, Exhibit 1: Responses to the Commission staff's questions, pp. 4-5.

[53] Conference transcript, p. 225 (Whalen).

[54] Petitioner's postconference brief, p. 22; Exhibit 1: Answers to Commission questions, p. 64; conference transcript, p. 28 (Zalesne).

[55] Metal Building Manufacturers Association, https://www.mbma.com/Introduction.html (accessed January 31, 2020).

[56] Buildusingsteel.org, https://www.buildusingsteel.org/build-using-steel/metal-building-systems (accessed January 31, 2020).

[57] Rhinobldg.com, https://www.rhinobldg.com/what-is-a-metal-building-system/ (accessed January 31, 2020).

sided weld.[58] The primary rigid frames are designed and constructed in accordance with standards developed by the American Institute of Steel Construction and the Sheet Steel Building Institute. Secondary framing is designed and constructed in accordance with standards developed by the American Iron and Steel Institute. Steel "red-iron" wall columns and ceiling pieces attach to form a single frame in the primary system. The secondary framing of the system connects across the bays with self-drilling screws for lateral support. The third part of the building is the end-wall framing. Steel wall and roof panels complete the PEMB. Commercial steel buildings constructed with a metal building system may be finished sometimes substituted or combined with masonry, stone, pre-cast or tilt-up concrete, wood, or glass. The flexibility of PEMBs allows for numerous colors, shapes, textures and designs to be used.

Process plant modules ("PPM")[59]

In a modular plant, the process equipment, instrumentation, valves, piping components, and electrical wiring are mounted within a structural steel framework also known as a module. Each module is typically constructed offsite. A modular plant can contain many unit operations on a single module or on multiple modules can be connected at the site to form a process system. Each module is designed to perform specific functions to the plant operations.[60] In contrast to FSS, some PPMs can take years to design, engineer and construct requiring extensive specialized labor to produce.[61] The modules are shipped to the site, where they are erected and integrated. Modules typically require more steel than traditional construction, because each module is designed and built to withstand the stresses of being transported, lifted, and erected. Modules are therefore structurally strong. Some modules can weigh more than 10,000 tons and be as tall as 300 feet.[62]

[58] Hearing transcript, p. 200 (Detwiler).

[59] Aiche.org, https://www.aiche.org/resources/publications/cep/2017/may/consider-modular-plant-design (accessed January 31, 2020).

[60] Hearing transcript, p. 226 (Guilfoyle).

[61] Hearing transcript, p. 226 (Guilfoyle).

[62] Hearing transcript, p. 226 (Guilfoyle).

Solar steel beams[63] [64]

Ground-mount foundations are dependent on soil composition, climate conditions, module size, among other factors. The driven-beams foundation is composed of support beams (I-beams), typically made of steel. These beams are typically pre-drilled and/or galvanized depending on project specifications. The beams are driven into the ground at a pre-determined depth (see figure I-5). The equipment used, sometimes, is a tracked excavator transformed to a small pile driver with a hydraulic hammer mounted on a fixed set of leads, which allows for control of the direction of the piling. Once a fixed number of beams are in the ground, the support and module assemble are attached to those beams.

Figure I-5
Fabricated structural steel: Solar steel beams

Source: Quora.com, https://www.quora.com/What-kind-of-structures-are-used-for-megawatt-solar-projects February 3, 2020.

Domestic like product issues

In the preliminary phase of these investigations, the petitioner argued that there is a single domestic like product that is co-extensive with the scope of the investigations. Respondent party Wind Turbine & Energy Cables Corp. ("WTEC"), an engineering, manufacturing, procurement, and field installation company for the energy market, requested that the Commission find that steel beams used to support solar panels ("solar steel beams"), such as those purchased and used by WTEC, be considered a separate domestic like product.[65]

[63] Solarpoweronline.com, https://www.solarpowerworldonline.com/2015/08/what-is-the-best-foundation-for-a-ground-mount-solar-array/ (accessed February 3, 2020).

[64] Pileking.com, http://pileking.com/services/solar-panel-pile-support/ (accessed February 3, 2020).

[65] Additionally, respondent parties Exportadora de Postes de Monclova, S.A. de C.V. and Exportadora de Postes GDL, S.A. de C.V., and Valmont Industries, Inc. and its related firms, argued that electrical (continued...)

In its preliminary phase determinations, the Commission found a single domestic like product, coextensive with the scope consisting of all in-scope fabricated structural steel.

The Commission invited parties to identify any potential separate like products in their comments on the draft final phase questionnaires. WTEC reiterated its argument in its comments that solar steel beams should be found as a separate like product. In addition, respondent party Wison (Nantong) Heavy Industry Co., Ltd. asked that separate product data be collected for certain process plant modules and certain steel pipes used for transmitting or processing of gas and petrochemicals (collectively, "process plant modules"). Lastly, respondent parties Cornerstone Building Brands (the parent company of NCI) and Corey made extensive comments concerning issues specific to parts of PEMBs (whole units of which are excluded from the scope).

In final phase of these investigations, several parties raised domestic like product issues in their briefs. The petitioner argues that the Commission should find one domestic like product, coextensive with the scope, and argues that the Commission should find that structural components of PEMBs, process plant modules, and solar steel beams are included in the single domestic like product.[66] Respondent party ExxonMobil Chemical Company ("ExxonMobil") and respondent parties Jinhuan Construction Group Co., Ltd., Wison (Nantong) Heavy Industry Co., Ltd., Shanghai Matsuo Steel Structure Co., Ltd., Yanda (Haimen) Heavy Equipment Manufacturing Co., Ltd., Shanghai Cosco Kawasaki Heavy Industries Steel Structure Co., Ltd., (collectively "Chinese respondents"), which filed a brief jointly with Dickerson Enterprises, Inc. and Steel Construction Group, LLC (collectively, "DEI"), argue that the Commission should find process plant modules to be a separate like product, either using a traditional like product analysis or a semi-finished product analysis.[67] Respondent parties Cornerstone Building Brands, Inc., Building Systems de Mexico, S.A. de C.V., BlueScope Buildings

(…continued)

transmission, distribution, and substation steel poles and lattice tower structures are not part of the scope of the investigations and are a separate domestic like product from in-scope fabricated structural steel. Respondent Direct Scaffold Supply, a U.S. importer of scaffolding, argued that scaffolding is not included in the definition of the scope in these investigations and should be a separate domestic like product from in-scope fabricated structural steel. These products were included in the list of excluded products in Commerce's final scope determination. (See the section entitled "Commerce's Scope" above.)

[66] Petitioner's prehearing brief, pp. 10-31.

[67] See ExxonMobil's posthearing brief, and Chinese respondents' and DEI's posthearing brief. Both parties clarified that their argument refers to complete process plant modules, not just fabricated structural steel components of process plant modules.

North America Inc., and Butler de Mexico, S. de R.L. de C.V. and Corey ("joint Mexican respondents") argue that components of pre-engineered building systems constitute a separate domestic like product from other in-scope fabricated structural steel.[68] Lastly, respondent party WTEC argued in its prehearing brief that solar steel beams should be found as a separate like product.[69]

The Commission's questionnaires in these final phase investigations asked for producers and importers to provide U.S. shipment data for solar steel beams, process plant modules, and parts used in pre-engineered metal building systems. In addition, questionnaire recipients that reported such shipments were asked to compare these products with other fabricated structural steel using the factors which the Commission typically considers in regarding the appropriate domestic product(s) that are "like" the subject imported product: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) common manufacturing facilities, production processes, and production employees; (5) customer and producer perceptions; and (6) price. Factor comparison responses and data comparing U.S. producers based on their sales volumes of these products are presented in appendix E, while detailed shipment data for these products reported by producers and importers are included in appendix F.

[68] Joint Mexican respondents' brief, pp. 3-19.
[69] WTEC's prehearing brief, pp. 1-11.

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

U.S. market characteristics

Fabricated structural steel is used in construction, and is typically custom made for each project.[1] Fabricated structural steel is used in a variety of structures including: commercial, office, institutional, and multifamily residential buildings; industrial and utility projects; parking decks; arenas; convention centers; medical facilities; ports; and transportation and infrastructure facilities.[2]

Apparent U.S. consumption of fabricated structural steel remained constant from 2016 to 2017, and increased by 5.9 percent from 2017 to 2018. Apparent consumption during January-September 2019 was 0.9 percent lower than in January-September 2018.

U.S. purchasers

The Commission issued questionnaires to 138 purchasers and received responses from 33 firms that had purchased fabricated structural steel since January 2016.[3] Nineteen responding purchasers are general contractors, 19 are construction managers, 3 are developers or owners, 1 is a subcontractor, and 5 reported being other types of purchasers, including a ***, a ***, an equipment supplier for the ***, and two identified as an Engineering, Procuring, and Constructing company (EPC).

Seven purchasers reported purchasing fabricated structural steel for process plant modules, six purchasers reported purchasing fabricated structural steel as parts of pre-engineered buildings, and three reported purchasing solar steel beams.

U.S. purchasers were located all over the contiguous United States, although responding purchasers are most heavily concentrated in the Northeast and West Coast. The responding purchasers primarily represented firms in the construction industry.[4]

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[1] Conference transcript, p. 157 (Posteraro).

[2] Petition, p. 7.

[3] Of the 33 responding purchasers, 24 purchased the domestic fabricated structural steel, 16 purchased imports of the subject merchandise from Canada, 6 purchased from China, and 3 purchased from Mexico. Six purchasers reported purchasing fabricated structural steel from nonsubject sources.

[4] Seventeen purchasers reported purchasing fabricated structural steel for commercial construction, 12 purchasers reported residential construction, 13 purchasers reported industrial construction, 10 reported high-rise construction of commercial or residential buildings greater than 20 stories, and 7 reported sports and/or entertainment construction projects. Ten purchasers reported other types of

(continued…)

Purchasers were asked to estimate their purchases of fabricated structural steel, by year and by source. Purchasers' ability to respond to this question varied. Five purchasers (***) were unable to provide their purchases on the basis of weight, or did not track country source of their purchases. The largest purchasers that were able to report their purchases of fabricated structural steel include ***.[5] The 28 responding purchasers that were able to provide purchase data reported purchasing and/or importing 1.54 million short tons of fabricated structural steel during January 2016-September 2019.

Channels of distribution

U.S. producers and importers sold mainly to end users at the specific job site, as shown in table II-1.[6]

projects in healthcare and pharmaceuticals industry, airport infrastructure, education industry, rooftop systems, and general infrastructure.

[5] ***.

[6] Note that shipments of fabricated structural steel from China shipped to ***.

Table II-1
Fabricated structural steel: U.S. producers' and importers' U.S. commercial shipments, by sources and channels of distribution, 2016-18, January-September 2018, and January-September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Share of U.S. shipments (percent)				
U.S. producers:					
to Distributors	***	***	***	***	***
to FSS manufacturer	***	***	***	***	***
to End user/ job site	99.9	99.8	99.6	99.6	99.5
U.S. importers: Canada subject					
to Distributors	***	***	***	***	***
to FSS manufacturer	***	***	***	***	***
to End user/ job site	100.0	100.0	99.3	99.2	100.0
U.S. importers: China					
to Distributors	***	***	***	***	***
to FSS manufacturer	***	***	***	***	***
to End user/ job site	95.9	98.7	82.1	81.3	98.4
U.S. importers: Mexico					
to Distributors	***	***	***	***	***
to FSS manufacturer	***	***	***	***	***
to End user/ job site	100.0	100.0	96.6	95.9	91.7
U.S. importers: Subject sources					
to Distributors	***	***	***	***	***
to FSS manufacturer	***	***	***	***	***
to End user/ job site	99.6	99.8	92.9	92.1	97.1
U.S. importers: Canada nonsubject					
to Distributors	***	***	***	***	***
to FSS manufacturer	***	***	***	***	***
to End user/ job site	***	***	***	***	***
U.S. importers: all other sources					
to Distributors	***	***	***	***	***
to FSS manufacturer	***	***	***	***	***
to End user/ job site	***	***	***	***	***
U.S. importers: Nonsubject sources					
to Distributors	***	***	***	***	***
to FSS manufacturer	***	***	***	***	***
to End user/ job site	98.6	96.9	96.2	96.8	98.7
U.S. importers: All sources					
to Distributors	0.6	0.9	0.8	0.7	0.4
to FSS manufacturer	0.1	0.1	5.6	6.2	2.0
to End user/ job site	99.3	99.0	93.6	93.1	97.5

Note: Fabricated structural steel is abbreviated as "FSS".
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.

Geographic distribution

U.S. producers and importers reported selling fabricated structural steel to all regions in the contiguous United States (table II-2). For U.S. producers, 24.3 percent of sales were within 100 miles of their production facility, 66.3 percent were between 101 and 1,000 miles, and 9.5 percent were over 1,000 miles. Importers sold 9.5 percent within 100 miles of their U.S. point of shipment, 77.2 percent between 101 and 1,000 miles, and 13.2 percent over 1,000 miles.

Table II-2
Fabricated structural steel: Geographic market areas in the United States served by U.S. producers and importers

Region	U.S. producers	Canada	China	Mexico	Subject U.S. importers
Northeast	65	20	7	5	28
Midwest	57	5	7	4	12
Southeast	63	9	7	3	15
Central Southwest	44	3	11	3	14
Mountains	44	4	4	5	10
Pacific Coast	36	4	13	6	19
Other	11	3	5	2	8
All regions (except Other)	15	3	3	3	6
Reporting firms	***	23	19	9	45

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-3 provides a summary of the supply factors regarding fabricated structural steel from U.S. producers and from subject countries. Since almost all product is produced to order, inventories are not likely to represent capacity to respond to changes in demand.

Table II-3
Fabricated structural steel: Supply factors that affect the ability to increase shipments to the U.S. market

Item	Capacity (short tons)		Capacity utilization (percent)		Inventories as a ratio to total shipments (percent)		Shipments, 2018 (percent)		Able to shift to alternate products
	2016	2018	2016	2018	2016	2018	Home market	Exports to non-U.S. markets	No. of firms reporting "yes"
United States	3,006,986	3,150,839	65.6	68.2	***	***	***	***	8 of ***
Canada (subject)	***	***	***	***	***	***	***	***	7 of 23
China	331,234	342,843	51.0	41.0	***	***	24.1	35.4	5 of 10
Mexico	286,296	280,886	74.2	75.3	***	***	59.3	***	3 of 8

Note: Capacity and capacity utilization incorporate small and large U.S. producers, while inventories, shipments, and ability to shift to alternate products incorporate only large U.S. producers.
Note: Responding U.S. producers accounted for more than half of U.S. production of fabricated structural steel in 2018. Responding foreign producer/exporter firms accounted for more than half of U.S. imports of fabricated structural steel from Canada, less than 25 percent of U.S. imports of fabricated structural steel from China, and less than half of U.S. imports of fabricated structural steel from Mexico during 2018. 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 fabricated structural steel have the ability to respond to changes in demand with moderate changes in the quantity of shipments of U.S.-produced fabricated structural steel to the U.S. market.[7] The main contributing factors to this degree of responsiveness of supply are the availability of some unused capacity. and some ability to shift production to or from alternate products. Factors mitigating responsiveness of supply are the limited ability to shift shipments from alternate markets, and the relatively limited ability to shift production from fabricated structural steel to other products. Additionally, U.S. producers' ability to respond to changes in demand may be limited by the capacity requirements of projects in various stages, and labor supply constraints.

Capacity utilization increased between 2016 and 2018, due to production outpacing capacity increases. Only 9 of the *** firms reporting capacity reported exports. These firms reported exporting to Canada, Mexico, the Caribbean, and Central America. Other products

[7] Respondent CISC argues that U.S. producers have overstated their capacity, that the actual availability of unused capacity is smaller, and that U.S. producers' ability to respond to demand is limited. Respondent CISC posthearing brief, Appendix A, p. 65.

that producers reportedly can produce on the same equipment as fabricated structural steel are stairs and rails, bridges, miscellaneous steel, and additional computer numerically controlled work, such as punching and stamping. Factors affecting U.S. producers' ability to shift production include: plants and equipment designed specifically for producing fabricated structural steel; both managers and production workers specialize in fabricated structural steel and could not shift without significant retraining. U.S. producer *** reported that while it is able to shift to ***, this change would require fewer workers than structural steel and would lead to temporary layoffs.

Subject imports from Canada

Based on available information, producers of fabricated structural steel from Canada (excluding nonsubject producer Canatal) have the ability to respond to changes in demand with moderate-to-large changes in the quantity of shipments of fabricated structural steel to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity and the ability to shift production to or from alternate products. Factors mitigating responsiveness of supply include limited ability to shift shipments from alternate markets.

Canadian producers' capacity utilization increased from 2016 to 2018, due to production increasing more than capacity. Canadian firms tend to export little product (*** percent of shipments in 2018) to markets other than the United States. Other products that responding Canadian producers reportedly can produce on the same equipment as fabricated structural steel include bridges, overpasses and rail bridge repairs, high voltage towers, duct work, power turbines, and offshore oil and gas work. Factors affecting foreign producers' ability to shift production include the organization of the factory, lifting/crane capacity, skills/expertise, space required for production of bridge sections, certification, and no interest in shifting production to or from other products.

Subject imports from China

Based on available information, producers of fabricated structural steel from China have the ability to respond to changes in demand with large changes in the quantity of shipments of fabricated structural steel to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity, the ability to shift shipments from alternate markets, and the ability to shift production to or from alternate products.

Chinese producers' capacity increased by 3.5 percent and production decreased by 16.7 percent between 2016 and 2018, resulting in lower capacity utilization. Export markets other than the United States received over one third of Chinese shipments in 2018. Primary export

markets include parts of Africa (Algeria, Ethiopia), Asia (Japan, Philippines, Malaysia), Europe (Denmark), the Middle East, South America (Argentina, Brazil), Australia, Canada, the Maldives, and Russia. Chinese producers reportedly can produce bridges and bridge sections, LNG equipment, cranes, and other offshore supporting vessels, floating production storage and offloading modules, and piping spools. Factors affecting the foreign producers' ability to shift production include the time, cost, training, and equipment designs.

Subject imports from Mexico

Based on available information, producers of fabricated structural steel from Mexico have the ability to respond to changes in demand with small-to-moderate changes in the quantity of shipments of fabricated structural steel to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the high capacity utilization rate and the small share sold to markets outside Mexico and the United States. Mexican producers have some responsiveness of supply due to the ability of some firms to shift production to other products.

Mexican producers' capacity utilization fluctuated from 2016 to 2018 as both capacity and production declined (1.9 percent and 0.5 percent, respectively). Mexican producers export a minimal amount (less than approximately *** percent of shipments in any year) of fabricated structural steel to markets other than the United States. Other products that responding Mexican producers reportedly can produce on the same equipment as fabricated structural steel are bridges, joists, high voltage towers, airducts, and plasma cut steel pieces. Factors affecting foreign producers' ability to shift production include time, cost, required certifications, and specialized equipment and technology for fabricated structural steel.

Imports from nonsubject sources

Imports from nonsubject sources accounted for 22.5 percent of total U.S. imports in 2018.[8] The largest sources of such imports during January 2016-September 2019 were Germany, Italy, South Korea, Taiwan, and the UAE. Based on official import statistics, these countries accounted for nearly half of imports from nonsubject sources, by value, in 2018.

[8] Nonsubject sources include Canadian producer Canatal.

Supply constraints

Most responding U.S. producers (99 ***)[9] and importers (52 of 64)[10] reported that they had not refused, declined, or been unable to supply fabricated structural steel since January 2016. Twenty-four of 30 responding purchasers reported that they had not been refused or declined fabricated structural steel since 2016. The U.S. producers and importers that did report declining orders reported constraints such as restricted capacity of their production lines, engineering capacity, fixed schedules of existing orders, a lack of both skilled and unskilled labor, and the availability of raw materials due to the Section 232 tariffs on steel. The six purchasers that reported supply constraints cited scheduling constraints and a labor shortage of skilled workers.

Labor shortages

The national unemployment rate fell by nearly 1.5 percent during 2016-19 (figure II-1). Labor availability has been commonly cited a supply constraint by firms. Respondents stated that this labor shortage is not a regional issue, but one that is common throughout the U.S. industry, resulting from a low unemployment rate and a skills gap.[11] Respondent Dickerson stated it awarded the LA Rams stadium project (LASED) to Schuff-Herrick because it was concerned by a possible labor shortage for the erector used by a competing U.S. fabricator.[12]

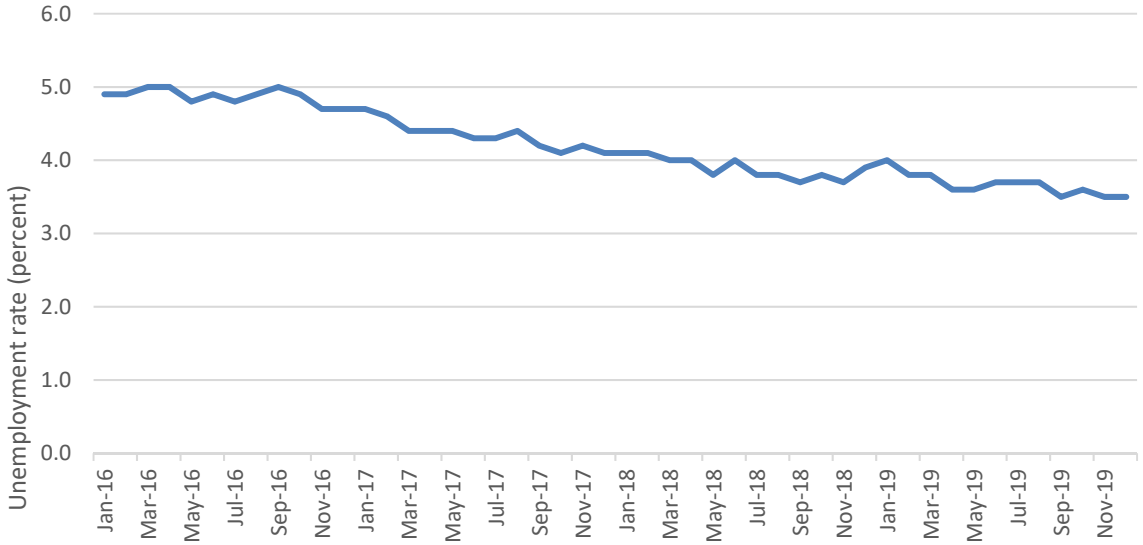
[9] The following analysis includes a total of *** U.S. producers. In cases where not all U.S. producers have responded to specific questions, only the number of U.S. producers that responded to a specific question is presented.

[10] The following analysis includes a total of 74 U.S. importers. In cases where not all U.S. importers have responded to specific questions, only the number of U.S. importers that responded to a specific question is presented.

[11] Hearing transcript, pp. 257-58 (Pasley, Nolan); Respondent CISC posthearing brief, Appendix B, p. 2.

[12] Hearing transcript, p. 281 (Dickerson).

Figure II-1
Unemployment rate: Seasonally adjusted, monthly, 2016-19



Source: Bureau of Labor Statistics, Seasonal Unemployment rate, https://data.bls.gov/timeseries/LNS14000000. Accessed February 4, 2020.

More specifically, respondents argue that there is a current and future shortage of welders that constrains U.S. producers' ability to supply fabricated structural steel.[13] Additionally, respondents argued that the "labor crunch" also extends to skilled engineers, detailers, and project managers, citing AISC publications.[14]

Subcontracting

To offset certain supply constraints due to capacity issues, tight schedules, or even "price issues," U.S. producers may subcontract to other fabricators in the United States or abroad.[15] U.S. producer *** stated that scheduling during projects is not linear and that in certain phases of a project, capacity requirements may be too large and must be subcontracted out. [16] U.S. producer *** reported that producers decline orders "all the time" because contracts have specified schedules so that at times they are at full capacity and cannot fulfill all of their orders. *** also reported that it typically

[13] Hearing transcript, p. 243 (Whalen); Respondent Corey posthearing brief, p. 1.
[14] Hearing transcript, p. 256 (Pasley); Respondent CISC posthearing brief, Appendix A, pp. 62-63, Respondents Joint Exhibit 2.
[15] Hearing transcript, pp. 134, 187 (Zalesne and Cooper).
[16] ***.

"books" 120 percent of its capacity in anticipation of schedule delays so that it can maintain 100 percent capacity utilization.

Chinese respondents and DEI stated that the need to rely on subcontractors, due to the inability of fabricators to meet their customers' production schedules in-house, in a costly condition of competition, and that reliance on subcontractors increases project costs and risks.[17]

New suppliers

Twenty-eight of 30 purchasers indicated that there were no new suppliers in the U.S. market since January 1, 2016. Two purchasers reported new suppliers: *** reported that Corey became a viable supplier and *** reported that the market is constantly changing and that it could not list all of the new entrants.

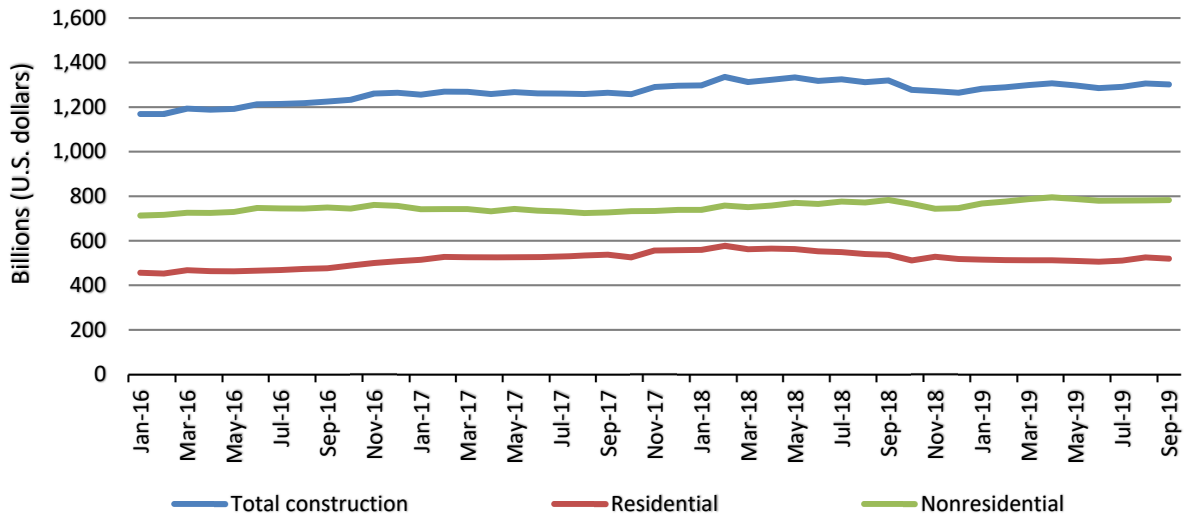
U.S. demand

Based on available information, the overall demand for fabricated structural steel is likely to experience small changes in response to changes in price. The main contributing factors are the relatively small cost share of fabricated structural steel in most of its end uses and a somewhat limited range of substitute products.

Demand for fabricated structural steel is driven by demand in the construction sector (particularly nonresidential construction).[18] The value of U.S. nonresidential construction increased by 10 percent and the value of U.S. residential construction increased by 14 percent between January 2016 and September 2019 (figure II-2).

[17] Chinese respondents and DEI posthearing brief, p. 11.
[18] Petitioner's postconference brief, p. 20.

Figure II-2
U.S. construction: Total, residential and nonresidential construction put in place, seasonally adjusted, monthly, January 2016-September 2019



Source: Construction put in place, U.S. Census, https://www.census.gov/construction/c30/historical_data.html, retrieved December 9, 2019.

End uses and cost share

U.S. demand for fabricated structural steel depends on the demand for U.S.-produced downstream structures in which it is used. Reported end uses include buildings (commercial, office, institutional, and multi-family residential), industrial and utility projects, parking decks, arenas, convention centers, medical facilities, ports, and transportation and infrastructure facilities.

Fabricated structural steel accounts for a varying share of the cost of the projects in which it is used. The petitioner stated that fabricated structural steel represents a small percentage of the overall cost of a project, with U.S. producer Novel estimating a cost share of 10 percent.[19] Canadian respondents stated that engineering and design costs drive the cost of the project, with the steel itself accounting for approximately 30 percent of the installed price.[20] AISC publications also cite a variation in the estimated cost share of fabricated

[19] Petitioner's postconference brief, Answers to Questions (Exhibit 1), p. 42; conference transcript, p. 103 (Noveletsky).

[20] CISC's postconference brief, pp. 12-14; conference transcript, p. 262 266 (Dougan, Posteraro).

structural steel, ranging from 25 percent[21] to 75 percent[22], depending on the scope of the project.

Average reported cost shares for some end uses were as follows:[23]

- Solar support structures (48.5 percent)
- Process plants (36.0 percent)
- Rack and racking systems (28.3 percent)
- Commercial buildings (27.6 percent; ranging from 2 percent to 85 percent)
- Warehouses (25.8 percent; ranging from 15 percent to 45 percent)
- Air cooled condensers (23 percent)
- Industrial buildings (21.8 percent; ranging from less than 1 percent to 90 percent)
- High rise buildings (21.0 percent; ranging from 3 percent to 60 percent)
- Pre-engineered metal building systems (PEMBs) (20 percent; ranging from 15 to 30 percent)[24]
- Sports and entertainment arenas (15.2 percent; ranging from 6 percent to 55 percent)
- Residential buildings (15.0 percent; ranging from less than 1 percent to 60 percent)
- Road cab assemblies (14.3 percent)
- Airports (10.0 percent)

[21] CISC's postconference brief, Answers to Questions (Exhibit 1), p. 9, and Exhibit 2.

[22] Petitioner posthearing brief, p. 2, and Exhibit 2.

[23] The average cost shares presented may include multiple responses from a single firm that submitted different types of questionnaires. Ranges are presented for end uses that were reported by more than five firms.

[24] The average cost share reported for PEMBs is based on responses from *** firms (***). ***, which sells PEMBs, reported cost share for commercial, industrial, and other applications reported costs shares of *** percent, and this cost share is included in the average. ***. If this response is excluded, the average cost share of fabricated structural steel in pre-engineered buildings is *** percent. *** reported costs shares of ***, ***, and *** percent for commercial, industrial, and institutional end uses, respectively.

- Industrial manufacturing facilities (9.1 percent; ranging from 5 percent to 20 percent)
- Hotels (8.5 percent; ranging from 2 percent to 15 percent)
- Hog barns (6.0 percent)
- Power plants (5.2 percent)
- Petroleum facilities (5.0 percent)
- LNG plants (1.5 percent)
- Wind turbines (1 percent)

The extent to which a, entire project is incorporated in a single bid varies, as does the cost share of fabricated structural steel in submitted bids.[25] As shown in the appendix I, some bids may be made for an entire project, such as a high-rise building, while other bids may be for subcomponents of a project.

Pre-engineered metal buildings (PEMBs)

According to respondents, PEMBs are ideal for low-rise, less complex structures, and the fabricated structural steel components are designed and fabricated to minimize the amount of steel in the structure, and allow for ready assembly at the job site.[26] There may be cases where fabricated structural steel components of PEMBs can be used for other applications, such as a small project,[27] although respondent BlueScope stated that if it imported a specific beam for PEMBs, it could not redirect it to the merchant market.[28] Like conventional fabricated structural steel, components for PEMBs are also designed specifically for unique projects, but respondents argue that producers of fabricated structural steel components for PEMBs "optimize the interplay between design and fabrication capabilities" and have different in-house design and engineering capabilities.[29] BlueScope Buildings, NCI, and Nucor Building Systems are the largest companies that produce PEMBs in the United States.[30]

Erection and installation services

The cost share of erection and installation services varies widely by project and application. U.S. producers reported that erection and installation services ranged from 1

[25] Petitioner posthearing brief, p. 2, Exhibit 1, pp. 10, 16, Exhibit 2; Respondent CISC posthearing brief, Appendix B, pp. 10-13.

[26] Hearing transcript, pp. 200, 201 (Detwiler, Palsey); BlueScope posthearing brief, p. 3.

[27] Hearing transcript, p. 308 (Golladay).

[28] Hearing transcript, p. 314 (Porter).

[29] Hearing transcript, pp. 320, 325 (Palsey).

[30] Hearing transcript, p. 31 (Nicely).

percent of the total cost of some commercial projects to 95 percent of the total cost of some end uses, with the greatest cost shares going to the erection and installation of framing, decks, and joists. U.S. importers reported that erection and installation services ranged from less than one percent for large industrial projects to 95 percent for high-rise office towers. U.S. purchasers reported that erection and installation services ranged from less than 1 percent for large commercial projects to 98 percent for commercial and office buildings. Respondents stated that there is a wide gap in cost share of erection services in a fabricated structural steel bid, and highlighted examples of erection services ranging from 28 percent of a greenfield industrial project to 55 percent of a high-rise building in New York.[31]

Most responding U.S. producers (94 of 116) reported that they provide erection and installation services as part of their bids. Of these U.S. producers, 63 U.S. producers reported subcontracting these services, 13 reported offering these services directly, and 18 reported offering these services either directly and/or through subcontractors, depending on their capacity at the time of erection. Most foreign producers (22 of 34) reported that they do not provide erection and installation services, but those that do provide services do so through subcontractors. One foreign producer (***) reported offering erection and installation services either directly and/or through subcontractors, depending on location, and foreign producer *** reported providing services directly ***.

Petitioners stated that erection services used for both U.S.-produced fabricated structural steel and fabricated structural steel from subject sources are the same, and that the prices of these erection services are also similar.[32] Respondents, however, stated that "means and methods" of both fabricators and erectors vary, and that may significantly affect costs.[33]

Business cycles

A majority of responding U.S. producers (67 ***), and some importers (25 of 63) and purchasers (7 of 27) indicated that the market was subject to business cycles or conditions of competition. Firms reported seasonality of installations associated with building in the spring and summer months, business cycles based on energy market trends and resulting investments, and overall economic trends. U.S. producers *** reported that because

[31] Hearing transcript, pp. 290-91 (Dessault).

[32] Hearing transcrtipt, pp. 84, 178 (Labbe, Price); Petitioner posthearing brief, p. 3. The Petitioner argues that labor costs are often standardized in certain labor markets due to unionized labor.

[33] Hearing transcript, p. 640 (Rooney).

installations can take one to two years to complete, the fabricated structural steel market lags behind general economic trends.

When asked about distinct conditions of competition in the fabricated structural steel market, purchasers cited price differences between fabricated structural steel and concrete, competition and expansion of fabricated structural steel industries in low-cost countries, and tariffs. A small U.S. producer (***) reported that it has been bidding against large fabricator competitors because larger projects are unavailable. U.S. producers also cited increased competition from producers in subject countries bidding on large commercial projects. U.S. producer *** reported that capital expansion projects, the source of most of its business, have slowed "due to the trade wars." U.S. producer *** reported that the industrial market can be slowed by regulatory uncertainty and changes in demand by utility companies.

Firms were asked if there had been any changes to business cycles or conditions of competition since 2016. Eight purchasers stated there had been changes, citing tariffs, increased competition from foreign producers, market uncertainty, and increased demand. Purchaser *** reported that there have been "mega energy infrastructure" projects that have led to increased demand for fabricated structural steel. Purchaser *** reported that most suppliers are hesitant to quote prices due to market uncertainty.

U.S. importer *** reported that increased investments in infrastructure and "mega-city commercial and residential developments" have reduced the supply of available skilled labor. Importer *** reported that general contractors are increasingly asked to take more responsibility in the scope of their projects for bid, requiring fabricators to include field dimensions, grouting of base plates, temporary shoring and bracing, all loose steel for elevator shafts, and other miscellaneous items shown on architectural, mechanical, electrical, and landscaping drawings, in addition to requiring specific finishes such as galvanizing, multi-coat paint systems, and intumescent fire proofing coatings.

U.S. producer and importer *** reported that "fast track" projects have become increasingly significant, requiring large production capacity to meet the delivery schedule and "high-functioning" technical and project management teams to manage large and complex projects. U.S. producers *** reported that competition from abroad has driven bids below market prices and has led to increased competition from domestic producers in other regions.

Impact of section 232 tariffs and section 301 tariffs

Firms were asked if the section 232 or 301 tariffs had an impact on the fabricated structural steel market (table II-4). Firms that reported an impact were then asked to report these tariffs' effects on overall U.S. demand, overall supply, prices, and raw material costs for fabricated structural steel (table II-5). Most responding firms reported that the section 232 tariffs had affected the fabricated structural steel market, by increasing raw material prices as well as prices for fabricated structural steel. Firms were more divided on whether the section 301 tariffs had affected the fabricated structural steel market.

Table II-4
Fabricated structural steel: Number of firms reporting that the section 232 or section 301 tariffs impacted the U.S. market

Item	U.S. producers		U.S. importers		Purchasers	
	Yes	No	Yes	No	Yes	No
Section 232	88	11	38	9	14	3
Section 301	28	34	24	12	9	4

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

Table II-5
Fabricated structural steel: Reported changed to the U.S. market resulting from section 232 or section 301 tariffs, by number of firms

Item	U.S. producers				U.S. importers				Purchasers			
	I	NC	D	F	I	NC	D	F	I	NC	D	F
	Section 232											
Raw material costs	61	4	1	41	33	1	---	8	10	1	---	5
Prices	58	13	5	30	33	2	---	8	10	2	---	5
	Section 301											
Demand	10	37	4	20	4	17	4	17	3	10	---	6
Supply	11	31	7	18	4	14	4	17	3	9	1	6
Prices	22	25	3	18	20	6	---	14	10	4	---	6
Raw material costs	20	26	4	16	15	9	---	14	8	5	---	6

Note: I=increased; NC=no change; D=decreased; F=fluctuated.

The petitioner stated that the section 232 tariffs, section 301 tariffs, and the antidumping and countervailing duty orders on steel plate[34] have not had a meaningful impact on the domestic fabricated structural steel industry.[35] It added that the section 301 tariffs on imports from China would not have had any impact for months after imposition given the lag time between bid award and actual fabricated structural steel supply. In addition, the petitioner asserted that preliminary phase U.S. producer questionnaire responses indicated that the Section 301 tariff of 25 percent was not high enough to make a material impact.[36] Respondent importer Corey stated that the imposition of section 232 duties caused the delay of construction projects in the United States due to the uncertainty caused by the tariffs, and Canadian respondents stated that the section 232 duties increased the price of all structural steel (whether imported or domestically produced) by as much as 30 percent.[37]

Demand trends

Most U.S. producers and a plurality of importers and purchasers reported an increase in U.S. demand for fabricated structural steel since January 1, 2016 (table II-6). Firms cited a strong economy, although several U.S. producers reported that imports from Canada, China, and Mexico have tempered U.S. producers' ability to benefit fully from the increased demand. A few U.S. producers also reported population growth in urban areas requiring more high-rise construction, and importer *** reported that the industrial sector in the Gulf region has grown due to the expansion of domestic energy production. Importer *** reported that the rise of e-commerce has created new requirements for warehouses and distribution facilities, and also cited "a number of fancy stadiums being built."

[34] A combination of antidumping and countervailing duty orders on hot-rolled steel (including coiled plate) from Australia, Brazil, Japan, Korea, Netherlands, Turkey, and the United Kingdom entered into effect in the United States in October 2016. Subsequently, a combination of antidumping and countervailing duty orders on cut-to-length plate from Austria, Belgium, Brazil, China, France, Germany, Italy, Japan, Korea, South Africa, Taiwan, and Turkey entered into effect in the United States in January-May 2017.

[35] Petitioner's postconference brief, pp. 22-25.

[36] Petitioner's postconference brief, pp. 22-25.

[37] Respondent Corey's postconference brief, pp. 4, 13-15; respondent CISC's postconference brief, pp. 17-19.

Table II-6
Fabricated structural steel: Firms' responses regarding U.S. demand and demand outside the United States

Item	Number of firms reporting			
	Increase	No change	Decrease	Fluctuate
Demand inside the United States:				
U.S. producers	61	16	15	24
Importers	23	9	5	20
Purchasers	10	7	2	3
Demand outside the United States:				
U.S. producers	4	15	4	11
Importers	10	10	2	22
Purchasers	3	8	2	3
Demand for end use product(s):				
Purchasers	8	10	3	9

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

A plurality of U.S. producers and purchasers reported that demand outside the United States was unchanged, and a plurality of importers reported that demand outside the United States fluctuated. However, some importers reported that urbanization, energy expansion, and infrastructure development in Canada and Mexico are increasing the demand for fabricated structural steel.

Seventeen of 23 purchasers reported that demand for fabricated structural steel varies by application or project. Purchaser *** reported that it decided to focus on rooftop and carport solar systems and to exit the large solar plant business, and purchaser *** reported that renovation projects require "little to no" structural steel.

Substitute products

Substitutes for fabricated structural steel are limited, depending on the specific application. Most responding U.S. producers (82 ***) and importers (42 of 62) reported that there are no substitutes for fabricated structural steel. A majority of purchasers (16 of 30) reported that there are some substitutes for fabricated structural steel. Firms listed brick, concrete, engineered wood, metal studs, or pre-engineered buildings as substitutes. Cast-in-place concrete can be used in place of fabricated structural steel in high rise buildings, and other large structures. Wood is an alternative to fabricated structural steel in low to mid-rise buildings, but has limitations depending on load requirements. A number of firms reported that both wood and concrete prices may increase pressure on the prices of fabricated structural steel. U.S. producer *** reported that although concrete and wood can be used in place of fabricated structural steel for certain types of construction, these decisions are made "well in advance" of the project start, and that material substitution generally is not possible

after the project has begun. Thus, the shift between concrete and fabricated structural steel cannot occur during construction and is not likely to occur in the short run.

Substitutability issues

The degree of substitution between domestic and imported fabricated structural steel depends upon such factors as relative prices, quality (e.g., grade standards, defect rates, etc.), and conditions of sale (e.g., lead times between order and delivery dates, reliability of supply, product services, etc.). Based on available data, staff believes that there is high degree of substitutability between domestically produced fabricated structural steel and fabricated structural steel imported from Canada and Mexico. Due to the importance of the scheduling of deliveries and lead times, the level of substitutability between domestically produced fabricated structural steel and fabricated structural steel imported from China may be somewhat lower.

Lead times

Fabricated structural steel is primarily produced-to-order. U.S. producers reported that 99.0 percent of their commercial shipments were produced-to-order, with the remaining shipments being sold from inventories. Importers reported that 99.3 percent of their commercial shipments were produced-to-order. Less than one percent of importers' shipments were from U.S. or foreign inventories. Due to fabricated structural steel being produced for a specific project, producers are unable to immediately supply customers with product; however, purchasers do not require immediate delivery once the bids are finalized. Purchasers do require that the fabricated structural steel be delivered in time with the construction schedule. It is very important for purchasers that the delivery schedule does not delay overall construction schedules.[38]

Project timing varies widely depending on the specific project. U.S. producers and importers were asked to estimate the average period of time for a project, and responses varied from two weeks to two years. U.S. producer *** reported that it takes about 60 days to complete shop fabrication, but U.S. producer *** reported that project duration depends on many factors, including if the scope of work requires detailing and engineering, the size of the contract, and the time required to produce, ship, and erect the fabricated structural steel. This firm highlighted the importance of a clear schedule to meet the project baseline, since fabricated structural steel is just one input into the construction of a building. Other U.S.

[38] Conference transcript, pp. 131-132 (Zalesne).

producers also highlighted that project times vary due to complexity and tonnage of the fabricated structural steel.

Knowledge of country sources

Twenty-eight of 30 responding purchasers indicated they had marketing/pricing knowledge of domestic product, 16 of Canadian fabricated structural steel, 7 of Chinese fabricated structural steel, and 5 of Mexican fabricated structural steel. Seven purchasers reported having marketing knowledge of fabricated structural steel from nonsubject countries including the UAE, Austria, Korea, Taiwan, Thailand, and Italy.

As shown in table II-7, most purchasers and their customers sometimes or never make purchasing decisions based on the producer or country of origin. Of the five purchasers that reported that they always make decisions based the manufacturer, one purchaser reported buying from its affiliated *** establishments, one purchaser reported that it uses a preferred subcontractor and supplier list to bid on its projects, and one purchaser reported that it is trying to identify reputable and trustworthy suppliers.

Table II-7
Fabricated structural steel: Purchasing decisions based on producer and country of origin

Decision	Always	Usually	Sometimes	Never
Purchases based on producer:				
Purchaser's decision	5	4	13	9
Purchaser's customer's decision	1	2	15	9
Purchases based on country of origin:				
Purchaser's decision	3	6	8	12
Purchaser's customer's decision	1	3	11	10

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

Four purchasers indicated that certain jumbo steel sections are only available from Luxembourg. Purchaser *** noted that plate greater than 4" is only available from Europe, China, or Japan, grade 65 plate is only available from Germany, and certain large tube sections are only available from Japan.

Factors affecting purchasing decisions

The most often cited top three factors firms consider in their purchasing decisions for fabricated structural steel were price/cost (25 firms), an ability to meet the project schedule (24 firms), and quality (15 firms), as shown in table II-8. Price/cost was the most frequently cited first-most important factor (cited by 8 firms), followed by quality (7 firms); an ability to meet the project schedule was the most frequently reported second-most important factor (11

firms); and price/cost and an ability to meet the project schedule were the most frequently reported third-most important factors (8 firms each).

Table II-8
Fabricated structural steel: Ranking of factors used in purchasing decisions as reported by U.S. purchasers, by factor

Item	1st	2nd	3rd	Total
	Number of firms (number)			
Price / Cost	8	7	10	25
Ability to meet schedule/on-time delivery/lead time	1	13	10	24
Quality	7	4	4	15
Ability to meet technical specifications	6	3	1	10
Other factors	7	6	5	NA

Note: Other factors include proven experience with similar projects (5 purchasers), safety standards (4), financial viability and bonding capacity (4), reliability and service (3), key personnel assigned to team or references (3), claims history (1), and ability to integrate services with project methodology (1).

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

The majority of purchasers (19 of 32) reported that they usually purchase the lowest-priced product.

Importance of specified purchase factors

Purchasers were asked to rate the importance of 25 factors in their purchasing decisions (table II-9). All of these factors, with the exception of five factors: logistics/supply chain efficiency, U.S. transportation costs, product range, quality of fabricated structural steel exceeds industry standards, and quality of installation exceeds industry standards, were rated as very important by at least half of responding purchasers. Certainty of delivery time, price of the overall contract, and availability were rated as very important by virtually all of the reporting purchasers. Erection safety record, price of the fabricated structural steel, the reliability of supply, availability of the supplier's production capacity, and product consistency were also reported as very important by the vast majority of responding purchasers.

Table II-9
Fabricated structural steel: Importance of purchase factors, as reported by U.S. purchasers, by factor

Factor	Number of firms reporting		
	Very	Somewhat	Not
Certainty of delivery time	31	---	---
Price of contract overall	31	1	---
Availability	30	1	---
Erection safety record	28	1	2
Price of fabricated structural steel	28	3	1
Reliability of supply	28	3	---
Supplier's available production capacity	27	5	---
Product consistency	27	3	1
Supplier experience in a similar projects	26	6	---
Quality of FSS meets industry standards	26	3	2
Financial stability/ offer performance bonds	25	7	---
Quality of installation meets industry standards	25	2	2
Minimize installation time	24	6	1
Price of installation	23	5	2
Delivery terms	20	11	---
Supplier's engineering skills	20	11	---
Experience with supplier	20	12	---
Technical support/service	18	14	---
Payment terms	16	14	1
Supplier's local experience	16	14	2
Logistics/supply chain efficiency	14	18	---
U.S. transportation costs	14	14	3
Product range	12	18	2
Quality of FSS exceeds industry standards	10	17	4
Quality of installation exceeds industry standards	9	16	4

Note: Fabricated structural steel is abbreviated as "FSS".

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

Respondents highlighted that potential penalties for not maintaining schedule commitments may sometimes far exceed any potential savings on lower-priced fabricated structural steel.[39] Respondent Exxon Mobil stated that its decisions to import process plant modules because of the domestic fabricated structural steel industry's capacity constraints, construction labor shortages, and geographical limitations (such as requirements for deep-water ports).[40]

[39] Hearing transcript, p. 208 (Kelly).
[40] Hearing transcript, p. 227 (Guilfoyle).

Supplier certification

Nineteen of 32 responding purchasers require their suppliers to be AISC certified. Many of these purchasers reported that AISC certification is required only if project specifications require it. Four of 25 responding purchasers reported that projects may sometimes require IAS AC472 specifications if dictated by project requirements. [41] Purchaser *** reported that it requires American Welding Society (AWS) certification, but that it is the obligation of the supplier to be qualified to meet conditions for a particular scope of work. Purchaser *** requires that its suppliers be Washington Association of Building Officials (WABO) certified for welding. Purchaser *** reported that it prefers its suppliers to be ISO certified.

Five purchasers (***) reported that prequalification is required before a bid is awarded. Nine purchasers reported that certification is required if the particular project or owner requires it. Purchaser *** reported that while it does not require specific certifications, it does factor in the safety record of the fabricator and erectors, such as the Experience Modification Rate (EMR),[42] and that it also considers bonding capabilities and financial stability. Purchaser *** reported that its prequalification process takes about 20 days and includes evaluation of experience, capacity, financials, bonding capacity, and safety record.

Two purchasers reported that suppliers had failed in their attempt to qualify fabricated structural steel, or lost their qualification, since 2016 as a normal course of business because they either did not meet prequalification requirements or defaulted on the work. Both purchasers did not specify supplier names. Purchaser *** reported that it did not know if any suppliers failed to qualify because it does not track that information. Purchasers reported disqualifying factors for suppliers including: lack of experience in complex steel fabrications, financial instability, an inability to meet schedule requirements, a history of

[41] PEMBs are subject to MBMA standards, and these standards reference AISC guidelines. Hearing transcript, pp. 35, 103, 105, 255 (Price, Weld, Detwiler, Nicely); Respondent CBB posthearing brief, Appendix A, p. 11.

[42] EMR is a number insurance companies use to represent a business's prior workers compensation claims and potential for future injuries. Fits Small Business, https://fitsmallbusiness.com/experience-modification-rate/, accessed January 9, 2020.

(continued…)

frivolous claims,[43] ongoing quality concerns, poor safety records/unsatisfactory EMR, an inability to attain bonding,[44] or a bad reputation.

The Metal Building Manufacturers Association ("MBMA") publishes the standards used to manufacture PEMBs. MBMA standards govern PEMB construction as opposed to AISC standards, which govern conventional steel construction.[45]

Changes in purchasing patterns

Purchasers were asked about changes in their purchasing patterns from different sources since 2016 (table II-10); reasons reported for changes in sourcing included various plant capacities, market changes, fabrication locations, and client preferences. Thirteen of 31 responding purchasers reported that they had changed suppliers since January 1, 2016, primarily due to the competitive bidding process, and the uniqueness of each project.

Table II-10
Fabricated structural steel: Changes in purchase patterns from U.S., subject, and nonsubject countries

Source of purchases	Did not purchase	Decreased	Increased	Constant	Fluctuated
United States	3	1	2	12	12
Canada	9	3	1	8	6
China	19	1	2	---	3
Mexico	21	---	---	1	2
All other sources	17	1	2	---	4
Sources unknown	19	2	2	2	1

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

Importance of purchasing domestic product

Twenty-three of 33 responding purchasers reported that all of their purchases did not require purchasing U.S.-produced product. Six purchasers reported that domestic product was required by law (for 5 to 40 percent of their purchases), four reported it was required by their customers (for 4 to 100 percent of their purchases), and no purchasers reported other preferences for domestic product.

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[43] Purchaser *** reported that a supplier's claim history is a factor considered when making purchasing decisions. A supplier may make a claim or be very litigious and require that the purchaser pay more than the lump sum of the bid if costs have changed. Staff telephone interview with ***, October 28, 2019.

[44] Construction bonds are a type of surety bond that protects against disruptions or financial loss due to a contractor's failure to complete a project or failure to meet contract specifications. Investopedia, https://www.investopedia.com/terms/c/construction-bond.asp, accessed December 19, 2019.

[45] Hearing transcript, p. 199 (Detwiler).

Several purchasers reported that there is sometimes a preference for U.S.-produced fabricated structural steel because there are fewer complications with procurement, and purchaser *** reported that it has a level of comfort with local fabricators.

Comparisons of domestic products, subject imports, and nonsubject imports

Purchasers were asked a number of questions comparing fabricated structural steel produced in the United States, subject countries, and nonsubject countries. First, purchasers were asked for a country-by-country comparison on the same 25 factors (table II-11) for which they were asked to rate the importance.

In comparisons to domestic product, 20 purchasers provided comparisons for Canada, 11 provided comparisons for China, 5 provided comparisons for Mexico, and 6 provided comparisons for nonsubject countries. The large majority of responding purchasers reported that product from Canada was comparable to that from the United States on all 25 factors, and the majority of responding purchasers reported that product from Mexico was comparable to that from the United States on all factors.

The majority or plurality of responding purchasers reported that the product from China was comparable to U.S. product with respect to 16 of the 25 factors. With respect to price, firms reported that the U.S.-produced fabricated structural steel was inferior (higher-priced) to prices of Chinese fabricated structural steel; however, a majority of responding firms stated that the domestic product was superior (lower-priced) with respect to the price of the contract overall.

Table II-11
Fabricated structural steel: Purchasers' comparisons between U.S.-produced and imported product

Factor	Number of firms reporting								
	United States vs. Canada			United States vs. China			United States vs. Mexico		
	S	C	I	S	C	I	S	C	I
Certainty of delivery time	1	17	2	5	4	2	1	4	---
Price of contract overall	3	13	4	6	3	2	---	4	1
Availability	---	19	2	3	5	3	---	4	1
Erection safety record	---	18	---	2	6	1	1	3	---
Price of fabricated structural steel	3	13	4	3	3	5	1	3	1
Reliability of supply	---	20	1	4	6	1	---	5	---
Supplier's available production capacity	1	17	2	---	8	3	---	4	1
Product consistency	---	20	---	5	4	1	---	5	---
Supplier experience in a similar projects	---	18	2	1	8	1	---	5	---
Quality of FSS meets industry standards	---	20	---	4	4	1	---	5	---
Financial stability/ offer performance bonds	---	20	---	1	9	1	1	4	---
Quality of installation meets industry standards	---	19	---	3	4	---	---	4	---
Minimize installation time	1	17	1	4	4	1	1	3	---
Price of installation	1	16	1	2	5	1	---	4	---
Delivery terms	1	19	1	3	6	2	1	4	---
Supplier's engineering skills	---	19	1	4	6	---	---	5	---
Experience with supplier	---	18	2	3	6	1	---	5	---
Technical support/service	---	19	1	4	5	2	---	5	---
Payment terms	---	20	---	2	8	1	---	5	---
Supplier's local experience	2	16	2	5	4	1	2	3	---
Logistics/supply chain efficiency	1	19	---	3	7	1	2	3	---
U.S. transportation costs	3	14	2	5	5	---	1	4	---
Product range	---	20	---	3	7	---	---	5	---
Quality of FSS exceeds industry standards	---	20	---	4	4	1	---	5	---
Quality of installation exceeds industry standards	---	19	---	3	4	---	---	4	---

Table continued on next page.

Table II-11 -- Continued
Fabricated structural steel: Purchasers' comparisons between U.S.-produced and imported product

Factor	Number of firms reporting		
	United States vs. Nonsubject sources		
	S	C	I
Certainty of delivery time	3	3	---
Price of contract overall	1	3	2
Availability	2	3	1
Erection safety record	1	3	---
Price of fabricated structural steel	1	3	2
Reliability of supply	3	2	---
Supplier's available production capacity	1	5	---
Quality of FSS meets industry standards	1	4	---
Product consistency	1	4	---
Supplier experience in a similar projects	2	4	---
Financial stability/ offer performance bonds	1	5	---
Quality of installation meets industry standards	1	3	---
Minimize installation time	2	2	---
Price of installation	1	2	---
Delivery terms	4	2	---
Supplier's engineering skills	1	5	---
Experience with supplier	4	2	---
Technical support/service	3	2	1
Payment terms	1	5	---
Supplier's local experience	4	2	---
Logistics/supply chain efficiency	3	3	---
U.S. transportation costs	5	1	---
Product range	1	5	---
Quality of FSS exceeds industry standards	1	4	---
Quality of installation exceeds industry standards	2	2	---

Note: A rating of superior means that price/U.S. transportation cost is generally lower. For example, if a firm reported "U.S. superior," it meant that the U.S. product was generally priced lower than the imported product.
Note: S=first listed country's product is superior; C=both countries' products are comparable; I=first list country's product is inferior.
Note: Fabricated structural steel is abbreviated as "FSS".

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

Respondents described a project cost that is greater than the price of fabricated structural steel, but incorporates risks, such as overcommitted capacity, expensive labor, safety records, and to a certain extent, subcontracting.[46]

[46] While common, subcontracting can result in substantial additional costs on a project owner, if the owner is required to arranged inspection of each subcontracted fabricator. Hearing transcript, pp. 288-289 (Dickerson).

Comparison of U.S.-produced and imported fabricated structural steel

In order to determine whether U.S.-produced fabricated structural steel can generally be used in the same applications as imports from Canada, China, and Mexico, U.S. producers, importers, and purchasers were asked whether the products can always, frequently, sometimes, or never be used interchangeably. As shown in table II-12, most U.S. producers reported that domestic product and imported product from any source can always be used interchangeably. Most U.S. importers reported that domestic product and imported product can always or frequently be used interchangeably. Most purchasers reported that fabricated structural steel from Canada and Mexico can always be used interchangeably with domestic fabricated structural steel, but their responses regarding Chinese fabricated structural steel were mixed, with a plurality of purchasers reporting that Chinese fabricated structural steel can only sometimes be used interchangeably with U.S.-produced fabricated structural steel.

Table II-12
Fabricated structural steel: Interchangeability between fabricated structural steel produced in the United States and in other countries, by country pair

Country pair	U.S. producers				U.S. importers				U.S. purchasers			
	A	F	S	N	A	F	S	N	A	F	S	N
United States vs. Canada	71	18	6	3	28	14	5	3	13	8	---	1
United States vs. China	49	16	6	5	12	13	10	5	4	4	5	1
United States vs. Mexico	55	16	8	3	16	10	5	3	7	4	---	1
Canada vs. China	33	6	6	4	9	11	7	5	3	3	3	1
Canada vs. Mexico	34	8	6	3	13	9	5	3	4	3	1	1
China vs. Mexico	36	5	3	3	11	9	3	5	3	3	---	1
United States vs. Other	40	9	6	3	10	11	10	3	3	4	4	1
Canada vs. Other	29	4	5	3	9	9	9	3	3	2	2	2
China vs. Other	30	3	3	3	9	9	5	3	2	3	---	1
Mexico vs. Other	30	3	4	3	8	10	6	3	3	3	---	1

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

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

Many firms caveated their responses, indicating that fabricated structural steel that is produced for a certain project can never be used interchangeably with other fabricated structural steel. Importer *** reported that availability of and ability to work with high strength steel or large steel sizes may limit interchangeable use between U.S.-produced fabricated structural steel and fabricated structural steel from “Other” countries. Importer *** reported that between country sources there are differing material grades, section profiles, design codes, welding certifications and procedure, and client acceptance. Importer *** reported that lead times for fabricated structural steel from China are too long, and that Mexican producers are constrained by their production capacity, thereby limiting their

range of work. Purchaser *** reported that the quality of steel varies greatly between Chinese suppliers and that it requires extra inspection and supervision.

As can be seen from table II-13, purchasers reported that fabricated structural steel produced in the United States, Canada, and Mexico always or usually meets quality specifications. Most purchasers (6 of 11) reported that Chinese fabricated structural steel usually meet minimum requirements, but the remaining five purchasers reported that Chinese fabricated structural steel only sometimes meets minimum specifications.

Table II-13
Fabricated structural steel: Ability to meet minimum quality specifications, by source

Source of purchases	Always	Usually	Sometimes	Rarely or never
United States	13	13	---	---
Canada	12	9	---	---
China	---	6	5	---
Mexico	1	6	---	---
Nonsubject sources	2	5	---	---

Note: Purchasers were asked how often domestically produced or imported fabricated structural steel meets minimum quality specifications for their own or their customers' uses.

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

In addition, U.S. producers, importers, and purchasers were asked to assess how often differences other than price were significant in sales of fabricated structural steel from the United States, subject, or nonsubject countries. As seen in table II-14, most U.S. producers and importers reported that there were never significant differences other than price between fabricated structural steel produced in the United States and in subject and nonsubject countries. U.S. purchaser responses were mixed.

Table II-14
Fabricated structural steel: Significance of differences other than price between fabricated structural steel produced in the United States and in other countries, by country pair

Country pair	U.S. producers				U.S. importers				U.S. purchasers			
	A	F	S	N	A	F	S	N	A	F	S	N
United States vs. Canada	3	9	28	51	8	9	9	21	4	2	8	7
United States vs. China	3	6	20	36	10	7	7	14	5	5	3	---
United States vs. Mexico	2	6	20	41	3	4	4	18	2	3	3	---
Canada vs. China	2	5	10	23	9	3	2	10	2	3	2	---
Canada vs. Mexico	1	6	11	24	4	3	3	12	2	1	3	---
China vs. Mexico	2	3	9	23	4	---	3	14	1	1	1	1
United States vs. Other	2	4	13	30	5	4	9	12	1	4	3	---
Canada vs. Other	1	2	8	18	4	2	5	10	---	1	3	---
China vs. Other	2	2	7	18	2	1	6	10	---	---	3	---
Mexico vs. Other	1	2	8	18	2	1	5	10	---	---	3	---

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

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

Most purchasers reported that there were only sometimes or never significant differences other than price between U.S.-produced fabricated structural steel and Canadian fabricated structural steel. Most purchasers reported that there were always or frequently significant factors other than price when comparing U.S.-produced fabricated structural steel and Chinese fabricated structural steel, and purchasers were evenly split regarding the how often there are significant differences other than price between U.S. and Mexican fabricated structural steel.

Purchasers *** reported that the quality of fabricators varies within the United States as well, and that "there are some very good foreign fabricators and there are some very bad U.S. fabricators. Good or bad fabricators are not limited to any one country."

Respondents stated that there are several important factors that are considered in bid requirements, including safety record, quality, an ability to meet the project schedule, and an ability to take on risk.[47] Additionally, respondents stated that certain projects may have specific bid requirements based on local requirements as well, citing certifications specific to Los Angeles, Las Vegas, and Florida as examples.[48]

[47] Hearing transcript, p. 260 (Whalen).
[48] Hearing transcript, p. 261 (Dickerson).

Elasticity estimates

This section discusses elasticity estimates.

U.S. supply elasticity

The domestic supply elasticity for fabricated structural steel measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price of fabricated structural steel. The elasticity of domestic supply depends on several factors including the level of excess capacity, the ease with which producers can alter capacity, producers' ability to shift to production of other products, the existence of inventories, and the availability of alternate markets for U.S.-produced fabricated structural steel. Analysis of these factors above indicates that the U.S. industry has the ability to moderately increase or decrease shipments to the U.S. market, depending on the capacity and scheduling requirements for specific fabricators at specific times; an estimate in the range of 3 to 5 is suggested.

Respondent CISC argues that U.S. producers have overstated their capacity, that the actual availability of unused capacity is smaller, and that U.S. producers' ability to respond to demand is more limited.[49]

U.S. demand elasticity

The U.S. demand elasticity for fabricated structural steel measures the sensitivity of the overall quantity demanded to a change in the U.S. market price of fabricated structural steel. This estimate depends on factors discussed above such as the limited existence and commercial viability of substitute products for specific applications, as well as the relatively moderate component share of fabricated structural steel in building construction. Based on the available information, the aggregate demand for fabricated structural steel is likely to be relatively inelastic; a range of -0.25 to -0.75 is suggested.

Joint respondents stated that they do not contest this range.[50]

[49] Respondent CISC posthearing brief, Appendix A, p. 65.
[50] Joint respondents' prehearing brief, p. 6.

Substitution elasticity

The elasticity of substitution depends upon the extent of product differentiation between the domestic and imported products.[51] Product differentiation, in turn, depends upon such factors as quality, and conditions of sale (e.g., availability and scheduling, lead times, and erection and installation services). Based on available information, the elasticity of substitution between U.S.-produced fabricated structural steel and fabricated structural steel imported from Canada and China is likely to be moderately high, while substitutability of imports from Mexico of fabricated structural steel for PEMBs may be slightly lower. A range of 3 to 5 is suggested, with the substitution elasticity of fabricated structural steel from Mexico falling on the lower end of the range.

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

Part III: 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 subsidies and 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 *** firms that accounted for an estimated 62.8 percent of U.S. production of fabricated structural steel during 2018.[1] An additional *** U.S. producers submitted incomplete U.S. producer questionnaires and therefore are not included in this section of the report.[2]

[1] The petitioner estimated that domestic production of fabricated structural steel totaled 3,418,290 short tons in 2017. (Petition, p. 3.) U.S. producers reported producing 2,148,023 short tons in 2018. Using the 2017 production estimate as a basis, this would result in 62.8 percent coverage accounted for by accepted questionnaire responses in this final phase.

[2] An additional *** U.S. producers submitted incomplete U.S. producer questionnaires and therefore are not included in the report. The list of these *** U.S. producers with incomplete data includes: ***.

An additional 30 firms responded to the Commission's questionnaire reporting they were not producers of fabricated structural steel.

U.S. producers

The Commission issued a U.S. producer questionnaire to 495 firms based on information provided by the petitioner and staff research.[3] One hundred thirty nine firms responded with questionnaires containing at least some information. *** firms provided usable data on their productive operations, with the large majority identifying themselves as members of the petitioner (i.e., the AISC Full Member Subgroup). Staff believes that these responses account for 62.8 percent of U.S. production of fabricated structural steel during 2018.

In the Commission's producers' questionnaire, firms were asked to identify as "small" producers (if they produced less than 5,000 short tons of fabricated structural steel annually since 2016) or as "medium to large" producers (if they produced 5,000 short tons or more in any annual or annualized period since 2016). Small firms were allowed to submit a short-form version of the questionnaire and provide general trade, financial, and employment data, while medium to large firms (hereinafter, "large" firms) were required to complete the entire questionnaire. All firms were asked to respond to questions related to market factors (i.e., Part III of the producers' questionnaire; see Parts II and V herein for more information).

Table III-1 lists U.S. producers of fabricated structural steel, their production locations, position on the petition, and shares of total production. Large producers accounted for *** percent of production in 2018, while small producers accounted for *** percent.[4]

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[3] The petitioner provided an updated list of AISC full members to reflect more recent membership and to remove any firms which may be producing fabricated structural steel excluded from the updated scope in Commerce's preliminary determinations. Staff determined that, based on AISC's 2018 dues data, the largest 235 firms would account for 80 percent of the petitioner's full member firms' estimated 2018 production.

As the petitioner estimated that its membership accounted for *** percent of total U.S. production in 2017 (Petition, p. 3), Commission staff supplemented this list by adding a roughly equal number of firms believed to fall outside of AISC's membership, and also ensured that at least one firm from all 50 States received a questionnaire. These were derived from various sources, including: (1) A list of potential producers listed in the petition of non-AISC firms (firms were selected from this list if detailed location data was provided); (2) Several regional trade association websites (Steel Fabricators of New England and Texas Structural Steel Institute); (3) A list of top 40 firms in 2018 by revenue as determined by the publication *The Fabricator* (though the list was inclusive of other, non-structural steel fabricators); and (4) Various online directories of structural steel producers.

[4] ***.

Table III-1
Fabricated structural steel: U.S. producers, their position on the petition, location of production, and share of reported production, 2018

Firm	Position on petition	Production location(s)	Firm type	Share of production (percent)
4G Steel	***	Lincoln, NE	***	***
Able Steel	***	Mesa,AZ	***	***
ADF	***	Great Falls, MT	***	***
Alberici Constructors	***	St. Louis, MO	***	***
Almet	***	New Haven, IN	***	***
American Steel	***	Greenfield, NH	***	***
Amfab	***	North Salt Lake	***	***
Banker Steel	***	Lynchburg, VA Orlando, FL South Plainfield, NJ	***	***
Basden Steel Corp.	***	Burleson, TX Claremore, OK Brookshire, TX	***	***
Ben Hur	***	St. Louis, MO	***	***
Ben's Structural	***	Waite Park, MN	***	***
Bennett Steel	***	Sapulpa, OK	***	***
Berlin Steel Construction	***	White Post, VA	***	***
Blattner	***	Cape Girardeau, MO	***	***
BlueScope Buildings North America (“BlueScope”)	***	Annville, PA Jackson, TN Rainsville, AL St Joseph, MO Visalia, CA	***	***
Bohling	***	Lynchburg, VA	***	***
Bradford Steel Co.	***	East Freetown, MA	***	***
Brooklyn Iron	***	Spokane WA	***	***
Building Envelope	***	Plainville, MA	***	***
C & F	***	Hamilton, TX	***	***
Canatal Steel USA (“Canatal”)	***	Roanoke, VA	***	***
Capco Steel	***	Providence,RI	***	***
Capital Steel	***	Trenton, NJ	***	***
Capone	***	Rowley, MA	***	***
Central Texas Iron Works (“CTIW”)	***	Waco, TX	***	***
Cianbro	***	Pittsfield, ME	***	***
Cives	***	Augusta, ME Winchester, VA Rosedale, MS Thomasville, GA Wolcott, IN	***	***
Concord	***	Grove City, OH	***	***
Construction Steel Inc.	***	Cedar City, UT	***	***
Construction Supply	***	Germantown WI	***	***
Continental Steel Fabrication	***	Kansas City, MO	***	***
Cooper's	***	Shelbyville, TN	***	***

Table continued on next page.

Table III-1--Continued
Fabricated structural steel: U.S. producers, their position on the petition, location of production, and share of reported production, 2018

Firm	Position on petition	Production location(s)	Firm type	Share of production (percent)
Crystal Steel	***	Delmar, DE Federalsburg, MD	***	***
Custom Metals	***	Little Rock, AR	***	***
D & R	***	Castroville, TX	***	***
Diversified Systems	***	Greenville, SC	***	***
Drake-Williams	***	Omaha, NE Omaha, NE	***	***
Dublin Steel	***	Palmer, MA	***	***
E & H Steel	***	Midland City, AL	***	***
Egger	***	Sioux Falls, SD	***	***
Encore	***	Phoenix, AZ	***	***
Engineered Steel	***	Sophia, NC	***	***
FabArc	***	Oxford, AL	***	***
Fabricated Steel	***	Baton Rouge, LA	***	***
FabSouth	***	Fort Lauderdale, FL Orlando, FL Winston-Salem, NC Winston-Salem, NC	***	***
Firelands	***	New London, OH	***	***
Fought & Company	***	Tigard, OR	***	***
G. A. West	***	Saraland, AL	***	***
Geiger & Peters	***	Indianapolis, IN	***	***
George Steel	***	Lebanon, OH	***	***
Golden State	***	Fowler, CA	***	***
Herrick Corp.	***	Stockton, CA San Bernadino, CA	***	***
High Steel Structures LLC	***	Lancaster, PA	***	***
HL Foster	***	West Springfield, MA	***	***
HME	***	Topeka, KS	***	***
Indiana Steel	***	Indianapolis, IN	***	***
Industrial Fabrication	***	Lake Crystal, MN	***	***
Integrity Steel	***	Mapleton, ND	***	***
Irwin Steel	***	Justin, TX	***	***
James A. McBrady	***	Scarborough, ME	***	***
J.B. Ventures	***	Tucson, AZ	***	***
Jeffords	***	Plattsburgh, NY	***	***
Joseph Oat	***	Camden, NJ	***	***
JPW Structural	***	Syracuse, NY	***	***
Koenig	***	Long Island City	***	***
L&D Steel	***	Largo, FL	***	***

Table continued on next page.

Table III-1--Continued
Fabricated structural steel: U.S. producers, their position on the petition, location of production, and share of reported production, 2018

Firm	Position on petition	Production location(s)	Firm type	Share of production (percent)
LeJeune	***	Minneapolis, MN Thorp, WI	***	***
Lenex Steel	***	Indianapolis, IN Indianapolis, IN	***	***
Levan Associates	***	Emmaus, PA	***	***
Liphart Steel	***	Richmond, VA	***	***
Littlell	***	Bridgewater, PA	***	***
LWI Metalworks	***	Morrisville, VT	***	***
Martin Steel	***	Eleele, HI	***	***
McFarlane	***	Sauk City, WI	***	***
McMahon	***	Chula Vista, CA	***	***
Merrill Iron	***	Schofield, WI	***	***
Metals Fabrication	***	Airway Heights, WA	***	***
Midwest Steel Works	***	Lincoln, NE	***	***
MSD Building	***	Pasadena, TX	***	***
NCI Group, Inc. (“NCI”)	***	Houston, TX Lexington, TN Monticello, IA Mt. Pleasant, IA Atwater, CA	***	***
North Alabama Fabricating	***	Cullman, AL	***	***
Novel	***	Greenland, NH	***	***
Nucor Buildings Group (“Nucor”)	***	Waterloo, IN Terrell, TX Brigham City, UT Eufaula, AL Portland, TN	***	***
Ocean Steel	***	Conklin, NY	***	***
Owen Industries	***	Carter Lake, IA	***	***
Owen Steel Company	***	Columbia, SC	***	***
Palmer	***	McAllen, TX	***	***
PKM Steel	***	Salina, KS	***	***
Prospect Steel	***	Little Rock, AR	***	***
Puma Services	***	Cheyenne, WY	***	***
Qualico	***	Webb, AL	***	***
Quinn Bros.	***	Essex, MA	***	***
R.K. Steel	***	Fredonia, KS	***	***
Ramar	***	Rochester, NY	***	***
Rens Welding	***	Taunton, MA	***	***
Rhoads Industries	***	Philadelphia, PA	***	***
Rigid Global	***	Houston, TX	***	***

Table continued on next page.

Table III-1--Continued
Fabricated structural steel: U.S. producers, their position on the petition, location of production, and share of reported production, 2018

Firm	Position on petition	Production location(s)	Firm type	Share of production (percent)
Ritner Steel	***	Carlisle, PA	***	***
Rocky Mountain	***	Olathe, CO	***	***
Romak	***	Benica, CA	***	***
S.L.Chasse	***	Hudson, NH	***	***
Saguaro Steel Industries	***	Phoenix, AZ	***	***
Samuel Grossi	***	Bensalem, PA	***	***
Schenectady Steel	***	Schenectady, NY	***	***
Sefton	***	Houston, TX	***	***
Selco	***	West Caldwell, NJ	***	***
Schuff Steel Co.	***	Phoenix, AZ Eloy, AZ Bellemont, AZ Stockton, CA Ottawa, KS Humble, TX	***	***
Shawmut	***	Swansea, Ma.	***	***
Shepard	***	Hartford, CT	***	***
Sippel	***	Ambridge, PA	***	***
Soucy	***	Pelham NH	***	***
State Welding	***	Wallingford, CT	***	***
Steel Fabricators of Monroe	***	Monroe, LA	***	***
Steel Service	***	Jackson, MS	***	***
Steel Technology	***	Rocky Mount, NC	***	***
SteelFab	***	Charlotte, NC Florence, SC Durant, OK Emporia, VA Roanoke, AL	***	***
Stein Steel & Supply	***	Atlanta, GA	***	***
Stewart-Amos	***	Harrisburg, PA	***	***
Stone Bridge	***	Gansevoort, NY	***	***
Structural Steel of Carolina	***	Winston-Salem, NC	***	***
Structural Steel Services	***	Meridian, MS	***	***
STS	***	Schenectady, NY	***	***
Supreme Steel	***	Portland, OR	***	***
Thomas Steel	***	Bellevue, OH	***	***
Tipton	***	Tipton, IA	***	***
TMCO	***	Lincoln, NE	***	***

Table continued on next page.

Table III-1--Continued
Fabricated structural steel: U.S. producers, their position on the petition, location of production, and share of reported production, 2018

Firm	Position on petition	Production location(s)	Firm type	Share of production (percent)
TRC	***	Idaho Falls, ID	***	***
TrueNorth	***	Fargo, ND Billings, MT Rapid City, SD Missoula, MT Fargo, ND	***	***
TTI Holdings	***	Gibsonton, FL Tampa, FL	***	***
United Steel	***	East Hartford, CT	***	***
Universal Steel	***	Lithonia, GA	***	***
Universal Steel NC	***	Thomasville, NC	***	***
Van Dellen Steel	***	Caledonia, MI	***	***
W&W|AFCO ("W&W")	***	Oklahoma City, OK San Angelo, TX Greeley, CO Lubbock, TX Greensboro, NC	***	***
Weir Welding	***	Carlstadt, NJ Saddle Brook, NJ	***	***
Western Slope	***	Grand Junction, CO	***	***
Wylie Steel	***	Springfield, TN	***	***
Zalk Josephs	***	Stoughton, WI	***	***
Zimkor	***	Littleton, CO	***	***

Firm type	Count of firm type	Share of production (percent)
Large producers	***	***
Small producers	***	***
Firms providing incomplete information	***	***
All producers	Total: ***	100.0

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

Table III-2 presents summary information on U.S. producers' positions on the petition.

Table III-2
Fabricated structural steel: U.S. producers' position on the petitions, by petition

Position regarding petitions	Support	Oppose	Take no position
	Count (number)		
Canada AD	***	***	***
Canada CVD	***	***	***
China AD	***	***	***
China CVD	***	***	***
Mexico AD	***	***	***
Mexico CVD	***	***	***
	Share across (percent)		
Canada AD	***	***	***
Canada CVD	***	***	***
China AD	***	***	***
China CVD	***	***	***
Mexico AD	***	***	***
Mexico CVD	***	***	***

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

As indicated in table III-3, *** U.S. producers are owned by another firm. In addition, *** U.S. producers reported related U.S. importers of the subject merchandise, and *** U.S. producers reported related foreign producers of the subject merchandise.[5] In addition, as discussed in the section "U.S. producers' imports and purchases" below, *** U.S. producers directly import the subject merchandise and *** purchase the subject merchandise from U.S. importers.

[5] *** have ownership by a Canadian company, and/or are related to an importer/exporter of, or producer of, fabricated structural steel from Canada. *** are related to an importer/exporter of and/or a related producer of fabricated structural steel from Mexico or Canada, and *** is related to an importer/exporter and a related producer of fabricated structural steel from China.
***. ***.

Table III-3
Fabricated structural steel: U.S. producers' ownership, related and/or affiliated firms

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

Table continued on next page.

Table III-3--Continued
Fabricated structural steel: U.S. producers' ownership, related and/or affiliated firms

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

Table continued on next page.

Table III-3--Continued
Fabricated structural steel: U.S. producers' ownership, related and/or affiliated firms

Item / Firm	Firm Name	Affiliated/Ownership
Related producers (Continued):		
***	***	***
	***	***
***	***	***
***	***	***
***	***	***
	***	***
	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***

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

Table III-4 presents U.S. producers' reported changes in operations since January 1, 2016.

Table III-4
Fabricated structural steel: U.S. producers' reported changes in operations, since January 1, 2016

Item / Firm	Reported changed in operations
Plant openings:	
***	***
***	***
***	***
***	***
***	***

Table continued on next page.

Table III-4--Continued
Fabricated structural steel: U.S. producers' reported changes in operations, since January 1, 2016

Item / Firm	Reported changed in operations
***	***
Plant closings:	
***	***
***	***
***	***.
***	***
***	***
***	***
***	***
Relocations:	
***	***
***	***

Table continued on next page.

Table III-4--Continued
Fabricated structural steel: U.S. producers' reported changes in operations, since January 1, 2016

Item / Firm	Reported changed in operations
Expansions:	
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***

Table continued on next page.

Table III-4--Continued
Fabricated structural steel: U.S. producers' reported changes in operations, since January 1, 2016

Item / Firm	Reported changed in operations
Expansions (Continued):	
***	***
***	***
Acquisitions:	
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***

Table continued on next page.

Table III-4--Continued
Fabricated structural steel: U.S. producers' reported changes in operations, since January 1, 2016

Item / Firm	Reported changed in operations
Consolidations:	
***	***
***	***
***	***
***	***
Prolonged shutdowns or curtailments:	
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***

Table continued on next page.

Table III-4--Continued
Fabricated structural steel: U.S. producers' reported changes in operations, since January 1, 2016

Item / Firm	Reported changed in operations
Prolonged shutdowns or curtailments (continued):	
***	***
***	***
***	***
***	***
***	***
Revised labor agreements:	
***	***
***	***
***	***
***	***
***	***
***	***
***	***
Other:	
***	***
***	***
***	***
***	***

Table continued on next page.

Table III-4--Continued
Fabricated structural steel: U.S. producers' reported changes in operations, since January 1, 2016

Item / Firm	Reported changed in operations
Other (continued):	
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***

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

U.S. production, capacity, and capacity utilization

Table III-5 and figure III-1 present U.S. producers' production, capacity, and capacity utilization. Reported capacity to produce fabricated structural steel increased during 2016-18, and capacity in the 2019 interim period was slightly higher than in interim 2018. Total production of fabricated structural steel also increased during 2016-18, though production was lower in interim 2019 compared to interim 2018. Capacity utilization increased by 2.6 percentage points from 2016-18, but was 3.7 percentage points lower in interim 2019 compared to interim 2018.

Labor-intensive activities (e.g., welding) are an important part of fabricated structural steel production generally. Further, the hours needed to complete a project can vary greatly depending on the scale of the project and the exact extent of these labor-intensive activities. (Indeed, numerous firms utilized hours worked per ton as a variable in their capacity calculations).[6] As such, skilled labor availability is an important factor for firms and a potential production constraint. Twenty-four firms reported skilled labor availability as a production constraint.[7] Detailed employment data are presented at the end of Part III.

Other prominent factors identified as production constraints included market conditions (which 41 firms identified as a constraint) and facility constraints such as spacing and layout issues (which 13 firms identified as a constraint).

[6] Respondent parties contend that capacity utilization figures are highly sensitive to estimates on productivity, and that numerous estimates of hours worked per ton provided by U.S. producers were at a lower level of what AISC would consider a typical fabrication project, thus tending to inflate capacity estimates. See Respondents' Joint Analysis of Material Injury and Threat, p. 51.

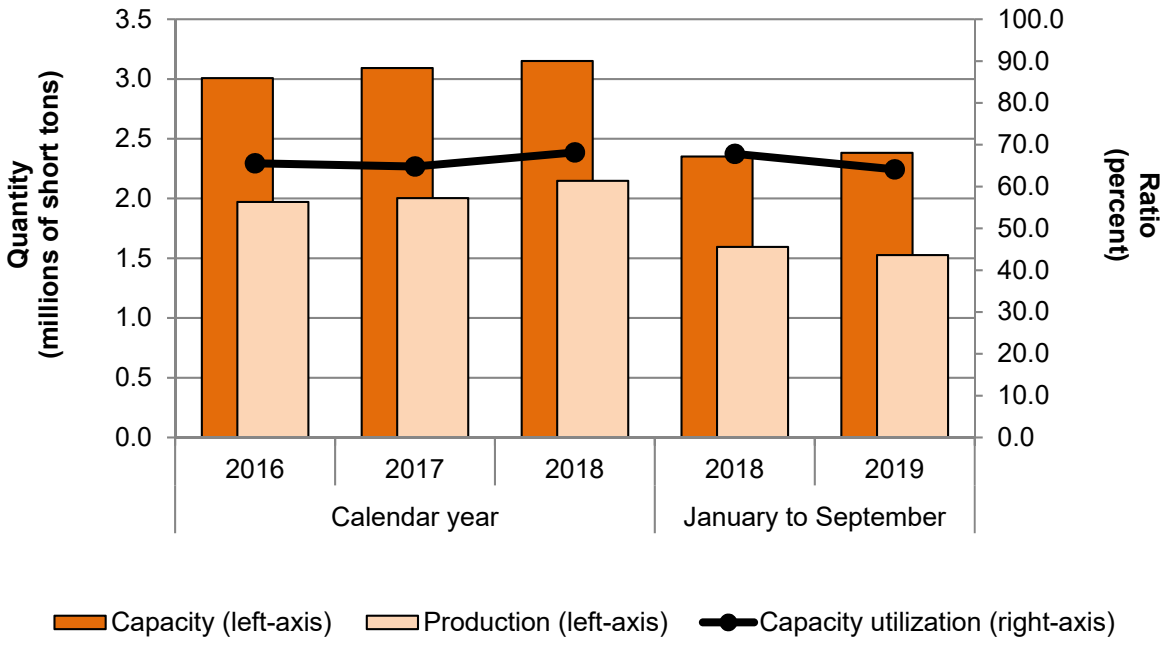
[7] Witnesses at the hearing appearing on behalf of the petitioner testified that labor availability is not an issue, stating that numerous firms have training programs to bring in new workers, while also offering good living wages. Hearing transcript, pp. 87-88 (Labbe, Noveletsky, Cooper, Downs). Counsel for petitioner also noted that the majority of firms answering the questionnaire have not refused, declined, or been unable to supply fabricated structural steel. Hearing transcript, pp. 102-103 (Weld).

Table III-5
Fabricated structural steel: U.S. producers' capacity, production, and capacity utilization, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Capacity (short tons)				
Large producers	***	***	***	***	***
Small producers	***	***	***	***	***
All producers	3,006,986	3,091,358	3,150,839	2,351,889	2,382,289
	Production (short tons)				
Large producers	***	***	***	***	***
Small producers	***	***	***	***	***
All producers	1,971,290	2,002,683	2,148,023	1,595,223	1,527,127
	Capacity utilization (percent)				
Large producers	***	***	***	***	***
Small producers	***	***	***	***	***
All producers	65.6	64.8	68.2	67.8	64.1
	Share of production (percent)				
Large producers	***	***	***	***	***
Small producers	***	***	***	***	***
All producers	100.0	100.0	100.0	100.0	100.0

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

Figure III-1
Fabricated structural steel: U.S. producers' capacity, production, and capacity utilization, 2016-18, January to September 2018, and January to September 2019



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

Alternative products

As shown in table III-6, *** percent of production on shared equipment reported by large U.S. producers during 2018 was of fabricated structural steel. Five firms, ***, reported producing bridge sections, a product excluded from Commerce's scope, in all periods for which data were collected. ***, reported producing products which would fall under the remaining eight excluded products identified in Commerce's scope (i.e, data in the "Other FSS exclusions" row in table III-6),[8] [9] while four firms reported producing other products generally (i.e, data in the "All other products" row in table III-6).[10]

[8] In the prehearing report, NCI accounted for *** data regarding production of these other excluded products on the same machinery. NCI reported that its data pertained ***. While such building systems in full are excluded from the scope, parts of such buildings that otherwise meet scope the definition of fabricated structural steel are not.

For the staff report, NCI was instructed to include this production *** throughout the questionnaire. See "U.S. producers' U.S. shipments and exports" footnote 12 below for more information.

[9] Petitioner contends that the Commission should exclude data reported by NCI, arguing that the company "has included ***." Petitioner also argues that "…trim, {insulated metal panels}, and other non-structural PEMBS components are not in-scope merchandise, should not be considered part of the like product, and ***." Petitioner posthearing brief, p. 6 and "Answers to Commissioner Questions" pp. 120-122.

NCI responds by quoting in part the Final Scope Memo from Commerce ("The petitioner noted that the scope explicitly covers "steel products that have been fabricated for erection or assembly into structures" with no limitations regarding whether or not the FSS is essential to support the design loads of the structure") and arguing that "By definition, this includes panels, or "skins" as the roof and walls of a PEMB are referred to in the industry." Posthearing Brief of Cornerstone Building Brands, Inc. ("CBB") and Building Systems de Mexico, S.A. de C.V. ("BSM") "Questions from the Hearing," p.9.

NCI also states that "Petitioner further alleges that NCI may have over-reported its production by including non-FSS items such as doors and windows or *** purchased from third parties. This is not true; doors, windows, and third-party purchases are not included in what NCI reported to the Commission." Posthearing Brief of CBB and BSM, p. 4. (In addition, BlueScope ***.) Email from ***, January 31, 2020.

[10] Approximately *** percent of this "all other products" data in any given period is attributable to ***, which reported producing "***."

Table III-6
Fabricated structural steel: Large U.S. producers' overall capacity and production on the same equipment as subject production, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
Overall capacity	2,991,291	3,057,074	3,098,940	2,280,749	2,323,055
Production:					
Fabricated structural steel	***	***	***	***	***
Bridge sections	***	***	***	***	***
Other FSS exclusions	***	***	***	***	***
All other products	***	***	***	***	***
Out-of-scope production	***	***	***	***	***
Total production on same machinery	2,016,504	2,035,802	2,151,386	1,611,028	1,535,889
	Ratios and shares (percent)				
Overall capacity utilization	67.4	66.6	69.4	70.6	66.1
Share of production:					
Fabricated structural steel	***	***	***	***	***
Bridge sections	***	***	***	***	***
Other FSS exclusions	***	***	***	***	***
All other products	***	***	***	***	***
Out-of-scope production	***	***	***	***	***
Total production on same machinery	100.0	100.0	100.0	100.0	100.0

Note: This table contains data only from large producers, as small producers were not required to provide these data in the questionnaire.

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

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

Table III-7 presents U.S. producers' U.S. shipments, export shipments, and total shipments.[11] Commercial U.S. shipments, which comprised most U.S. shipments in each year of the data collection period, rose steadily from 2016 to 2018, and were slightly higher in interim 2019 than in interim 2018. Internal consumption (which exceeded *** percent of U.S. shipments during 2016-18) increased unevenly from 2016-18, while transfers to related firms decreased from 2016-18. While reported internal consumption was lower in interim 2019 than in interim 2018, transfers to related firms were higher in interim 2019 than in interim 2018

[11] Detailed shipment data by application (i.e., type of project) and for specified products are available in appendix F.

(*continued*...)

(though transfers were never more than *** percent of the total share of U.S. shipments in any period).[12]

[12] Combined, *** reported internal consumption and transfers to related firms are attributable to firms which *** reported producing fabricated structural steel for PEMBs: BlueScope, NCI, and Nucor. Firms were instructed to report as internal consumption any fabricated structural steel they produced for ultimate sale as PEMBs (since PEMBs as a whole are excluded from the scope definition, while such components that otherwise meet the scope definition of fabricated structural steel are not). In addition, BlueScope, NCI, and Nucor were asked to what extent the following components are included in their shipment data: wall panels, trim, doors, windows, roofing and/or decking systems, and insulated metal panels (see footnote 9).

NCI is the *** producer. The firm explained that its sales of fabricated structural steel largely occurred in ***. As explained in footnote 8, ***. For the staff report, NCI was instructed to include this production *** throughout the questionnaire. As revised, approximately ***.

***.

Nucor is the *** U.S. producer focused *** on PEMBs, and reported *** of its U.S. shipments ***. Nucor did not include *** in its U.S. commercial shipments, internal consumption, related transfers, or export shipments.

BlueScope, is the *** U.S. producer focused *** on PEMBs. The firm reported *** its shipments as ***. As the firm explained in its questionnaire: "***." See BlueScope's U.S. producer questionnaire response, question IV-7.

***.

Table III-7
Fabricated structural steel: Large U.S. producers' U.S. shipments, export shipments, and total shipments, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
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 short ton)				
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: This table contains data only from large producers, as small producers were not required to provide data related to internal consumption, company transfers, or export shipments.

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

Table III-8 presents U.S. producers' U.S. shipments by firm size. Shipments by quantity, value, and average unit values of shipments increased for both large and small firms from 2016-18. Large producers accounted for more than *** percent of quantity and value data.

Table III-8
Fabricated structural steel: U.S. producers' U.S. shipments by firm size, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
Large producers	***	***	***	***	***
Small producers	***	***	***	***	***
All producers	1,925,968	1,956,721	2,090,706	1,546,473	1,514,388
	Value (1,000 dollars)				
Large producers	***	***	***	***	***
Small producers	***	***	***	***	***
All producers	5,040,766	5,350,709	6,373,706	4,660,132	4,704,274
	Average unit value (dollars per short ton)				
Large producers	***	***	***	***	***
Small producers	***	***	***	***	***
All producers	2,617	2,735	3,049	3,013	3,106
	Share of quantity (percent)				
Large producers	***	***	***	***	***
Small producers	***	***	***	***	***
All producers	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)				
Large producers	***	***	***	***	***
Small producers	***	***	***	***	***
All producers	100.0	100.0	100.0	100.0	100.0

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

Captive consumption

Section 771(7)(C)(iv) of the Act states that–[13]

> *If domestic producers internally transfer significant production of the domestic like product for the production of a downstream article and sell significant production of the domestic like product in the merchant market, and the Commission finds that–*
>
> *(I) the domestic like product produced that is internally transferred for processing into that downstream article does not enter the merchant market for the domestic like product,*
>
> *(II) the domestic like product is the predominant material input in the production of that downstream article, and*
>
> *then the Commission, in determining market share and the factors affecting financial performance . . ., shall focus primarily on the merchant market for the domestic like product.*

Transfers and sales

As reported in table III-7 above, internal consumption accounted for between *** and *** percent of large U.S. producers' total shipments of fabricated structural steel between 2016 and 2018, while transfers to related firms accounted for between *** and *** percent.[14] In January-September 2019, these shares were *** percent and *** percent of total shipments, respectively.[15] The large majority of such shipments were of PEMB components. In 2018, PEMB component producers Bluescope, NCI, and Nucor accounted for *** short tons of the *** short tons of fabricated structural steel that was internally consumed, and *** short tons of the *** short tons of fabricated structural steel that was transferred to related firms.[16]

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

[14] Small U.S. producers (those with less than 5,000 short tons annual production of fabricated structural steel since 2016) were not required to report separate components of their U.S. shipments.

[15] With slight variations from period to period, U.S. shipments constituted approximately 98 percent of total shipments throughout the period for which data were collected.

[16] These producers of PEMB components – or more specifically *** – also accounted for *** of fabricated structural steel in 2018.

First statutory criterion in captive consumption

The first requirement for application of the captive consumption provision is that the domestic like product that is internally transferred for processing into that downstream article not enter the merchant market for the domestic like product. U.S. producers reported internal consumption (and limited volumes of transfers to related firms) of fabricated structural steel for the production of PEMBs.

BlueScope reported *** of its produced fabricated structural steel as ***. Nucor reported *** of its produced fabricated structural steel ***. Thus, *** entering the merchant market. NCI reported approximately *** percent of its produced fabricated structural steel ***, and approximately *** percent ***. NCI indicated that ***.[17]

Second statutory criterion in captive consumption

The second criterion of the captive consumption provision concerns whether the domestic like product is the predominant material input in the production of the downstream article that is captively produced. With respect to the downstream articles resulting from captive production, BlueScope reported that fabricated structural steel comprises *** percent of the finished cost of PEMBs, compared to *** percent for other inputs. NCI reported that fabricated structural steel comprises *** percent of the finished cost of PEMBs, compared to *** percent for other inputs. Nucor reported that fabricated structural steel comprises *** percent of the finished cost of PEMBs, compared to *** percent for other inputs.[18] Similarly, six U.S. purchasers reported purchasing parts for pre-engineered metal buildings. Of the five that provided data, one purchaser reported that fabricated structural steel accounted for *** percent of the share of total cost of the end-use product (metal buildings) compared to *** percent for other inputs; the other four firms reports that fabricated

[17] Email from ***, February 11, 2020.

[18] *** reported separate shares of costs accounted for by erection and installation services, while *** did not provide a separate accounting. For this reason, the shares shown above for *** sum to figures less than 100 percent.

structural steel accounted for *** percent of the share of total cost of the end-use product compared to *** percent for other inputs. [19]

U.S. producers' inventories

Table III-9 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 17.5 percent from 2016 to 2018, but were lower in interim 2019 than in interim 2018. Inventories as a ratio to U.S. production or U.S. shipments rose slightly from 2016 to 2018, but were lower in interim 2019 than in interim 2018 as inventory levels in interim 2019 were lower than in interim 2018.

[19] As with U.S. producers, U.S. purchasers were requested to account for separate shares of costs represented by erection and installation services, and therefore the shares shown above sum to figures less than 100 percent.

Table III-9
Fabricated structural steel: U.S. producers' inventories, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
Large U.S. producers' end-of-period inventories	***	***	***	***	***
	Ratio (percent)				
Ratio of inventories to.--					
U.S. production	***	***	***	***	***
U.S. shipments	***	***	***	***	***
Total shipments	***	***	***	***	***
	Quantity (short tons)				
Small U.S. producers' end-of-period inventories	***	***	***	***	***
	Ratio (percent)				
Ratio of inventories to.--					
U.S. production	***	***	***	***	***
U.S. shipments	***	***	***	***	***
	Quantity (short tons)				
Small and large U.S. producers' end-of-period inventories	110,174	116,598	129,419	129,664	112,554
	Ratio (percent)				
Ratio of inventories to.--					
U.S. production	5.6	5.8	6.0	6.1	5.5
U.S. shipments	5.7	6.0	6.2	6.3	5.6

Note: Total shipments are not presented for small producers, as small producers were not required to provide export shipments.

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

U.S. producers' imports and purchases

Six current or former U.S. producers directly import fabricated structural steel from subject sources. These U.S. producers' imports of fabricated structural steel are presented in table III-10.[20] [21]

Table III-10
Fabricated structural steel: U.S. producers' imports, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
***'s U.S. production	***	***	***	***	***
***'s U.S. imports from subject sources (***)	***	***	***	***	***
	Ratio (percent)				
***'s ratio to U.S. production of imports from subject sources (***)	***	***	***	***	***
	Narrative				
***'s reason for importing	***				
	Quantity (short tons)				
***'s U.S. production	***	***	***	***	***
***'s U.S. imports from subject sources (***)	***	***	***	***	***
	Ratio (percent)				
***'s ratio to U.S. production of imports from subject sources (***)	***	***	***	***	***
	Narrative				
***'s reason for importing	***				

Table continued on next page.

[20] ***.

[21] In the preliminary phase of these investigations, the Commission considered *** as a related party on the basis that its ***. The Commission found that appropriate circumstances did not exist to exclude *** from the domestic industry.

In this final phase, *** filed both a U.S. Producers' and Importers' questionnaire, and *** filed an Importers' questionnaire and Foreign Producers' questionnaire. *** production and import data are presented in table III-10. *** imports of subject merchandise (all from ***) were *** short tons in 2016, *** short tons in 2017, *** short tons in 2018, *** short tons in interim 2018, and *** short tons in interim 2019.

Table III-10--Continued
Fabricated structural steel: U.S. producers' imports, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
***'s U.S. production	***	***	***	***	***
***'s U.S. imports from subject sources (***)	***	***	***	***	***
	Ratio (percent)				
***'s ratio to U.S. production of imports from subject sources (***)	***	***	***	***	***
	Narrative				
***'s reason for importing	***.				
	Quantity (short tons)				
***'s U.S. production	***	***	***	***	***
***'s U.S. imports from.--					
***	***	***	***	***	***
***	***	***	***	***	***
Subject sources	***	***	***	***	***
	Ratio (percent)				
***'s ratio to U.S. production of imports from.--					
***	***	***	***	***	***
***	***	***	***	***	***
Subject sources	***	***	***	***	***
	Narrative				
***'s reason for importing	***.				
	Quantity (short tons)				
***'s U.S. production	***	***	***	***	***
***'s U.S. imports from subject sources (***)	***	***	***	***	***
	Ratio (percent)				
***'s ratio to U.S. production of imports from subject sources (***)	***	***	***	***	***
	Narrative				
***'s reason for importing	***				

Table continued on next page.

Table III-10--Continued
Fabricated structural steel: U.S. producers' imports, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
***'s U.S. production	***	***	***	***	***
***'s U.S. imports from subject sources (***)	***	***	***	***	***
	Ratio (percent)				
***'s ratio to U.S. production of imports from subject sources (***)	***	***	***	***	***
	Narrative				
***'s reason for importing	***.				

Note: *** percent of *** in all periods. *** percent of *** in all periods, and approximately *** percent of *** were of *** in any given period.

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

Table III-11 presents large U.S. producers' purchases. *** accounted for all U.S. producers' purchases of fabricated structural steel imported from Canada.[22] *** firm reported purchases from China.[23] Fourteen U.S. producers reported purchasing fabricated structural steel from other domestic producers.

Table III-11
Fabricated structural steel: Large U.S. producers' purchases, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
Purchases from U.S. importers of fabricated structural steel from:					
Canada subject	***	***	***	***	***
China	***	***	***	***	***
Mexico	***	***	***	***	***
Subject sources	***	***	***	***	***
Canada nonsubject	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All sources	***	***	***	***	***
Purchases from domestic producers	***	***	***	***	***
Purchases from other sources	***	***	***	***	***
Total purchases	***	***	***	***	***

Note: Purchases are not presented for small producers, as small producers were not required to provide these data.

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

[22] ***.
[23] ***.

U.S. employment, wages, and productivity

Table III-12 shows U.S. producers' employment-related data in regards to fabricated structural steel. Production and related workers ("PRWs") for all producers fell by approximately two percent (212 PRWs) from 2016 to 2018, but were higher in interim 2019 than in interim 2018. Hourly wages and productivity for all producers both increased from 2016 to 2018, and while hourly wages were slightly higher in interim 2019 than in interim 2018, productivity was slightly lower in interim 2019 than in interim 2018.

Table III-12
Fabricated structural steel: U.S. producers' employment related data, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
Large U.S. producers.--					
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 (short tons per 1,000 hours)	***	***	***	***	***
Unit labor costs (dollars per short ton)	***	***	***	***	***
Small U.S. producers.--					
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 (short tons per 1,000 hours)	***	***	***	***	***
Unit labor costs (dollars per short ton)	***	***	***	***	***
Large and small U.S. producers.--					
Production and related workers (PRWs) (number)	20,789	20,446	20,577	20,828	21,342
Total hours worked (1,000 hours)	47,494	46,761	47,111	35,896	36,156
Hours worked per PRW (hours)	2,285	2,287	2,289	1,723	1,694
Wages paid ($1,000)	1,167,533	1,166,030	1,254,867	918,347	949,984
Hourly wages (dollars per hour)	$24.58	$24.94	$26.64	$25.58	$26.27
Productivity (short tons per 1,000 hours)	41.5	42.8	45.6	44.4	42.2
Unit labor costs (dollars per short ton)	$592	$582	$584	$576	$622

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

As labor availability was identified as an important variable in capacity, large firms were asked to include more detail related to employment data, including data on any PRWs in their firm which were not involved in the production of fabricated structural steel. In addition, regarding production of fabricated structural steel, firms were asked how many employees were involved in "floor" operations (e.g., fabrication and welding) compared to "other" operations (e.g., design, sales, or other office activities).[24] These data are presented in table III-13.

For large firms, PRWs engaged in floor production of fabricated structural steel accounted for the largest shares of workers, hours worked, and wages paid throughout the period for which data were collected, followed by PRWs engaged in other production of fabricated structural steel. PRWs engaged in other productive activities consistently accounted for *** percent of total PRWs, suggesting limits to labor resources available for re-allocation among reporting firms.

Thirty-three U.S. producers provided further narrative information with their employment data. Seven firms attested to skilled labor availability as a concern, and 10 firms discussed import competition as a constraint in their efforts to increase employment. Several firms noted the generally tight labor market as a factor in rising wages over the period of data collection.

[24] These data for floor-based and other operations for large U.S. producers in regards to fabricated structural steel are presented collectively in table III-12.

Table III-13
Fabricated structural steel: Large U.S. producers' detailed employment related data, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity				
PRWs (number).--					
Floor production	***	***	***	***	***
Other production	***	***	***	***	***
Total (Fabricated structural steel "FSS")	***	***	***	***	***
Rest of company	***	***	***	***	***
Total	***	***	***	***	***
Hours worked by PRWs (1,000 hours).--					
Floor production	***	***	***	***	***
Other production	***	***	***	***	***
Total (FSS)	***	***	***	***	***
Rest of company	***	***	***	***	***
Total	***	***	***	***	***
Wages paid to PRWs ($1,000).--					
Floor production	***	***	***	***	***
Other production	***	***	***	***	***
Total (FSS)	***	***	***	***	***
Rest of company	***	***	***	***	***
Total	***	***	***	***	***
	Share of quantity (percent)				
PRWs.--					
Floor production	***	***	***	***	***
Other production	***	***	***	***	***
Total (FSS)	***	***	***	***	***
Rest of company	***	***	***	***	***
Total	100.0	100.0	100.0	100.0	100.0
Hours worked by PRWs.--					
Floor production	***	***	***	***	***
Other production	***	***	***	***	***
Total (FSS)	***	***	***	***	***
Rest of company	***	***	***	***	***
Total	100.0	100.0	100.0	100.0	100.0
Wages paid to PRWs.--					
Floor production	***	***	***	***	***
Other production	***	***	***	***	***
Total (FSS)	***	***	***	***	***
Rest of company	***	***	***	***	***
Total	100.0	100.0	100.0	100.0	100.0

Note: "Floor production" refers to data on employees involved in floor-based production activities (e.g., fabrication and welding) for fabricated structural steel. "Other production" refers to data on employees involved in other production activities (e.g., design, sales, or other office activities) for fabricated structural steel.

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 245 firms believed to be importers of subject fabricated structural steel, as well as to all recipients of U.S. producer questionnaires.[1] Usable questionnaire responses were received from 74 companies. One hundred and nine firms reported that they did not import fabricated structural steel into the United States. The response coverage, based on *** for imports under the primary HTS numbers, by quantity, for the 183 firms responding affirmatively or negatively to the Commission's questionnaire was the following:

- 54.4 percent of subject U.S. imports from Canada;
- 43.5 percent of U.S. imports from China;
- 71.4 percent of U.S. imports from Mexico;
- 54.7 percent of U.S. from subject sources;
- 100.0 percent of nonsubject U.S. imports from Canada;
- 41.1 percent of U.S. imports from all other sources;
- 42.7 percent of U.S. imports from nonsubject sources; and
- 52.4 percent of U.S. imports from all countries.

Import quantities and values presented in this report ("official imports, as adjusted") are derived from data submitted in response to Commission importer questionnaires and from official U.S. import statistics using the primary HTS numbers, adjusted to exclude import data (***) from companies that provided a complete response or a certified "no" response to the Commission's importer questionnaire. Import data for Industries Canatal, Inc. ("Canatal") were treated as nonsubject after Commerce issued a negative final determination in the Canada countervailing duty

[1] The Commission issued questionnaires to those firms identified in the petition and in the preliminary phase of these investigations, along with firms that, based on a review of data provided by *** may have accounted for at least 0.3 percent of U.S. imports from Canada, China, Mexico, and nonsubject sources, respectively, under HTS statistical reporting numbers 7308.90.3000, 7308.90.6000, and 7308.90.9590 ("primary HTS numbers") in 2018. Based on ***, questionnaires were issued to firms that accounted for the following shares of imports under the primary HTS numbers: *** percent from Canada, *** percent from China, *** percent from Mexico, and *** percent from nonsubject sources.

investigation and calculated a dumping margin of 0.00 percent for Canatal in its final determination in the Canada antidumping duty investigation. Based on these figures, the ratios of the 74 affirmatively responding importers' questionnaire data to official imports, as adjusted, during 2018, are as follows:[2]

- 53.1 percent of subject U.S. imports from Canada;
- 28.0 percent of U.S. imports from China;
- 46.2 percent of U.S. imports from Mexico;
- 39.9 percent of U.S. imports from subject sources;
- 100.0 percent of nonsubject U.S. imports from Canada;
- 25.2 percent of total U.S. imports from all other sources;
- 36.5 percent of U.S. imports from nonsubject sources; and
- 39.1 percent of total U.S. imports from all countries.

In light of the incomplete data coverage by the Commission's importer questionnaires in the final phase of these investigations, especially with respect to imports from China and all other nonsubject sources, import quantities and values presented in this report are based on official import statistics, as adjusted (see above), unless indicated otherwise. However, official U.S. import statistics are overstated to the extent that they include other products not within the scope of these investigations.

Table IV-1 lists all responding U.S. importers of in-scope fabricated structural steel from Canada, China, Mexico, and other sources, their locations, and their shares of U.S. imports, in 2018.

[2] The response rates presented are calculated based on a comparison of the quantity of 2018 U.S. imports of fabricated structural steel as reported in the responses to the Commission's U.S. importer questionnaires with total quantity of 2018 U.S. official imports, as adjusted. Questionnaire data coverage presented may be imprecise because the official Commerce statistics under these three HTS numbers may include other products not within the scope of these investigations, particularly with respect to HTS statistical reporting number 7308.90.9590. In addition, minor amounts of in-scope merchandise may be included under other HTS categories.

Table IV-1
Fabricated structural steel: U.S. importers, their headquarters, and share of total imports by source, 2018

Firm	Headquarters	Share of imports by source (percent)				
		Canada (subject and nonsubject)	China	Mexico	All other sources	All import sources
ADF	Terrebonne, QC	***	***	***	***	***
Almita Piling	Castle Rock, CO	***	***	***	***	***
ArcelorMittal	Martillac, FR	***	***	***	***	***
Babcock	Barberton, OH	***	***	***	***	***
Beauce-Atlas	Sainte-Marie De Beauce, QC	***	***	***	***	***
Bechtel	Houston, TX	***	***	***	***	***
Bid Group	St George, SC	***	***	***	***	***
BlueScope	Kansas City, MO	***	***	***	***	***
Breton	St-Bruno, Quebec, Canada, QC	***	***	***	***	***
Canam	Point Of Rocks, MD	***	***	***	***	***
Canatal[1]	Thetford Mines, QC	***	***	***	***	***
Cimolai	Rome, Italy,	***	***	***	***	***
Corey	San Jose Del Castillo, El Salto, JA	***	***	***	***	***
Dickerson	Driftwood, TX	***	***	***	***	***
EAB	Ancaster, ON	***	***	***	***	***
Enexio	Clearwater, FL	***	***	***	***	***
ESC	The Woodlands, TX	***	***	***	***	***
Evapco	Taneytown, MD	***	***	***	***	***
FabSouth	Fort Lauderdale, FL	***	***	***	***	***
FLSmidth	Midvale, UT	***	***	***	***	***
Formosa	Point Comfort, TX	***	***	***	***	***
GCGV	Gregory, TX	***	***	***	***	***
GE	Boston, MA	***	***	***	***	***
GMC	Statton Island, NY	***	***	***	***	***
Hansen	West Des Moines, IA	***	***	***	***	***
HD International	Vancouver, WA	***	***	***	***	***
Herrick	Stockton, CA	***	***	***	***	***
Holtec	Camden, NJ	***	***	***	***	***
Home Depot	Atlanta, GA	***	***	***	***	***
IRL-MEX	Chula Vista, CA	***	***	***	***	***

Table continued on next page.

Table IV-1--Continued
Fabricated structural steel: U.S. importers, their headquarters, and share of total imports by source, 2018

Firm	Headquarters	Share of imports by source (percent)				
		Canada (subject and nonsubject)	China	Mexico	All other sources	All import sources
Jay	Milford, NH	***	***	***	***	***
John Zink	Tulsa, OK	***	***	***	***	***
Laura Metaal	Dover, DE	***	***	***	***	***
Laura Metaal NL	Kerkrade, (The Netherlands)	***	***	***	***	***
Linde	Houston, TX	***	***	***	***	***
Marid	Windsor Junction, NS	***	***	***	***	***
McDermott Inc.	Houston, TX	***	***	***	***	***
Metal Perreault	Donnacona, QC	***	***	***	***	***
Midwest	Detroit, MI	***	***	***	***	***
Mitsui	New York, NY	***	***	***	***	***
Monadelphous	Pasadena, TX	***	***	***	***	***
NCI	Houston, TX	***	***	***	***	***
Nedcon	Doetinchem (The Netherlands)	***	***	***	***	***
Norgate	La Guadeloupe, QC	***	***	***	***	***
Northern States	Youngstown, OH	***	***	***	***	***
Ocean	Saint John, NB	***	***	***	***	***
Patton	Kolkata, WB	***	***	***	***	***
Potent	Port Lavaca, TX	***	***	***	***	***
Quiedan	Salinas, CA	***	***	***	***	***
Rad Build	Lathrop, CA	***	***	***	***	***
Sasol	Houston, TX	***	***	***	***	***
Sears Holdings	Hoffman Estates, IL	***	***	***	***	***
Shell	Houston, TX	***	***	***	***	***
SPG Dry	Bridgewater, NJ	***	***	***	***	***
Steel Construction	Driftwood, TX	***	***	***	***	***
Stonebridge	South Plainfield, NJ	***	***	***	***	***
Sturo	Lévis, QC	***	***	***	***	***
Sunpower	San Jose, CA	***	***	***	***	***
Sunpower Systems	Richmond, CA	***	***	***	***	***
Supreme Steel	Portland, OR	***	***	***	***	***

Table continued on next page.

Table IV-1--Continued
Fabricated structural steel: U.S. importers, their headquarters, and share of total imports by source, 2018

Firm	Headquarters	Share of imports by source (percent)				
		Canada (subject and nonsubject)	China	Mexico	All other sources	All import sources
Swiss Krono	Barnwell, SC	***	***	***	***	***
Takraf	Denver, CO	***	***	***	***	***
Torino	Setauket, NY	***	***	***	***	***
Tri State	Concord, NH	***	***	***	***	***
Trimax	Ste-Marie, QC	***	***	***	***	***
Vestas	Portland, OR	***	***	***	***	***
Vestas Blades	Brighton, CO	***	***	***	***	***
Vestas Nacelles	Brighton, CO	***	***	***	***	***
Vestas Towers	Pueblo, CO	***	***	***	***	***
Walters	Hamilton, ON	***	***	***	***	***
Wartsila	Houston, TX	***	***	***	***	***
Westinghouse	Cranberry Township, PA	***	***	***	***	***
Witron	Arlington Heights, IL	***	***	***	***	***
Total		100.0	100.0	100.0	100.0	100.0

[1] Import data for Canatal were treated as nonsubject after Commerce issued a negative determination in the Canada countervailing duty investigation and calculated dumping rates of 0.00 percent for in its final determination in the Canada antidumping investigation.

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. imports

Table IV-2 and figure IV-1 present data for U.S. imports of fabricated structural steel from Canada (subject and nonsubject), China, Mexico, and all other sources. According to official import statistics, as adjusted, China was the largest subject source of U.S. imports of fabricated structural steel in 2018, accounting for 36.2 percent of total imports (by quantity) in 2018, followed by Canada at 24.4 percent, and Mexico at 16.9 percent. The share of the quantity of total U.S. imports of fabricated structural steel held by the subject sources combined increased from 74.2 percent of total U.S. imports in 2016 to 77.5 percent in 2018 but was 61.6 percent of total imports during January-September ("interim") 2019. The quantity of U.S. subject imports of fabricated structural steel from all three subject countries combined increased by 5.3 percent from 2016 to 2018 but was 20.2 percent lower in interim 2019 than in interim 2018.

Table IV-2
Fabricated structural steel: U.S. imports, by source, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
U.S. imports from.--					
Canada subject	195,091	227,972	245,246	180,567	187,315
China	400,619	377,466	364,265	311,385	149,768
Mexico	144,917	125,285	170,194	120,637	151,864
Subject sources	740,627	730,723	779,706	612,588	488,946
Canada nonsubject	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	257,591	236,648	226,275	169,217	305,008
All import sources	998,218	967,370	1,005,981	781,806	793,954
	Value (1,000 dollars)				
U.S. imports from.--					
Canada subject	588,778	672,861	700,431	521,561	563,543
China	761,739	794,439	841,397	703,321	395,947
Mexico	265,226	238,532	298,321	218,056	258,401
Subject sources	1,615,743	1,705,832	1,840,149	1,442,938	1,217,890
Canada nonsubject	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	888,065	853,437	784,431	594,955	898,055
All import sources	2,503,808	2,559,269	2,624,580	2,037,894	2,115,945
	Unit value (dollars per short ton)				
U.S. imports from.--					
Canada subject	3,018	2,952	2,856	2,888	3,009
China	1,901	2,105	2,310	2,259	2,644
Mexico	1,830	1,904	1,753	1,808	1,702
Subject sources	2,182	2,334	2,360	2,355	2,491
Canada nonsubject	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	3,448	3,606	3,467	3,516	2,944
All import sources	2,508	2,646	2,609	2,607	2,665

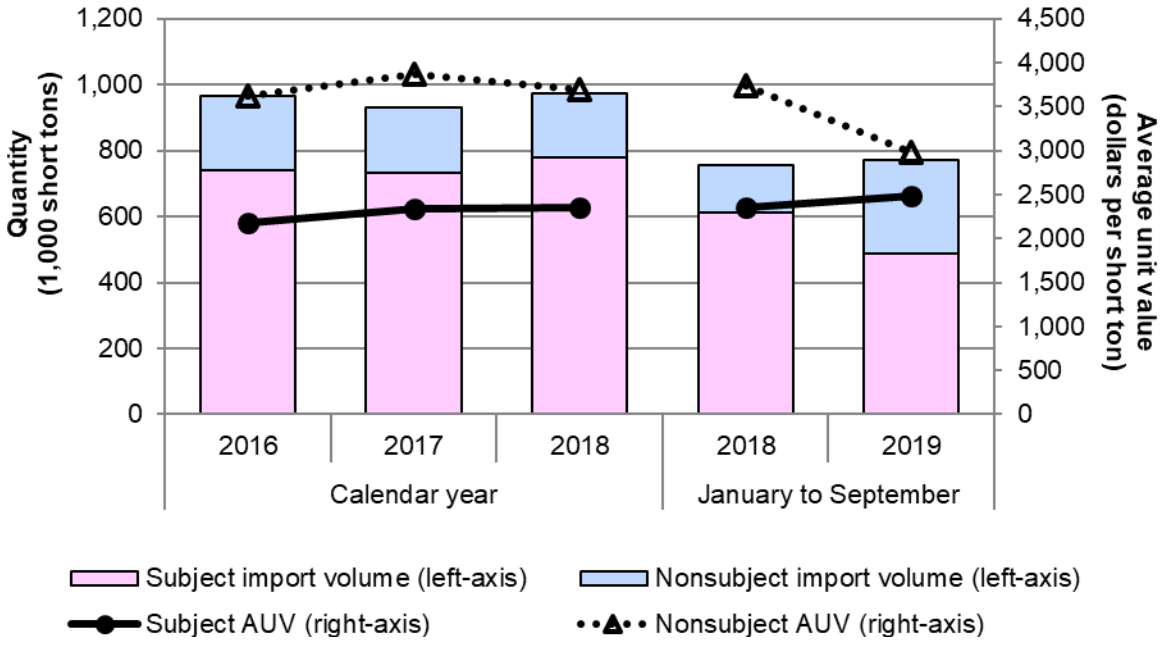
Table continued on next page.

Table IV-2--Continued
Fabricated structural steel: U.S. imports, by source, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Share of quantity (percent)				
U.S. imports from.--					
Canada subject	19.5	23.6	24.4	23.1	23.6
China	40.1	39.0	36.2	39.8	18.9
Mexico	14.5	13.0	16.9	15.4	19.1
Subject sources	74.2	75.5	77.5	78.4	61.6
Canada nonsubject	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	25.8	24.5	22.5	21.6	38.4
All import sources	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)				
U.S. imports from.--					
Canada subject	23.5	26.3	26.7	25.6	26.6
China	30.4	31.0	32.1	34.5	18.7
Mexico	10.6	9.3	11.4	10.7	12.2
Subject sources	64.5	66.7	70.1	70.8	57.6
Canada nonsubject	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	35.5	33.3	29.9	29.2	42.4
All import sources	100.0	100.0	100.0	100.0	100.0
	Ratio to U.S. production (percent)				
U.S. imports from.--					
Canada subject	9.9	11.4	11.4	11.3	12.3
China	20.3	18.8	17.0	19.5	9.8
Mexico	7.4	6.3	7.9	7.6	9.9
Subject sources	37.6	36.5	36.3	38.4	32.0
Canada nonsubject	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	13.1	11.8	10.5	10.6	20.0
All import sources	50.6	48.3	46.8	49.0	52.0

Source: Compiled from data submitted in response to Commission questionnaire and from *** and official U.S. import statistics using HTS statistical reporting numbers 7308.90.3000, 7308.90.6000, and 7308.90.9590, accessed November 22, 2019.

Figure IV-1
Fabricated structural steel: U.S. import volumes and prices, 2016-18, January to September 2018, and January to September 2019



Source: Compiled from data submitted in response to Commission questionnaire and from *** and official U.S. import statistics using HTS statistical reporting numbers 7308.90.3000, 7308.90.6000, and 7308.90.9590, accessed November 22, 2019.

U.S. subject imports of fabricated structural steel from Canada (in terms of quantity) increased by 25.7 percent from 2016 to 2018 and were 3.7 percent higher in interim 2019 than in interim 2018. There were similar trends in the value of subject U.S. imports from Canada (albeit at different magnitudes). The average unit values of U.S. subject imports of fabricated structural steel from Canada, which were consistently the highest of the three subject countries, decreased by 5.4 percent from $3,018 per short ton in 2016 to $2,856 per short ton in 2018. The average unit value of U.S. imports from Canada was $2,888 per short ton during interim 2018 compared to $3,009 per short ton during interim 2019. The ratio of U.S. subject imports from Canada to U.S. production increased from 11.7 percent in 2016 to 13.4 percent in 2018. It was 13.3 percent in interim 2018 and 14.0 percent in interim 2019.

U.S. imports of fabricated structural steel from China (in terms of quantity) decreased by 9.1 percent from 2016 to 2018 and were 51.9 percent lower in interim 2019 than in interim

2018.[3] Meanwhile, the value of U.S. imports from China increased by 10.5 percent from 2016 to 2018, but the value of such imports was 43.7 percent lower in interim 2019 than in interim 2018. The average unit values of U.S. imports of fabricated structural steel from China increased by 21.5 percent from a low of $1,901 per short ton in 2016 to $2,310 per short ton in 2018. The average unit value of U.S. imports from China was $2,259 per short ton during interim 2018 compared to $2,644 per short ton during interim 2019. The ratio of U.S. imports from China to U.S. production decreased from 24.1 percent in 2016 to 20.0 percent in 2018. It was 22.9 percent in interim 2018 and 11.2 percent in interim 2019.

U.S. imports of fabricated structural steel from Mexico (in terms of quantity) increased by 17.4 percent from 2016 to 2018 and were 25.9 percent higher in interim 2019 than in interim 2018. There was a similar trend in the value of U.S. imports from Mexico (albeit at a different magnitude). The average unit values of U.S. imports of fabricated structural steel from Mexico, which were the lowest of the three subject countries during the period for which data were collected, declined overall by 4.2 percent from a high of $1,830 per short ton in 2016 to $1,753 per short ton in 2018. The average unit value of U.S. imports from Mexico was $1,808 per short ton during interim 2018 compared to $1,702 per short ton during interim 2019. The ratio of U.S. imports from Mexico to U.S. production increased from 8.7 percent in 2016 to 9.3 percent in 2018. It was 8.9 percent in interim 2018 and 11.3 percent in interim 2019.

The share of the quantity of U.S. imports of fabricated structural steel attributable to nonsubject sources declined from 25.8 percent of total U.S. imports in 2016 to 22.5 percent in 2018 and was 21.6 percent of total imports during interim 2018 and 38.4 percent in interim 2019.

Negligibility

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.[4] Negligible imports are generally defined in the Act, as amended, as imports from a country 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

[3] Products of China imported under HTS subheadings 7308.90.30, 7308.90.60, and 7308.90.95 became subject to an additional initial 25-percent ad valorem duty (annexes A and B of 83 FR 40823) on August 23, 2018, under Section 301 of the Trade Act of 1974.

[4] 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)).

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.[5]

From February 2018 to January 2019, the most recent 12-month period preceding the filing of the petitions in these investigations, imports from each subject country accounted for more than three percent of total U.S. imports of fabricated structural steel. Table IV-3 presents the individual shares of total imports accounted by subject countries by quantity during February 2018-January 2019 based on official imports, as adjusted.

Table IV-3
Fabricated structural steel: U.S. imports in the twelve-month period preceding the filing of the petition from February 2018 through January 2019

Item	February 2018 to January 2019	
	Quantity (short tons)	Share quantity (percent)
U.S. imports from.--		
Canada subject	248,851	24.5
China	350,192	34.5
Mexico	175,237	17.3
of which, Mexico AD	***	***
of which, Mexico CVD	***	***
All other sources	240,912	23.7
All import sources	1,015,193	100.0

Source: Compiled from data submitted in response to Commission questionnaire and from *** and official U.S. import statistics using HTS statistical reporting numbers 7308.90.3000, 7308.90.6000, and 7308.90.9590, accessed November 22, 2019.

According to official imports, as adjusted, during the period February 2018 through January 2019, subject imports from Canada accounted for 24.5 percent[6] and imports from China accounted for 34.5 percent of total reported imports. Imports from Mexico accounted for 17.3 percent of total reported imports. For the purposes of the countervailing duties investigation, subject imports from Mexico accounted for *** percent of total imports and

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

[6] Import data for Canadian firm Industries Canatal, Inc. were treated as nonsubject after Commerce issued a negative final determination in the Canada countervailing duty investigation and calculated dumping rates of 0.00 percent for Canatal in its final determination in the Canada antidumping duty investigation.

for the purposes of the antidumping duty investigation, subject imports from Mexico accounted for *** percent of total imports.[7]

Cumulation considerations

In assessing whether imports should be cumulated, the Commission determines whether U.S. imports from the subject countries compete with each other and with the domestic like product and has generally considered four factors: (1) fungibility, (2) presence of sales or offers to sell in the same geographical markets, (3) common or similar channels of distribution, and (4) simultaneous presence in the market. Information regarding channels of distribution, market areas, and interchangeability appear in Part II. Additional information concerning fungibility, geographical markets, and simultaneous presence in the market is presented below.

Fungibility

The Commission requested information concerning large U.S. producers' and U.S. importers' U.S. shipments of fabricated structural steel, by specific applications, for calendar year 2018.[8] These data are presented in table IV-4 and figure IV-2.

In 2018, shares of U.S. producers' and U.S. importers' combined shipments by application were led by commercial low-rise and industrial applications with 42.4 and 23.3 percent, respectively. U.S. producers' U.S. shipments accounted for *** percent of all shipments reported. Almost half of all U.S. producers' shipments were for commercial low-rise applications, followed by industrial and other applications at *** and *** percent, respectively. All import sources were well represented across applications, with the largest share of total U.S. import shipments going to industrial applications, at *** percent, followed by commercial low-rise applications, at *** percent.

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[7] In the Mexico countervailing duty investigation, Commerce calculated a subsidy rate of 0.01 for Building Systems de Mexico, S.A. de C.V., and in the Mexico antidumping duty investigation, Commerce calculated a dumping margin of 0.00 percent for Corey S.A. de C.V.

[8] High-rise construction includes any projects, residential or commercial, of 20 stories or more. Residential use includes the following: multi-story residential, including mixed residential and commercial sites, of less than 20 stories. Commercial use includes the following: office sites, retail, medical, or other commercial sites of less than 20 stories. Industrial use includes the following: oil and gas extraction, conveyance, and processing; mining extraction, conveyance, storage, and processing; industrial power generation facilities; petrochemical plants; cement plants; fertilizer plants; and industrial metal smelters. Sports/entertainment includes structures for stadiums, amusement parks, and other sports or entertainment venues.

Almost *** of U.S. shipments of subject imports from Canada were for commercial low-rise applications. Slightly more than *** of U.S. shipments of subject imports from China were for industrial applications. More than *** of U.S. shipments of subject imports from Mexico were for commercial applications.

Table IV-4
Fabricated structural steel: U.S. producers' and U.S. importers' U.S. shipments, by application, 2018

	High rise	Residential low rise	Commercial low rise	Industrial	Sports and entertainment	Other	All applications
	Quantity (short tons)						
U.S. producers	***	***	***	***	***	***	***
U.S. imports from.--							
Canada subject	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***
Mexico	***	***	***	***	***	***	***
Subject sources	***	***	***	***	***	***	***
Canada nonsubject	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***	***
All import sources	***	***	***	***	***	***	***
Combined producers and importers	136,780	76,798	979,158	538,583	133,801	442,302	2,307,422
	Share across (percent)						
U.S. producers	***	***	***	***	***	***	100.0
U.S. imports from.--							
Canada subject	***	***	***	***	***	***	100.0
China	***	***	***	***	***	***	100.0
Mexico	***	***	***	***	***	***	100.0
Subject sources	***	***	***	***	***	***	100.0
Canada nonsubject	***	***	***	***	***	***	100.0
All other sources	***	***	***	***	***	***	100.0
Nonsubject sources	***	***	***	***	***	***	100.0
All import sources	***	***	***	***	***	***	100.0
Combined producers and importers	5.9	3.3	42.4	23.3	5.8	19.2	100.0
	Share down (percent)						
U.S. producers	***	***	***	***	***	***	***
U.S. imports from.--							
Canada subject	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***
Mexico	***	***	***	***	***	***	***
Subject sources	***	***	***	***	***	***	***
Canada nonsubject	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***	***
All import sources	***	***	***	***	***	***	***
Combined producers and importers	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

Figure IV-2
Fabricated structural steel: U.S. producers' and U.S. importers' U.S. shipments, by application, 2018

* * * * * * *

The Commission also requested information concerning U.S. producers' and U.S. importers' U.S. shipments of fabricated structural steel in process plant modules,[9] solar steel beams,[10] parts used in pre-engineered metal building systems ("PEMBs"),[11] and all other in-scope fabricated structural steel products. These data are presented in table IV-5 and figure IV-3.[12]

Other in-scope fabricated structural steel products accounted for the largest share of U.S. shipments from all sources, except for Mexico, for which the largest share was parts used in PEMBs with *** percent.[13] Parts used in PEMBs also accounted for *** percent of U.S. producers' U.S. shipments. China was the principal import source for in-scope fabricated structural steel used in process plant modules, accounting for a majority of U.S. shipments from all import sources. In contrast, U.S. producers held a majority of shares of all U.S. shipments for every product type except for solar beams. The leading sources of U.S. shipments of solar beams were subject imports from Canada and China.

[9] Process plant modules include: (1) process plant modules containing pipes, cable trays, and/or equipment for the transmission and/or processing of gas, liquids, or chemicals and/or petrochemicals; and (2) carbon or alloy steel pipes which are cut, welded, punched, or drilled for the purpose of transmitting or processing gas, liquids, or chemicals and/or petrochemicals.

[10] Solar steel beams include fabricated steel beams designed for the exclusive use of supporting solar panels and related components.

[11] This category includes in-scope fabricated structural steel parts which are used in PEMBs, which are defined as complete metal buildings that integrate steel framing, roofing and walls to form one, pre-engineered building system, that meet Metal Building Manufacturers Association guide specifications. PEMBs are typically limited in height to no more than 60 feet or two stories.

[12] Domestic like product factor comparison responses and data comparing U.S. producers based on their sales volumes of these products is presented in appendix E, while detailed shipment data for these products reported by producers and importers are included in appendix F.

[13] This share is based on firms that submitted a questionnaire response, and as such might overstate slightly the concentration of parts used in pre-engineered metal building systems to the degree that the non-responding U.S. importers from Mexico import other fabricated structural steel.

Table IV-5
Fabricated structural steel: U.S. producers' and U.S. importers' U.S. shipments, by type of product, 2018

	Process plant modules	Solar beams	Parts for PEMBs	All other FSS	All products
	Quantity (short tons)				
U.S. producers	***	***	***	***	***
U.S. imports from.--					
Canada subject	***	***	***	***	***
China	***	***	***	***	***
Mexico	***	***	***	***	***
Subject sources	***	***	***	***	***
Canada nonsubject	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
Combined producers and importers	***	***	***	***	2,307,421
	Share across (percent)				
U.S. producers	***	***	***	***	100.0
U.S. imports from.--					
Canada subject	***	***	***	***	100.0
China	***	***	***	***	100.0
Mexico	***	***	***	***	100.0
Subject sources	***	***	***	***	100.0
Canada nonsubject	***	***	***	***	100.0
All other sources	***	***	***	***	100.0
Nonsubject sources	***	***	***	***	100.0
All import sources	***	***	***	***	100.0
Combined producers and importers	***	***	***	***	100.0
	Share down (percent)				
U.S. producers	***	***	***	***	***
U.S. imports from.--					
Canada subject	***	***	***	***	***
China	***	***	***	***	***
Mexico	***	***	***	***	***
Subject sources	***	***	***	***	***
Canada nonsubject	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
Combined producers and importers	100.0	100.0	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. Data for process plant modules reflects U.S. shipments of fabricated structural steel used in process plant modules, not U.S. shipments of process plant modules.

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

Figure IV-3
Fabricated structural steel: U.S. producers' and U.S. importers' U.S. shipments, by type of product, 2018

* * * * * * *

Geographical markets

Fabricated structural steel produced in the United States is shipped nationwide.[14] In 2018, ***, show that almost *** percent of subject imports from Canada entered through the Eastern or Northern borders of the United States. Only imports from China entered each U.S region in substantial shares in 2018. More than *** percent of imports from Mexico entered through the Southern or Western borders. Table IV-6 presents U.S. import quantities of fabricated structural steel by source and border of entry during 2018.[15]

[14] See Part II for additional information on geographic markets.

[15] The "East" border of entry includes the following Customs entry districts for fabricated structural steel: Baltimore, MD; Boston, MA; Buffalo, NY; Charleston, SC; Charlotte, NC; New York, NY; Norfolk, VA; Ogdensburg, NY; Philadelphia, PA; Portland, ME; Providence, RI; San Juan, PR; Savannah, GA; St. Albans, VT; Virgin Islands; and Washington, DC. The "North" border of entry includes the following Customs entry districts for fabricated structural steel: Chicago, IL; Cleveland, OH; Detroit, MI; Duluth, MN; Great Falls, MT; Milwaukee, WI; Minneapolis, MN; Pembina, ND; and St. Louis, MO. The "South" border of entry includes the following Customs entry districts for fabricated structural steel: Dallas-Fort Worth, TX; El Paso, TX; Houston-Galveston, TX; Laredo, TX; Miami, FL; Mobile, AL; New Orleans, LA; Port Arthur, TX; and Tampa, FL. The "West" border of entry includes the following Customs entry districts for fabricated structural steel: Anchorage, AK; Columbia-Snake, OR; Honolulu, HI; Los Angeles, CA; Nogales, AZ; San Diego, CA; San Francisco, CA; and Seattle, WA.

Table IV-6
Fabricated structural steel: U.S. imports by border of entry, 2018

Item	Border of entry				
	East	North	South	West	All borders
	Quantity (short tons)				
U.S. imports from.-- Canada subject	***	***	***	***	***
China	129,949	66,898	98,860	169,106	464,814
Mexico	78	2	240,309	79,301	319,690
Subject sources	***	***	***	***	***
Canada nonsubject	***	***	***	***	***
All other sources	83,010	30,639	56,277	74,433	244,359
Nonsubject sources	***	***	***	***	***
All import sources	376,867	165,012	395,473	350,027	1,287,380
	Share across (percent)				
U.S. imports from.-- Canada subject	***	***	***	***	***
China	28.0	14.4	21.3	36.4	100.0
Mexico	0.0	0.0	75.2	24.8	100.0
Subject sources	***	***	***	***	***
Canada nonsubject	***	***	***	***	***
All other sources	34.0	12.5	23.0	30.5	100.0
Nonsubject sources	***	***	***	***	***
All import sources	29.3	12.8	30.7	27.2	100.0
	Share down (percent)				
U.S. imports from.-- Canada subject	***	***	***	***	***
China	***	***	***	***	***
Mexico	***	***	***	***	***
Subject sources	***	***	***	***	***
Canada nonsubject	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	100.0	100.0	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: Compiled from *** using HTS statistical reporting numbers 7308.90.3000, 7308.90.6000, and 7308.90.9590, accessed December 11, 2019.

Presence in the market

Table IV-7 presents monthly official U.S. import statistics, as adjusted, for subject countries and nonsubject sources. Figure IV-4 and IV-5 represent monthly official import statistics, as adjusted, for Canada, China, and Mexico and for subject and nonsubject sources. The monthly import statistics indicate that U.S. imports of fabricated structural steel from the three subject countries were present in each month during January 2016 to September 2019. Following the imposition of initial 25-percent *ad valorem* duty in August 2018 on products from China under Section 301 of the *Trade Act of 1974*, which included products imported under the primary HTS numbers 7308.90.30, 7308.90.60, and 7308.90.95, imports of fabricated structural steel from China began a trend of sharp decline, from 48,259 short tons in August 2018 to 20,124 short tons in September 2018, and to 11,544 short tons by September 2019.

Table IV-7
Fabricated structural steel: U.S. imports by month, January 2016 through September 2019

U.S. imports	Canada subject	China	Mexico	Subject sources	Canada nonsubject	All other sources	Nonsubject sources	All import sources
	Quantity (short tons)							
2016: January	***	44,058	14,169	***	***	17,707	***	88,581
2016: February	***	36,098	8,878	***	***	23,591	***	82,526
2016: March	***	40,583	9,470	***	***	28,196	***	91,426
2016: April	***	46,762	9,517	***	***	26,255	***	97,236
2016: May	***	39,062	10,622	***	***	22,353	***	90,764
2016: June	***	38,090	12,920	***	***	20,947	***	90,317
2016: July	***	32,312	12,593	***	***	28,134	***	93,113
2016: August	***	33,061	15,526	***	***	18,940	***	84,527
2016: September	***	30,611	14,810	***	***	17,988	***	77,729
2016: October	***	24,648	13,673	***	***	13,224	***	70,514
2016: November	***	28,840	11,659	***	***	18,064	***	75,890
2016: December	***	23,867	12,383	***	***	20,276	***	72,971
2017: January	***	27,413	11,358	***	***	22,647	***	76,827
2017: February	***	25,453	8,609	***	***	15,348	***	63,095
2017: March	***	22,786	10,366	***	***	16,185	***	65,500
2017: April	***	27,282	10,753	***	***	19,498	***	72,672
2017: May	***	34,685	10,669	***	***	20,649	***	82,568
2017: June	***	36,390	11,044	***	***	21,374	***	83,957
2017: July	***	37,097	10,587	***	***	20,285	***	85,422
2017: August	***	32,041	9,946	***	***	18,792	***	80,824
2017: September	***	26,102	10,297	***	***	17,928	***	71,005
2017: October	***	23,106	13,362	***	***	24,326	***	84,063
2017: November	***	24,382	9,926	***	***	17,239	***	70,767
2017: December	***	23,748	8,996	***	***	17,540	***	68,662
2018: January	***	29,763	10,973	***	***	15,517	***	72,563

Table continued on next page.

Table IV-7—Continued
Fabricated structural steel: U.S. imports by month, January 2016 through September 2019

U.S. imports	Canada subject	China	Mexico	Subject sources	Canada nonsubject	All other sources	Nonsubject sources	All import sources
	Quantity (short tons)							
2018: February	***	32,823	11,489	***	***	14,851	***	78,283
2018: March	***	24,590	12,413	***	***	17,610	***	71,143
2018: April	***	30,564	12,677	***	***	17,367	***	79,286
2018: May	***	39,377	13,318	***	***	20,046	***	92,986
2018: June	***	36,214	13,927	***	***	18,547	***	89,251
2018: July	***	44,737	14,980	***	***	18,660	***	98,327
2018: August	***	48,259	16,279	***	***	16,408	***	99,037
2018: September	***	20,124	14,565	***	***	14,954	***	66,062
2018: October	***	22,883	18,497	***	***	15,898	***	78,295
2018: November	***	15,270	16,243	***	***	18,103	***	69,630
2018: December	***	14,732	14,840	***	***	15,162	***	65,522
2019: January	***	16,483	16,106	***	***	23,010	***	76,260
2019: February	***	17,540	14,393	***	***	14,906	***	63,949
2019: March	***	14,935	16,289	***	***	20,157	***	73,027
2019: April	***	15,305	20,044	***	***	25,260	***	78,480
2019: May	***	12,870	17,697	***	***	25,415	***	72,465
2019: June	***	16,006	14,754	***	***	31,418	***	82,569
2019: July	***	15,586	18,405	***	***	38,330	***	92,828
2019: August	***	12,339	16,131	***	***	40,454	***	88,881
2019: September	***	11,554	16,881	***	***	50,354	***	101,628

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

Source: Compiled from *** using HTS statistical reporting numbers 7308.90.3000, 7308.90.6000, and 7308.90.9590, accessed December 11, 2019.

Figure IV-4
Fabricated structural steel: U.S. imports, by subject source, by month, January 2016 through September 2019

* * * * * * *

Figure IV-5
Fabricated structural steel: U.S. imports, by source, by month, January 2016 through September 2019

* * * * * * *

Apparent U.S. consumption

According to the American Institute of Steel Construction, apparent U.S. consumption of fabricated structural steel is largely driven by demand for non-residential construction, multi-story residential construction (including hotels and dormitories), non-building structures (including open-air stadiums, process and chemical plants, power plants, petroleum refineries, and other buildings that do not have a roof), and other non-structural applications (including rack systems, marine applications, trailers, transportation, and mobile homes). Non-building structures and non-residential construction represented the largest U.S. demand segments for fabricated structural steel, followed by non-structural applications and multi-story residential construction.[16] The demand for fabricated structural steel, which is driven primarily by activity in the non-residential and industrial construction markets, has increased modestly and at a steady pace since 2015, alongside U.S. spending increases in relevant construction sectors.[17]

Table IV-8 and figure IV-6 present data on apparent U.S. consumption for fabricated structural steel for 2016 to 2018, January-September 2018, and January-September 2019. These data are based on questionnaire responses from U.S. producers and official import statistics, as adjusted.[18] Apparent U.S. consumption, by quantity, increased from 2.9 million short tons in 2016 to 3.1 million short tons in 2018, equivalent to a 5.9 percent increase. Apparent U.S. consumption was 0.9 percent lower in interim 2019 than in interim 2018, a difference of 19,937 short tons. The value of apparent U.S. consumption increased from $7.5 billion in 2016 to $9.0 billion in 2018, an overall increase of 19.3 percent. The value of apparent U.S. consumption in interim 2019 was 1.8 percent higher than in interim 2018.

[16] *Structural Steel: An Industry Overview*, A White Paper by the American Institute of Steel Construction, August 2018, https://www.aisc.org/globalassets/aisc/publications/white-papers/structural_steel_industry_overview_2018.pdf, retrieved March 4, 2019.

[17] Petitioner's postconference brief, p. 20; and Corey's postconference brief, pp. 3-4.

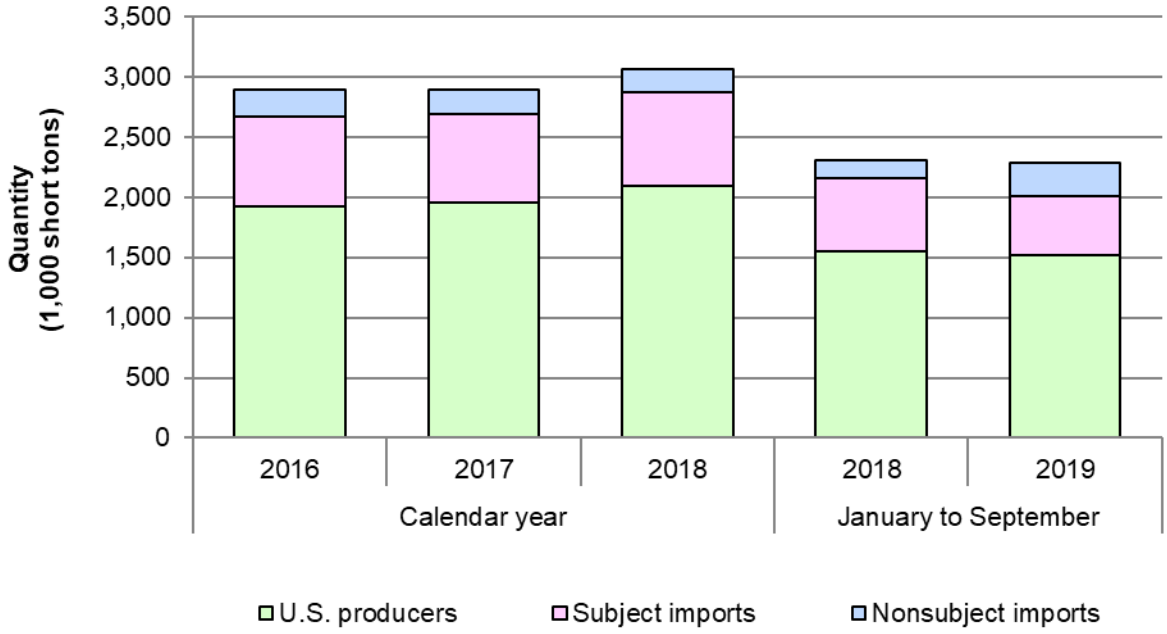
[18] Coverage estimates are provided at the beginning of Parts III and IV of this report.

Table IV-8
Fabricated structural steel: Apparent U.S. consumption, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
U.S. producers' U.S. shipments	1,925,968	1,956,721	2,090,706	1,546,473	1,514,388
U.S. imports from.--					
Canada subject	195,091	227,972	245,246	180,567	187,315
China	400,619	377,466	364,265	311,385	149,768
Mexico	144,917	125,285	170,194	120,637	151,864
Subject sources	740,627	730,723	779,706	612,588	488,946
Canada nonsubject	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	257,591	236,648	226,275	169,217	305,008
All import sources	998,218	967,370	1,005,981	781,806	793,954
Apparent U.S. consumption	2,924,186	2,924,091	3,096,687	2,328,279	2,308,342
	Value (1,000 dollars)				
U.S. producers' U.S. shipments	5,040,766	5,350,709	6,373,706	4,660,132	4,704,274
U.S. imports from.--					
Canada subject	588,778	672,861	700,431	521,561	563,543
China	761,739	794,439	841,397	703,321	395,947
Mexico	265,226	238,532	298,321	218,056	258,401
Subject sources	1,615,743	1,705,832	1,840,149	1,442,938	1,217,890
Canada nonsubject	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	888,065	853,437	784,431	594,955	898,055
All import sources	2,503,808	2,559,269	2,624,580	2,037,894	2,115,945
Apparent U.S. consumption	7,544,574	7,909,978	8,998,286	6,698,026	6,820,219

Source: Compiled from data submitted in response to Commission questionnaire and from *** and official U.S. import statistics using HTS statistical reporting numbers 7308.90.3000, 7308.90.6000, and 7308.90.9590, accessed November 22, 2019.

Figure IV-6
Fabricated structural steel: Apparent U.S. consumption, 2016-18, January to September 2018, and January to September 2019



Source: Compiled from data submitted in response to Commission questionnaire and from *** and official U.S. import statistics using HTS statistical reporting numbers 7308.90.3000, 7308.90.6000, and 7308.90.9590, accessed November 22, 2019.

U.S. market shares

U.S. market share data for fabricated structural steel are presented in table IV-9. U.S. producers' share of the domestic market, by quantity, increased by 1.7 percentage points, from 65.9 percent of the market in 2016 to 67.5 percent of the market in 2018. During interim 2019, U.S. producers accounted for 65.6 percent of the U.S. market by quantity. In terms of value, the U.S. producers' share of the domestic market, increased by 4.0 percentage points, from 66.8 percent of the market in 2016 to 70.8 percent of the market in 2018. During interim 2019, the U.S. producers accounted for 69.0 percent of the U.S. market, by value.

Subject imports' share of the U.S. market, by quantity, remained relatively flat, with 25.3 percent of the U.S. market in 2016, 25.0 percent in 2017, and 25.2 percent of the U.S. market in 2018. Subject imports' share of the U.S. market, by value, decreased by 1.0 percentage points from 21.4 percent of the U.S. market in 2016 to 20.4 percent of the U.S. market in 2018. The shares of the U.S. market of subject imports from Canada and Mexico both

increased from 2016 to 2018, while the share of subject imports from China decreased. Imports from subject sources held 21.2 percent of the U.S. market, by quantity, and 17.9 percent, by value, during interim 2019 compared with 26.3 percent of the U.S. market, by quantity, and 21.5 percent, by value, during interim 2018.

Nonsubject imports' share of the domestic market, by quantity, declined from 8.8 percent of the market in 2016 to 7.3 percent of the market in 2018. During interim 2019, nonsubject imports held 13.2 percent of the U.S. market, by quantity, compared with 7.3 percent during interim 2018. In terms of value, the nonsubject imports' share of the domestic market decreased by 3.1 percentage points—from 11.8 percent of the market in 2016 to 8.7 percent of the market in 2018. During interim 2019, nonsubject imports held 13.2 percent of the U.S. market, by value, compared with 8.9 percent during interim 2018.

Table IV-9
Fabricated structural steel: Market shares, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
Apparent U.S. consumption	2,924,186	2,924,091	3,096,687	2,328,279	2,308,342
	Share of quantity (percent)				
U.S. producers' U.S. shipments	65.9	66.9	67.5	66.4	65.6
U.S. imports from.--					
Canada subject	6.7	7.8	7.9	7.8	8.1
China	13.7	12.9	11.8	13.4	6.5
Mexico	5.0	4.3	5.5	5.2	6.6
Subject sources	25.3	25.0	25.2	26.3	21.2
Canada nonsubject	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	8.8	8.1	7.3	7.3	13.2
All import sources	34.1	33.1	32.5	33.6	34.4
	Value (1,000 dollars)				
Apparent U.S. consumption	7,544,574	7,909,978	8,998,286	6,698,026	6,820,219
	Share of value (percent)				
U.S. producers' U.S. shipments	66.8	67.6	70.8	69.6	69.0
U.S. imports from.--					
Canada subject	7.8	8.5	7.8	7.8	8.3
China	10.1	10.0	9.4	10.5	5.8
Mexico	3.5	3.0	3.3	3.3	3.8
Subject sources	21.4	21.6	20.4	21.5	17.9
Canada nonsubject	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	11.8	10.8	8.7	8.9	13.2
All import sources	33.2	32.4	29.2	30.4	31.0

Source: Compiled from data submitted in response to Commission questionnaire and from *** and official U.S. import statistics using HTS statistical reporting numbers 7308.90.3000, 7308.90.6000, and 7308.90.9590, accessed November 22, 2019.

Part V: Pricing data

Factors affecting prices

Raw material costs

The production of fabricated structural steel requires a variety of raw materials, including steel plate, steel structural shapes (such as beams, channels, angle, and hollow steel sections), steel bars, and other steel mill products, as well as numerous small metal fasteners.[1] Overall raw material costs increased as a share of the total cost of goods sold from *** percent in 2016 to *** percent in 2018.[2]

Prices for flat and long steel products are presented in figures V-1 and V-2, and prices for metal fasteners are presented in figure V-3. Prices for flat steel products increased overall between January 2016 and September 2019, but faced cyclical decreases at the end of each year. [3] Prices for certain long steel products increased as well, but to a lesser degree. Prices of fasteners were largely unchanged from 2016 to mid-2018 when the prices tended to increase. Most responding U.S. producers (63 ***) [4] and some importers (28 of 57) [5] reported that raw material prices had increased since 2016, while 50 U.S. producers and 27 importers reported that raw material prices had fluctuated. Firms cited section 232 tariffs[6] and overall changes in demand for the raw material cost increases, and many firms stated that they were unable to pass on the increased raw material costs to their customers.

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[1] Petitioner's postconference brief, Answers to Questions (Exhibit 1), pp. 8-9.

[2] Raw material costs as a share of the total cost of goods sold were *** percentage points lower in January-September 2019 than in January-September 2018.

[3] A combination of antidumping and countervailing duty orders on hot-rolled steel (including coiled plate) from Australia, Brazil, Japan, Korea, Netherlands, Turkey, and the United Kingdom entered into effect in the United States in October 2016. Subsequently, a combination of antidumping and countervailing duty orders on cut-to-length plate from Austria, Belgium, Brazil, China, France, Germany, Italy, Japan, Korea, South Africa, Taiwan, and Turkey entered into effect in the United States in January-May 2017.

[4] The following analysis includes a total of *** U.S. producers. In cases where not all U.S. producers have responded to specific questions, only the number of U.S. producers that responded to a specific question are presented.

[5] The following analysis includes a total of 74 U.S. importers. In cases where not all U.S. importers have responded to specific questions, only the number of U.S. importers that responded to a specific question are presented.

[6] Increased tariffs under section 232 entered into effect in the United States in March 2018.

Figure V-1
Flat carbon steel products: Index of prices of flat products, by month, January 2016-September 2019

* * * * * * *

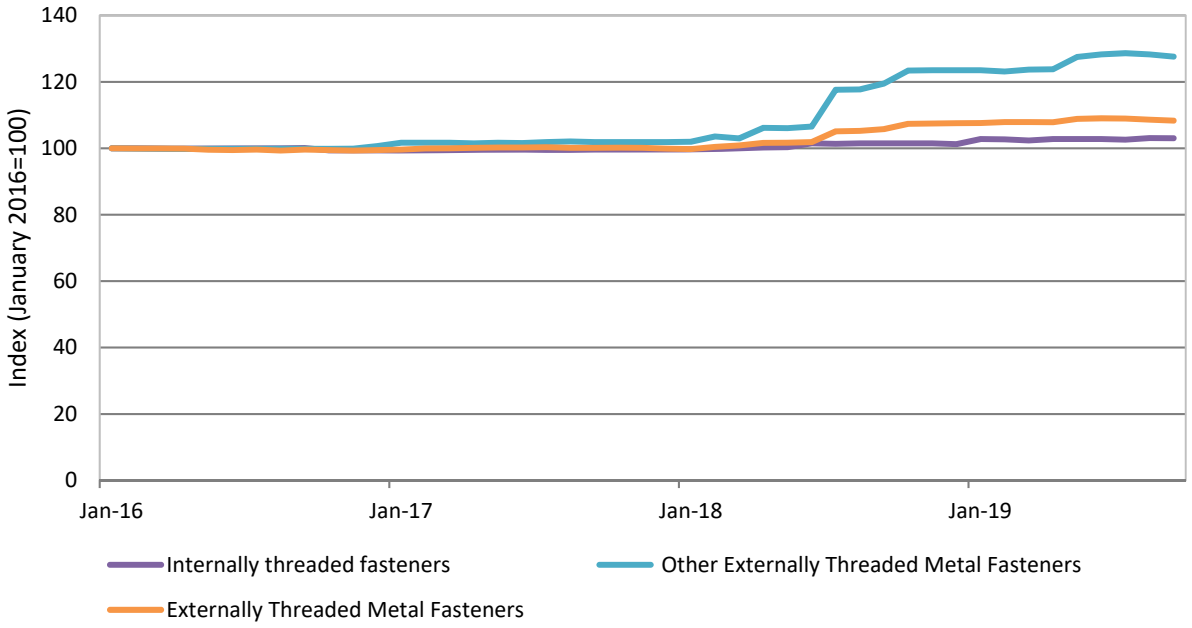
Source: ***, retrieved: December 11, 2019.

Figure V-2
Long steel products: Index of prices of long and tubular products, by month, January 2016-September 2019

* * * * * * *

Source: ***, retrieved: December 11, 2019.

Figure V-3
Metal fasteners non-aircraft: Index of prices of metal non-aircraft fasteners, by month, January 2016-September 2019



Source: U.S. Bureau of Labor Statistics, Producer Price Index by Industry, November 14, 2019. Retrieved from Federal Reserve Economic Data (FRED) database, Economic Research Division, Federal Reserve Bank of St. Louis, retrieved December 9, 2019, https://fred.stlouisfed.org/series/PCU3327223327223, https://fred.stlouisfed.org/series/PCU3327223327223199, https://fred.stlouisfed.org/series/WPU108103.

Respondents reported a variety of methods to capture raw material price changes. Respondents Corey and Related Companies stated that fabricators may be able to lock in raw material pricing before submitting a bid, although other respondents stated that this may not be possible for smaller fabricators without access to steel mill pricing.[7] Respondent Wison stated that it also locks in price prior to submitting a bid, and that submitted bids are valid for 90 days. If the award is granted after 90 days, Wison may revise its bid based on changes of raw material costs.[8] Respondent NCI stated that it does have an ability to increase prices according to some of its contract provisions, but is often negotiated with the customer.[9]

[7] Hearing transcript, pp. 299-300, 302 (Salas, Dickerson, Kelly).
[8] Hearing transcript, p. 301 (Zhao).
[9] Hearing transcript, p. 300 (Golladay).

Transportation costs to the U.S. market

Transportation costs for fabricated structural steel shipped from subject countries to the United States averaged 1.1 percent for Canada, 8.7 percent for China, and 1.3 percent for Mexico during 2018. These estimates were derived from official import data and represent the transportation and other charges on imports.[10]

U.S. inland transportation costs

Most responding U.S. producers (112 ***) and importers (50 of 55) reported that they typically arrange transportation to their customers. Most U.S. producers reported that their U.S. inland transportation costs ranged from 1 to 5 percent while most importers reported costs between less than 1 and 23 percent.

Importer ***, which incorporates fabricated structural steel into ***, stated that its ***.[11]

Pricing practices

Pricing methods

Most U.S. producers (116 ***) and importers (42 of 62) reported using a competitive bidding process. U.S. producers and importers also reported using transaction-by-transaction negotiations and contracts (table V-1). U.S. importers NCI and BlueScope, producers of PEMBs, do not sell through a competitive bidding process.[12]

[10] The estimated transportation costs were obtained by subtracting the customs value from the c.i.f. value of the imports for 2018 and then dividing by the customs value based on the primary HTS statistical reporting numbers (7308.90.9590, 7308.90.3000, and 7308.90.6000).

[11] *** importer questionnaire, III-15 Supply Constraints.

[12] BlueScope posthearing brief, p. 2.

Table V-1
Fabricated structural steel: U.S. producers' and importers' reported price setting methods, by number of responding firms

Method	U.S. producers	U.S. importers
Transaction-by-transaction	52	12
Bids	116	42
Contracts	24	12
Set price lists	2	3
Other	---	13
Responding firms	***	62

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.

Most U.S. producers (116 ***) and foreign producers (28 of 43) reported that they engage in a bidding process to win contracts, and 30 of 32 responding purchasers reported using a bidding process to purchase fabricated structural steel. Firms were asked the share of their commercial shipments that were sold through a competitive bidding process. Of the firms that responded to that question, 95.8 percent of U.S. producers' commercial shipments and 90.4 percent of importers' commercial shipments since 2016 were through a competitive bidding process.[13] [14] [15]

[13] U.S. producers *** are excluded from this calculation, as ***, and while ***, it reported that none of its sales were made through a competitive bidding process.

[14] Many firms submitted conflicting sales type and bid process responses. If firms reported 100 percent of sales were made through competitive bids, Staff revised the responses to the contract and bid follow-up questions.

[15] Firms that reported selling fabricated structural steel through methods other than competitive bidding were asked to estimate the share of their 2018 remaining sales (not sold through a competitive bidding process) that were sold through short-term contracts, annual contracts, long-term contracts, and spot sales. Of the very small share of shipments that U.S. producers and importers did not sell on a project basis through competitive bidding, U.S. producers reported that 72.1 percent were sold on the spot market, 25.6 percent were sold through traditional short-term contracts, less than 1 percent were sold through traditional annual contacts, and 1.9 percent were sold through traditional long-term contracts. U.S. importers reported that 30.3 percent were sold on the spot market, 57.4 percent were sold through traditional short-term contracts, 3.4 percent were sold through traditional annual contracts, and 8.8 percent were sold through traditional long-term contracts.

Most purchasers (22 of 32) reported that their purchase frequency is determined by specific project needs, and by the phase of construction.[16] Twenty-two of 32 responding purchasers reported that their purchasing frequency had not changed since 2016.

Bid process

As discussed above, most fabricated structural steel is sold through a multi-stage, competitive bidding process. However, pre-engineered metal building systems (PEMBs) are sold through a network of associated builders, and prices may be a result of negotiations rather than of a bidding process.[17]

Initial requests for bids

Purchasers request bids from firms that they expect to have the expertise and facilities to be able to provide the necessary fabricated structural steel.[18] Purchasers reported a variety of methods to compile the initial list of suppliers from which purchasers will request bids. These include past experiences with firms, commercial vetting, selection from a preferred bidder list, a pre-qualification list, firms' experience with similar projects, and responses to prequalification questionnaires. In addition, purchasers are increasingly likely to issue nondisclosure agreements during the bidding process.[19] Purchasers reported contacting an average of six suppliers, but responses ranged from 3 to 25 suppliers, depending on the size and complexity of the project.[20]

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[16] Two purchasers reported that they purchase product daily, one purchases weekly, six purchase monthly, two purchase quarterly, and one purchases annually.

[17] Hearing transcript, pp. 253, 328-29, 332, 334 (Pasley, Salas).

[18] For example, one respondent, purchaser Manhattan West Construction, reported that it examines a number of criteria to determine from which fabricators it will request a bid. Its criteria include: ability to handle size and complexity in design; experience in the New York market erecting large-scale high-rise steel frame buildings using local union labor; ability to provide performance bonds for the value of the structural steel package; and an organization that could offer creative engineering solutions which would reduce schedule risks by streamlining fabrication. Conference transcript, pp. 55, 173 (Kaplan, Caso).

[19] *** and ***.

[20] W&W/AFCO Steel stated that between four and eight fabricators will typically participate in a bid, with the number of participants decreasing with the size and complexity of the project. Novel Iron Works stated that larger projects tend to involve four to five bidders, while the smaller ones can involve ten or more bidders. Petitioner's postconference brief, p. 16, Answers to Questions (Exhibit 1), p. 51; Conference transcript, pp. 35, 41 (Cooper, Noveletsky).

Bid development, particularly for complex or difficult projects, tends to be costly because "each project has its own design" and may take hundreds of hours of preparation.[21] The contracts that fabricators bid on typically include design work (at least part of which must be done before the bid is accepted), the fabricated structural steel, and installation.

When bidding begins, the designs may be incomplete because different components of the design need to be coordinated, owners may not know exactly how they want the building to be built, and owner/developers may try to speed up production.[22] However, bid requirements are clarified when there are multiple rounds of bidding, and bids are "leveled out."[23] Purchasers also provide potential suppliers contractual drawings that do not include connection engineering, so producers generally include the design and engineering of those connections as part of their bid.

Bidding timeline

The number of rounds of bidding in a project tends to vary based on the size of the project. Smaller projects and public projects generally only involve one round, while larger projects may have up to five rounds. Most responding U.S. producers (96 ***) reported that bids typically have one to three rounds of bidding and 30 of those U.S. producers reported that bidding typically only involves one round. Most foreign producers (25 of 43) also reported that bids typically have one to three rounds of bidding and nine of those foreign producers reported that bidding typically only involves one round. U.S. producers most commonly reported that firms generally have one to two weeks to submit an initial bid following a request for proposal.[24] Responding foreign producers reported that they generally have three to four weeks to submit an initial bid following a request for proposal. Most purchasers reported that they allow for three weeks between the request for proposal and submission of initial bids. U.S. producer *** reported that there are some contractors that will "shop" around prices to drive down bids.

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[21] Conference transcript, pp. 54, 63, 100, 237 (Kaplan); Hearing transcript, pp. 44, 46 (Cooper).

[22] Conference transcript, pp. 100, 237, 257, 253-254, 258-259 (Noveletsky, Kanner, Dougan, Posteraro, Whelan).

[23] Hearing transcript, p. 188 (Cooper, Labbe).

[24] U.S. producers were also asked to report how long their firm has to submit its final bid after the initial request for proposal. Responses varied, and many indicated a misunderstanding of the question. However, most responses indicated that a similar length of time (1-2 weeks) is allowed during the initial and final bid.

In larger projects with three bidding rounds, purchasers develop a short list from initial budget bids. The next "formal" bidding rounds involve narrowed scope of the design to be used and a smaller number of potential bidders. In the final rounds, bids are awarded on the "best and final" bids submitted. Purchasers report that bids typically do not provide a price for a "fully compliant proposal."[25] Clarification of the project bids and qualification issues of the supplier are resolved through the multiple rounds.[26] Most purchasers (22 of 31) reported that not all firms make it to the final round of bidding.

Discussion of competing bids

The majority of responding U.S. producers (63 ***) reported that purchasers may discuss competing bids with them. Thirty-five of these U.S. producers reported that purchasers will specifically discuss price with them, although these discussions may occur after the bid has been awarded. U.S. producers reported that price feedback is often vague, but sometimes purchasers may suggest a percentage reduction in pricing that would be required to win a bid. Most responding foreign producers (24 of 32) reported that purchasers do not discuss competing bids with them, although several foreign producers stated that purchasers ask clarifying scope questions that can alert them to what their competitors are offering. Foreign producer *** reported that purchasers may give an indication of where their bid stands in a ranking, and *** stated that any discussions between bidder and purchaser are typically to make the scope of competing bids comparable, but that no pricing is discussed. Most purchasers (21 of 32) reported that they never discuss competing bids to get a lower bid price.[27]

Purchasers were asked how often they allow or request that bidders revise their bid on a particular sales agreement. Eleven purchasers reported that they rarely or never allow for bid revisions, nine reported that they sometimes allow for revisions, nine reported frequently allowing price revisions, and three reported always allowing for price revisions. Most purchasers (26 of 32) reported that their projects have complete specifications at the point of their request for quote. Some purchasers qualified their responses by stating that they provide all available information at the time that is provided by the designers, and in cases where specifications are not complete, requests for information are used to provide clarity to the

[25] Conference transcript, p. 257 (Guile).

[26] Conference transcript, p. 258 (Guile).

[27] Five purchasers reported sometimes discussing competing bid prices, three reported frequently discussing competing bid prices, and one purchaser reported always discussing competing bid prices.

scope. Most purchasers (19 of 32) reported that they rarely or never change the size, quantity, and/or grade requested for a project after the project has been awarded.[28]

Petitioners stated that occasionally, and depending on the relationship with between the customer and the fabricator, purchasers will share details of the winning bid.[29] Respondents, however, stated that communications after a bid are unreliable.[30]

Bid structure

Bids may be presented as a "lump sum," which provides a bottom line number inclusive of all aspects of the bid, or may be presented on a unit price basis, which prices out the expected fabricated parts for a project. Lump sum bids include detailing, connection engineering, fabrication, delivery, and erection of the fabricated structural steel and present the final cost to purchasers. There is very little flexibility with lump sum bids if a fabricator goes over budget. Importer *** reported that a typical construction bid will include some elements of fabricated structural steel supply, integral on-site fabricated structural steel fabrication, and other non-fabricated structural steel construction considerations including installation of piping supports, piping, painting/coating, insulation, fireproofing, and a myriad of specialty items (e.g., valves, pumps, motors, gauges, sensors, electrical, etc.). Unit price bids could vary based on specific potential design features that are determined after the final bid. For example, there may be unit prices for certain connectors used to connect the building façade if the type of façade (glass or stone) has not been determined when the contract is set.[31] "The contract could have allowances, unit prices, alternate prices, so {the total price is} not even final when the contract is awarded."[32] Thus unit price bids allow for flexibility for projects that are likely to undergo many changes throughout the project.[33]

Most responding U.S. producers (94 ***) reported that their bids included erection and installation services, with more than half of these producers (59) reporting that more than 75 percent of their bids include these services. Twelve foreign producers (***) reported providing some bids with services included. Five of these 12 foreign producers (***) reported that at least 75 percent of their bids

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[28] Ten purchasers reported that they sometimes change, three reported that they frequently change, and one reported that they always change the size, quantity, and/or grade requested for a project.

[29] Hearing transcript, p. 98 (Noveletsky).

[30] Hearing transcript, p. 297 (Dickerson).

[31] Conference transcript, pp. 252-253 (Posteraro).

[32] Conference transcript, p. 253 (Posteraro).

[33] ***.

included these services, and all but one of these foreign producers reported that they provided these services through subcontractors. Canadian producer *** reported that it provides erection services directly, and Canadian producer *** reported that it provides services both directly and indirectly.

Itemized bids and bid component breakouts

Slightly more than half of responding purchasers (17 of 32) reported that the bids they receive are not itemized. Purchaser *** reported that it collects bids on a lump sum basis that includes engineering. Purchaser *** stated that when it requests bids, it may construct internal estimates for required fabricated structural steel tonnage, but that is only for double-checking accuracy of submitted bids. It does not request line item breakouts because it prefers to transfer all risk of fabricated structural steel procurement and pricing to the subcontractor.[34] Generally *** discusses tonnage in internal meetings when discussing competing bids, but the information is not tracked and retained.[35] Purchaser *** reported that bids may be itemized, but by value per area of a project, rather than by fabricated structural steel. Purchaser *** reported that if fabricated structural steel is a major factor in the project, it may request that fabricated structural steel be priced separately, and purchaser *** reported that it typically does not accept lump sum proposals and that it requires enough information to compare the bids on multiple levels.

Petitioners stated that bid documents frequently itemize components of a bid and that customers frequently ask fabricators to identify the value of components in a total bid.[36]Canadian respondent Supreme stated that it seldom provides a breakout of its services, but when it does, it always qualifies that these breakouts are based on the total award of the job, and that the breakout is for accounting or evaluation purposes only.[37] Respondent Related Companies, however, reported that it does request breakouts, that fabricated structural steel is not always the driver of the overall project cost, and that it will sometimes split up fabricated structural steel and erections services into separate bids to get a more "aggressive price" of

[34] Staff telephone interview with ***, November 6, 2019.
[35] Staff telephone interview with ***, November 12, 2019.
[36] Petitioners posthearing brief, Exhibit 1, p. 38.
[37] Hearing transcript, p. 284 (Guile).

fabricated structural steel.[38] Respondent ADF International stated that it may not provide breakout costs because it may try to "front load" a project to fund the rest of it.[39] Respondent CISC stated that even in bids where the cost of fabricated structural steel is separately reported, individual line items are not up for separate negotiation.[40]

Sales terms and discounts

U.S. producers and importers typically quote prices on a delivered basis, and because most sales are made through competitive bids, most U.S. producers and importers do not offer discounts.

Price leadership

Several purchasers reported that there are no price leaders in the market due to the specificity required in each project. A few purchasers *** reported that steel mills (such as Nucor) are the primary price leaders. *** stated that unless a customer is directed to a single source, any particular supplier trying to manipulate the market would not be cost competitive. Other purchasers reported that Banker Steel is a price leader because of its large integrated fabrication and erection capacity; that William Hare, Qualico, and Trinity are price leaders with competitive pricing; Breton Steel because of ***, and Soletec because of its quality and price guarantee.

Of the six purchasers reporting purchases for PEMBs and of the seven purchasers reporting purchases of process plant modules (PPMs), none reported any price leaders.

Bid data

The Commission requested U.S. purchasers to provide the bid data for their five largest purchases of fabricated structural steel since January 1, 2016 that involved at least one bid from a U.S. producer and least one bid from a supplier of fabricated structural steel produced in Canada, China, or Mexico.[41] Fourteen purchasers provided usable bid data for 40 different

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[38] Hearing transcript, p. 285 (Kelly).

[39] Hearing transcript, p. 287 (Rooney).

[40] Respondent CISC posthearing brief, Appendix A, p. 20 and Appendix B, p. 9.

[41] During the preliminary phase of these investigations, pricing data were collected for six products that were broadly defined by the type of project or end use. However, much of the pricing data was unusable because of the difficulties that firms had in completing the questionnaire and irregularities and inaccuracies in the data that they did report. Ultimately only 5 of 57 U.S. producers provided usable price data.

projects.[42] [43] All reported bid lists (including bid lists with no U.S./subject comparisons) are included in appendix I. Note that these bid data likely do not include purchases of fabricated structural steel components for PEMBs because these products are generally not sold through a competitive bidding process.[44]

Of the 40 project bid lists, 11 bid lists included at least one bid that broke out the cost of fabricated structural steel from the total cost.[45] The following bid comparisons are based on total cost, which includes a variety of complex services and out-of-scope products. [46] [47]

Based on purchasers' questionnaires, 17 of 40 bids were awarded to U.S. producers of fabricated structural steel since 2016 (table V-2). Nineteen bids were awarded to subject Canadian producers. Two bids were awarded to Mexican producers.[48]

[42] Nine purchasers provided bid data for 16 purchases that involved only U.S. suppliers or only foreign producers, with no relevant bid comparison. Six purchasers (***) explicitly reported that they solicit bids only from domestic suppliers and did not include bid data in their questionnaires, as per questionnaire instructions.

[43] One purchaser, (***), that reported purchasing fabricated structural steel for PEMBs also reported bid data. The purchases for which *** reported bid lists that included ***, are similar to other reported bid lists.

[44] See pp. V-5 to V-6.

[45] Purchaser *** was only able to provide the cost of fabricated structural steel for the winning bids, and purchasers *** were able to provide cost breakouts for only certain bidding firms. Half of the bid lists without relevant bid comparisons (8 of 16) provided fabricated structural steel cost.

[46] Other costs included in the cost of the bid ranged from erection, painting, roof mechanization, ***, metal decking, shop drawings, cranes, design assist engineering, detailing, shoring, and supply of out-of-scope steel products.

[47] Purchaser *** reported that it was unable to gather bid data in the given time. Purchaser *** was unable to provide tonnage information. Purchaser *** reported that it awarded subcontracts to domestic fabricators who "in some instances subcontracted components of fabrication to Mexico, China, and Thailand."

[48] U.S. purchaser *** reported that its largest purchase was a ***. The purchaser identified the final total quantity of fabricated structural steel ***, but could not provide the final total delivered cost quote ***. Staff allocated the final total cost based on the share of the total quantity provided by ***.

Table V-2
Fabricated structural steel: Summary of bids, January 2016 through September 2019

Source	Count won	Won higher than US	Won lower than US
United States	17	NA	NA
Canada subject	19	1	18
China	---	---	---
Mexico	2	---	2
Subject sources	21	1	20
Canada nonsubject	2	---	2

Note: Bid data is analyzed on the basis of total cost of the bid, which may include other associated services and costs in addition to the cost of the fabricated structural steel.

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

Some purchasers solicit bids only from domestic sources. Four of 10 bid lists with bids from only U.S. producers were awarded to the lowest bid, and one was split between the bidding U.S. producers. Purchasers were asked to report the number of projects that were put up for bid since 2016. Nearly three-quarters (72 percent) of all projects put up for bid since 2016 involved only domestic offers; 18 percent involved offers from only U.S. and subject Canadian suppliers, 9 percent involved only U.S. and China suppliers, and 1 percent involved offers from U.S., Chinese, and either Canadian and/or Mexican suppliers.[49]

As shown in table V-3, winning bid prices for fabricated structural steel (including other associated services and costs) from subject sources were below those for U.S.-produced fabricated structural steel in 28 of 37 instances (355,454 short tons); margins of underbidding ranged from 0.3 to 55.1 percent, and averaged 4.3 percent. In the remaining nine instances (121,517 short tons), margins of overbidding ranged from 3.5 to 41.9 percent, and averaged 10.3 percent.

Purchaser *** provided the only bid comparison between a U.S. producer and a Chinese producer. This bid list was provided for the construction of ***. The bid was awarded to U.S. producer *** because it offered the “best value”.

[49] These data account for a removal of large purchaser *** reported *** projects, all of which involved only domestic suppliers. Staff has removed this outlier due to its size; however, if these projects are included, 95 percent of all projects since 2016 involved domestic only offers.

Table V-3
Fabricated structural steel: Instances of underbidding/overbidding and the range and average of margins, by country, January 2016 through September 2019

Source	Underbidding				
	Number of instances	Quantity (short tons)	Average margin (percent)	Margin range (percent)	
				Min	Max
Canada subject	***	***	***	***	***
China	***	***	***	***	***
Mexico	***	***	***	***	***
Subject sources	28	355,454	4.3	0.3	55.1
Canada nonsubject	***	***	***	***	***
Source	**(Overbidding)**				
	Number of instances	Quantity (short tons)	Average margin (percent)	Margin range (percent)	
				Min	Max
Canada subject	***	***	***	***	***
China	***	***	***	***	***
Mexico	***	***	***	***	***
Subject sources	9	121,517	(10.3)	(3.5)	(41.9)
Canada nonsubject	***	***	***	***	***

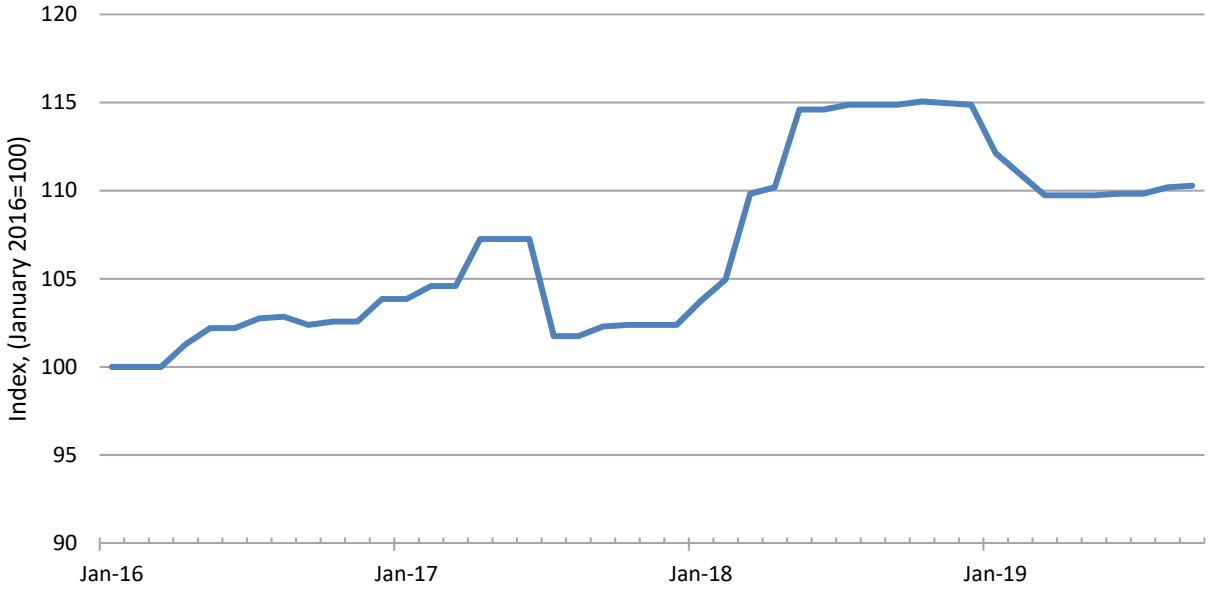
Note: Bid data is analyzed on the basis of total cost of the bid which may include other associated services and costs in addition to the cost of the fabricated structural steel.
Note: Bid data shown include all bid comparisons, regardless of winning bid. Bid lists that include bids from multiple subject sources will have more than one instance of overbidding or underbidding.

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

Publicly available price data

There are some publicly available price data for certain fabricated structural iron and steel. Prices for fabricated structural iron and steel for commercial, residential, institutional, and public buildings increased from January 2016 until mid-2017, when prices dropped abruptly. They rose again starting in January 2018 and until the second quarter of 2018 at which point prices remained stable for the rest of the year before declining slightly in early 2019 (figure V-4).

Figure V-4
Fabricated structural iron and steel for commercial, residential, institutional, and public buildings: price index, monthly, not seasonally adjusted, January 2016=100, January 2016-September 2019



Source: U.S. Bureau of Labor Statistics, Producer Price Index by Industry, November 14, 2019. Retrieved from Federal Reserve Economic Data (FRED) database, Economic Research Division, Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/PCU33231233231212, retrieved December 9, 2019.

Lost sales and lost revenue

In the preliminary phase of these investigations, the Commission requested that U.S. producers of fabricated structural steel report purchasers with which they experienced instances of lost sales or revenue due to competition from imports of fabricated structural steel from Canada, China, and Mexico during January 2015-September 2018. Six U.S. producers submitted lost sales and lost revenue allegations. The six responding U.S. producers identified 65 firms with which they lost sales or revenue (116 consisting of lost sales allegations, and 23 consisting of lost revenue allegations).

In the final phase of these investigations, of the *** responding U.S. producers, 58 reported that they had to reduce prices and 13 reported that they had to roll back announced price increases. Sixty firms reported that they had lost sales.

Staff contacted 128 purchasers and received responses from 33 purchasers.[50] Responding purchasers reported purchasing and importing 1.54 million short tons of fabricated structural steel during January 2016-September 2019 (tables V-4). As noted in Part II, purchasers (***) were unable to provide their purchases on the basis of weight, or did not track country source of their purchases, and are therefore not included in the following tables.

[50] Seven purchasers (***), submitted lost sales lost revenue survey responses in the preliminary phase, but did not submit purchaser questionnaire responses in the final phase of these investigations.

Table V-4
Fabricated structural steel: Purchasers' responses to purchasing patterns, by firm

Purchaser	Purchases and imports in January 2016 through September 2019 (short tons)			Change in domestic share[2] (pp, 2016-18)	Change in subject country share[2] (pp, 2016-18)
	Domestic	Subject sources	Nonsubject sources		
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Total	1,130,528	317,930	86,966	(1.0)	8.7

Note: Nonsubject Canadian producer Canatal may be included in these purchases.
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 33 purchasers, 18 reported that, since 2016, they had purchased imported fabricated structural steel from subject countries instead of U.S.-produced product: 15 reported purchasing Canadian product, 6 reported purchasing Chinese product, and 2 reported purchasing Mexican product (tables V-5 through V-6). Fifteen of these 18 purchasers reported that subject import prices were lower than the prices of U.S.-produced product, and 13 reported that price was a primary reason for purchasing imported product from at least one subject source rather than U.S.-produced fabricated structural steel.

Ten purchasers reported that Canadian prices were lower than U.S.-produced product, and also reported that price was a primary reason for the decision to purchase imported product from Canada rather than U.S.-produced product. Six firms reported that Chinese product was priced lower than U.S. product and four purchasers reported that price was the primary reason for purchasing Chinese product instead of domestic fabricated structural steel.[51] Two purchasers reported that Mexican product was priced lower than domestic fabricated structural steel, and that price was the primary reason they switched their purchases to Mexican fabricated structural steel.

Table V-5
Fabricated structural steel: Purchasers' responses to purchasing subject instead of domestic, by country

Source	Count of purchasers reporting subject instead of domestic	Count of purchasers reported that imports were priced lower	Count of purchasers reporting that price was a primary reason for shift	Quantity subject purchased (short tons)
Canada	15	10	10	***
China	6	6	4	***
Mexico	2	2	2	***
Any subject source	18	15	13	118,941

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

Thirteen purchasers estimated the quantity of fabricated structural steel from subject sources purchased instead of domestic product; quantities ranged from *** short tons to *** short tons (tables V-6 and V-7). Ten purchasers estimated the quantity of fabricated structural steel from Canada purchased instead of domestic product; quantities ranged from

[51] U.S. purchaser *** reported that it purchased *** short tons of imported fabricated structural steel from China, but that price was not a primary reason for the shift. Staff have excluded this quantity from tables V-5 and V-6.

*** short tons to *** short tons. Four purchasers estimated that they had purchased Chinese fabricated structural steel instead of domestic product. Quantities of Chinese product purchased instead of domestic product ranged from *** to *** short tons. Two purchasers indicated they had bought Mexican fabricated structural steel instead of domestic product, with estimated quantity ranging from *** short tons. Purchasers identified supply (***), the ability to meet schedule requirements (***), reliability and efficiency of Canadian firms (***), a change in project timing (***), and the ability to take on a "difficult project" (***) as non-price reasons for purchasing subject imports rather than U.S.-produced product.

Table V-6
Fabricated structural steel: 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 (short tons)	If No, non-price reason
***	***	***	***	***	***. Parties have debated the treatment of purchaser ***'s reported lost sales. Staff has included its reported lost sales based on other corroborating information in its submitted bid lists.
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***

Table continued on next page.

Table V-6 -- Continued
Fabricated structural steel: Purchasers' responses to purchasing subject imports (including Canada) 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 (short tons)	If No, non-price reason
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***

Table continued on next page.

Table V-6 -- Continued
Fabricated structural steel: Purchasers' responses to purchasing subject imports (including Canada) 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 (short tons)	If No, non-price reason
***	***	***	***	***	***.

Table continued on next page.

Table V-6 -- Continued
Fabricated structural steel: Purchasers' responses to purchasing subject imports (including Canada) 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 (short tons)	If No, non-price reason
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Total	Yes--18; No--12	Yes--15; No--4	Yes--13; No--5	***	

Note: Parties have debated the treatment of purchaser ***'s reported lost sales. Staff has included its reported lost sales based on other corroborating information in its submitted bid lists.

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

Of 33 purchasers, 3 reported that U.S. producers had reduced prices in order to compete with lower-priced imports from Canada (1 firm), China (1 firm), and Mexico (2 firms);[52] 22 reported that they did not know (tables V-7 and V-8). The reported estimated price reduction ranged from 3.0 to 10.0 percent. *** estimated that U.S. producers had decreased prices by 3.0 percent due to competition from Canadian product, indicating that it discussed price reductions with competitive bidders, regardless of the country of origin. Purchaser *** was not able to estimate the reduction in price, but noted that the decision to award the project to non-U.S. suppliers was driven both by price and schedule, and that during the period of purchase, no domestic supplier would commit to either of its criteria.

Table V-7
Fabricated structural steel: Purchasers' responses to U.S. producer price reductions

Source	Count of purchasers reporting U.S. producers reduced prices	Simple average of estimated U.S. price reduction (percent)	Range of estimated U.S. price reductions (percent)
Canada	1	3.0	***
China	1	10.0	***
Mexico	2	10.0	***
All subject sources	3	6.5	***

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

[52] Purchaser *** indicated that U.S. producers reduced prices due to competition of imports from China and Mexico. This purchaser did not provide an explanation for the estimated price reductions.

Table V-8
Fabricated structural steel: Purchasers' responses to U.S. producer price reductions, by firm

Purchaser	Producers reduced price (Y/N)	If produced reduced prices: Estimated U.S. price reduction (percent)	If produced reduced prices: Additional information, if available
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
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***	***	***	***
***	***	***	***
Total / average	Yes--3; No--7	6.5	

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

Thirteen U.S. producers (***) submitted lost sales and lost revenue allegations during the final phase of these investigations, seven of which reported new lost sales and lost revenue in 2019. Seven U.S. producers (***) submitted 40 allegations of lost sales in 2019 to imports from Canada, amounting to approximately $*** and approximately *** short tons. One U.S.

producer, (***) submitted nine allegations of lost revenue in 2019 due to imports from Canada, amounting to approximately $*** on approximately *** short tons.

Part VI: Financial experience of U.S. producers

Background

The Commission received *** usable responses from U.S. producers of fabricated structural steel.[1] More than half (***) of these usable responses were from small U.S. producers with less than 5,000 short tons production in each period since 2016. Small U.S. producers were asked to provide financial data limited to total net sales, total COGS, and total SG&A. As presented in figure VI-1, these *** small U.S. producers accounted for *** percent of total net sales in 2018.[2] Due to the narrower focus of information requested from small U.S. producers, detailed analysis in this section of the report is largely based on the responses of the *** large U.S. producers (those companies producing 5,000 short tons or more in at least one annual or annualized period since 2016). The *** responding large U.S. producers accounted for *** percent of net sales by quantity in 2018 of all responses (figure VI-1).

Net sales consisted primarily of commercial sales; however, five large U.S. producers (***) reported internal consumption and three (***) reported transfers to

[1] An additional *** U.S. producers submitted incomplete U.S. producer questionnaires and therefore are not included in the report. The list of these *** U.S. producers with incomplete data: ***.

[2] The vast majority (53 ***) of large U.S. producers reported financial results on the basis of generally accepted accounting principles (GAAP), although one U.S. producer (***) used cash basis, and two U.S. producers used other bases. Fourteen large U.S. producers' fiscal years do not end on December 31; however, all firms provided data on a calendar year basis.

Commission staff conducted a verification of NCI's U.S. producer questionnaire response. ***. Staff verification report, NCI, February 5, 2020.

related firms.[3] [4] These non-commercial sales combined accounted for *** percent and *** percent of net sales quantity and value, respectively, reported by large U.S. producers in 2018.[5]

Large U.S. producers of fabricated structural steel reported sales of out-of-scope products at the same facility. These out-of-scope products sold by large U.S. producers are: certain rebar (1), bridges and sections (8), pre-engineered building systems (1), roof and floor decking systems (3), open web steel bar joists and joist girders (2), steel poles and components (2), and other products such as ornamental iron, metal wall panels, steel tanks, and corregated pipe products (7).[6]

The fabricated structural steel industry's financial data are consistent with characterizations in the petition and from the preliminary conference testimony that this industry generally consists of small- to medium-sized companies, with much variation among U.S. producers' operations due to the number and complexity of projects in each specific

[3] Virtually all of the internal consumption were reported by fabricated structural steel producers that sold parts and complete PEMBs *** in 2018.

[4] Ten of the large U.S. producers reported purchasing inputs such as raw steel, angles, beams, plates, flanges, paint/coating, and detailing and engineering services from related suppliers in 2018. These 10 large U.S. producers reported valuing the purchases from related suppliers at fair market value or negotiated transfer prices. The share of inputs purchased from related suppliers ranged from 2 percent (***) to 73 percent (***) of each large producer's total COGS in 2018. U.S. producer questionnaires, V-6 and V-7.

[5] Small U.S. producers were asked to report on their total net sales only.

[6] Five of the large U.S. producers reported tolling arrangements; these companies' production of fabricated structural steel collectively represented 2.4 percent of reported total fabricated structural steel production. The five large U.S. producers reporting tolling arrangements were: ***.

period.[7] [8] The largest responding U.S. producers ***, [9] ***,[10] and ***[11] accounted for *** percent by quantity and *** percent by value of total net sales collectively reported by U.S. producers in 2018 (figure VI-1 and calculated from table G-1).

Operations on fabricated structural steel

Figure VI-1 shows the share of net sales quantity in 2018 of selected U.S. producers. Table VI-1 presents aggregated data of all *** U.S. producers' operations of fabricated structural steel, while table VI-2 presents the corresponding changes in average unit values. Table VI-3 presents aggregated data of *** large U.S. producers' operations of fabricated structural steel, with table VI-4 presenting the corresponding changes in average unit values.

[7] AISC witnesses testified that projects vary in length and size, resulting in revenues and expenditures spreading across different accounting periods. In addition, costs associated with bidding on projects not awarded may also spread across accounting periods, e.g. "time of bid" versus "time of award". Conference transcript, p. 119 (Kaplan) and p. 120 (Zalesne); Nate McGovern, Counsel to Banker Steel, email message to USITC staff, March 1, 2019. At the hearing, petitioner's counsel stated that product mix is an issue in this industry, with witnesses noting the mix of products both by source (subject imports mixed with domestic product in a bid) as well as by type (complexity of fabrication). Hearing transcript, p. 135 (Price) and p. 164 (Kaplan).

[8] The vast majority (89.7 percent) of large U.S. producers used job order cost accounting system reflecting the bid nature of the fabricated structural steel market. The other cost accounting systems used included combined job order and standard costs, combined job order and actual costs, percentage of completion, direct and allocated costs, and standard costs.

[9] ***. *** U.S. producer questionnaire, IV-7. *** accounted for *** internal consumption and *** transfers to related firms reported by U.S. producers.

[10] ***. Staff verification report, NCI, February 5, 2020.

[11] ***. *** also accounted for *** internal consumption reported by U.S. producers.

Table VI-5 presents aggregated data of *** small U.S. producers' operations of fabricated structural steel, with table VI-6 presenting the corresponding changes in average unit values. Table VI-7 and figure VI-2 present raw material costs of *** large U.S. producers. Appendix G presents selected company-specific financial data of the 10 largest fabricated structural steel U.S. producers based on 2018 production. The largest 10 U.S. producers presented in appendix G *** accounted for the majority (approximately ***) of net sales quantity and value reported by the large U.S. producers and by all U.S. producers.

Figure VI-1
Fabricated structrual steel: U.S. producers' share of total net sales quantity, 2018

* * * * * * *

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

Table VI-1
Fabricated structural steel: Results of operations of all U.S. producers, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
Total net sales	1,966,355	1,997,097	2,139,556	1,583,672	1,540,206
	Value (1,000 dollars)				
Total net sales	5,252,278	5,554,915	6,619,233	4,824,319	4,895,954
Total COGS	3,950,331	4,219,860	5,136,331	3,752,809	3,769,860
Gross profit or (loss)	1,301,947	1,335,055	1,482,902	1,071,510	1,126,094
Total SG&A expenses	992,862	1,026,863	1,107,800	810,249	824,073
Operating income or (loss)	309,085	308,192	375,102	261,261	302,021
	Unit value (dollars per short ton)				
Total net sales	2,671	2,781	3,094	3,046	3,179
Total COGS	2,009	2,113	2,401	2,370	2,448
Gross profit or (loss)	662	668	693	677	731
Total SG&A expenses	505	514	518	512	535
Operating income or (loss)	157	154	175	165	196
	Ratio to net sales (percent)				
Total COGS	75.2	76.0	77.6	77.8	77.0
Gross profit or (loss)	24.8	24.0	22.4	22.2	23.0
Total SG&A expenses	18.9	18.5	16.7	16.8	16.8
Operating income or (loss)	5.9	5.5	5.7	5.4	6.2
	Number of firms reporting				
Operating losses	***	***	***	***	***
Data	***	***	***	***	***

Note: Small U.S. producers (those with less than 5,000 short tons annual production of fabricated structural steel since 2016) were not required to report separate costs or to report income/expenses below the operation level.

Note: Five large U.S. producers (***) were not able to remove (or did not state that they were able to remove) revenue and costs related to post-production installation and erection services from their fabricated structural steel financials (see footnote 13 in this section of the report). These five large U.S. producers collectively accounted for *** percent of net sales by quantity and value of aggregated U.S. producers' data in 2018. As a result, aggregated financial data may be slightly overstated from the inclusion of erection and installation revenues and costs of these five companies.

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

Table VI-2
Fabricated structural steel: Changes in AUVs of all U.S. producers, between calendar years and between partial year periods

Item	Between Calendar years			Between partial year period
	2016-18	2016-17	2017-18	2018-19
	Change in AUVs (dollars per short ton)			
Total net sales	423	110	312	132
Average COGS	392	104	288	78
Gross profit or (loss)	31	6	25	55
SG&A expense	13	9	4	23
Operating income or (loss)	18	(3)	21	31

Note: Small U.S. producers (those with less than 5,000 short tons annual production of fabricated structural steel since 2016) were not required to report separate costs or to report income/expenses below the operation level.

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

Table VI-3
Fabricated structural steel: Results of operations of large U.S. producers, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
Commercial sales	***	***	***	***	***
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
Total net sales	***	***	***	***	***
	Value (1,000 dollars)				
Commercial sales	***	***	***	***	***
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
Total net sales	***	***	***	***	***
Cost of goods sold.-- Raw materials	***	***	***	***	***
Direct labor	***	***	***	***	***
Other factory costs	***	***	***	***	***
Total COGS	***	***	***	***	***
Gross profit or (loss)	***	***	***	***	***
SG&A expense	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***
Interest expense	***	***	***	***	***
All other expenses	***	***	***	***	***
All other income	***	***	***	***	***
Net income or (loss)	***	***	***	***	***
Depreciation/amortization	***	***	***	***	***
Cash flow	***	***	***	***	***
	Ratio to net sales (percent)				
Cost of goods sold.-- Raw materials	***	***	***	***	***
Direct labor	***	***	***	***	***
Other factory costs	***	***	***	***	***
Average COGS	***	***	***	***	***
Gross profit or (loss)	***	***	***	***	***
SG&A expense	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***
Net income or (loss)	***	***	***	***	***

Table continued on next page.

Table VI-3—Continued
Fabricated structural steel: Results of operations of large U.S. producers, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Ratio to total COGS (percent)				
Cost of goods sold.-- Raw materials	***	***	***	***	***
Direct labor	***	***	***	***	***
Other factory costs	***	***	***	***	***
Average COGS	***	***	***	***	***
	Unit value (dollars per short ton)				
Commercial sales	***	***	***	***	***
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
Total net sales	***	***	***	***	***
Cost of goods sold.-- Raw materials	***	***	***	***	***
Direct labor	***	***	***	***	***
Other factory costs	***	***	***	***	***
Average COGS	***	***	***	***	***
Gross profit	***	***	***	***	***
SG&A expense	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***
Net income or (loss)	***	***	***	***	***
	Number of firms reporting				
Operating losses	***	***	***	***	***
Net losses	***	***	***	***	***
Data	***	***	***	***	***

Note: “Large” U.S. producers are those producing 5,000 short tons or more in at least one annual or annualized period since 2016.

Note: Five large U.S. producers (***) were not able to remove (or did not state that they were able to remove) revenue and costs related to post-production installation and erection services from their fabricated structural steel financials (see footnote 13 in this section of the report). These five large U.S. producers collectively accounted for *** percent of net sales by quantity and value of aggregated U.S. producers’ data in 2018. As a result, aggregated financial data may be slightly overstated from the inclusion of erection and installation revenues and costs of these five companies.

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

Table VI-4
Fabricated structural steel: Changes in AUVs of large U.S. producers, between calendar years and between partial year periods

Item	Between Calendar years			Between partial year period
	2016-18	2016-17	2017-18	2018-19
	Change in AUVs (dollars per short ton)			
Commercial sales	***	***	***	***
Internal consumption	***	***	***	***
Transfers to related firms	***	***	***	***
Total net sales	***	***	***	***
Cost of goods sold.-- Raw materials	***	***	***	***
Direct labor	***	***	***	***
Other factory costs	***	***	***	***
Average COGS	***	***	***	***
Gross profit or (loss)	***	***	***	***
SG&A expense	***	***	***	***
Operating income or (loss)	***	***	***	***
Net income or (loss)	***	***	***	***

Note: “Large” U.S. producers are those producing 5,000 short tons or more in at least one annual or annualized period since 2016.

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

Table VI-5
Fabricated structural steel: Results of operations of small U.S. producers, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
Total net sales	***	***	***	***	***
	Value (1,000 dollars)				
Total net sales	***	***	***	***	***
Total COGS	***	***	***	***	***
Gross profit	***	***	***	***	***
Total SG&A expenses	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***
	Unit value (dollars per short ton)				
Total net sales	***	***	***	***	***
Total COGS	***	***	***	***	***
Gross profit or (loss)	***	***	***	***	***
Total SG&A expenses	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***
	Ratio to net sales (percent)				
Total COGS	***	***	***	***	***
Gross profit or (loss)	***	***	***	***	***
Total SG&A expenses	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***
	Number of firms reporting				
Operating losses	***	***	***	***	***
Data	***	***	***	***	***

Note: “Small” U.S. producers are those with less than 5,000 short tons of annual production of fabricated structural steel since 2016.

Note: The count of firms in the data varies from period to period as a result of small U.S. producers reporting no data in certain periods. Small U.S. producers were not required to report separate costs or to report income/expenses below the operation level.

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

Table VI-6
Fabricated structural steel: Changes in AUVs of small U.S. producers, between calendar years and between partial year periods

Item	Between Calendar years			Between partial year period
	2016-18	2016-17	2017-18	2018-19
	Change in AUVs (dollars per short ton)			
Total net sales	***	***	***	***
Average cost of goods sold	***	***	***	***
Gross profit	***	***	***	***
SG&A expense	***	***	***	***
Operating income or (loss)	***	***	***	***

Note: "Small" U.S. producers are those with less than 5,000 short tons of annual production of fabricated structural steel since 2016.

Note: Small U.S. producers were not required to report separate costs or to report income/expenses below the operation level.

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

Net sales

Net sales quantity and value both increased each year from 2016 to 2018 for the responding fabricated structural steel industy as a whole (table VI-1) and also when grouped as large producers (table VI-3) and small producers (table VI-5). Individually, from 2016 to 2018, 36 U.S. producers (17 small and 19 large) reported net sales quantity declines and 25 (13 small and 12 large) reported net sales value declines. *** were the three largest responding producers, consistently accounting for more than *** of net sales quantity and value from 2016 to 2018. Aggregated (table VI-1) and grouped as large (table VI-3) and small producers (table VI-5), net sales quantity was lower in January-September 2019 ("interim 2019") than in January-September 2018 ("interim 2018") while net sales value was higher.

On a firm-by-firm basis (appendix G), net sales quantity and value in each annual period varied dramatically, reflecting the project-based nature of the fabricated steel industry as well as the complexity of fabricated structural steel sold and the spread of revenue across more than one period for larger projects.[12] In addition, large U.S. producers included the revenue and cost related to design and engineering for in-scope fabricated structural steel (44) and

[12] Net sales quantity and value fluctuations from period to period may reflect the complexity of fabricated structural steel sold during a specific period examined and/or the spread of revenue and costs across more than one period for larger projects. Therefore, percent change analysis is less meaningful given the large variation of U.S. producer size, complexity and size of projects in the fabricated structural steel industry in any given period.

out-of-scope erection and installation costs (5).[13] The estimated revenue of the design and engineering services reported by the large U.S. producer varied from less than one percent (11) to 50 percent (***) of total revenue presented in table VI-3.[14] The estimated revenue of the out-of-scope erection and installation services reported by 42 large U.S. producers varied from less than four percent (***) to 49 percent (***) of total revenue (data for these out-of-scope services are removed from table VI-3 for all but five of the large U.S. producers).[15]

From 2016 to 2018, the value of net sales increased faster than the quantity of net sales, resulting in increasing average unit value of fabricated structrual steel sold (table VI-1). Average net sales value per unit ranged from a low of $2,671 per-short ton in 2016 to a high of $3,094 per-short ton in 2018 (table VI-1). Individually, U.S. producers reported extensive ranges in average net sales value per unit, as low as *** per-short ton (***), with more than *** of responding U.S. producers reporting per unit values of less than *** in at least one calendar year period) to as high as *** per unit (***), with eight of *** U.S. producers reporting net sales values per unit of more than *** per-short ton in at least one calendar year period). Average net sales value per unit was higher in interim 2019 than in interim 2018 for responding U.S. producers (aggregated and when grouped separately as large and small producers, tables VI-1, VI-3, and VI-5, respectively).

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[13] Most large U.S. producers (72.4 percent) reported providing out-of-scope erection and installation service in addition to sales of fabricated structural steel but removed the revenues and costs related to out-of-scope erection and installation from their financial data; however, five of these large U.S. producers either stated that they were not able to separate revenues and costs associated with out-of-scope post-production installation and erection services from their fabricated structural steel financials (***) or did not provide a response (***). As a result, aggregated financial data will be overstated by the inclusion of erection and installation revenues and costs by these companies. Combined, these five companies accounted for a very small share (*** percent) of net sales by quantity and value of aggregated U.S. producers data in 2018.

[14] *** is the only large U.S. producer reporting design and engineering services above 10 percent as a share of revenue. The three largest U.S. producers *** focused on selling parts or complete PEMBs (***) reported design and engineering services accounting for three to seven percent of total revenue in 2019.

[15] Two of the three largest U.S. producers *** focused on selling parts of complete PEMBs (***) reported no out-of-scope installation and erection services associated with their fabrication operations. One (***) reported providing out-of-scope installation and erection services accounting for *** of 2018 net sales of fabricated structural steel, and has removed the revenue and costs associated with these out-of-scope services.

Cost of goods sold and gross profit or (loss)

From 2016 to 2018, total COGS increased in the aggregate for all U.S. producers in both absolute and per unit values (table VI-1). For large U.S. producers, total COGS as well as specific COGS items (raw materials, direct labor, and other factory costs) also increased in both absolute and per unit values (table VI-3). Total COGS in the aggregate for all U.S. producers was higher in interim 2019 than in interim 2018 in both absolute and per unit values (table VI-1). For large U.S. producers, aggregated total COGS, direct labor, and other factory costs also were higher in both absolute and per unit values while raw material costs were lower in interim 2019 than in interim 2018 (table VI-3). As a ratio to net sales, aggregated COGS of all responding U.S. producers increased from 2016 to 2018 and was lower in interim 2019 than in interim 2018 (table VI-1).

As shown in table VI-3, raw materials represent the largest absolute value and increasing share of total COGS of large U.S. producers, from *** percent in 2016 to *** percent in 2018 of responding large U.S. producers (table VI-3). Table VI-7 and figure VI-2 present details on raw material inputs as a share of total raw material costs in 2018 of responding large U.S. producers. Steel plates alone accounted for 22.0 percent of total raw material costs in 2018, while structural steel shapes and other steel mill products combined as one category accounted for the largest share (62.2 percent) of total raw material costs in 2018.

Table VI-7
Fabricated structrual steel: Raw materials costs of large U.S. producers, 2018

Raw materials	Calendar 2018		
	Value (1,000 dollars)	Unit value (dollars per short ton)	Share of value (percent)
Steel plates	***	***	22.0
Structural steel shapes and other steel mill products[1]	***	***	62.2
Fabrication supplies[2]	***	***	3.7
Other raw materials[3]	***	***	12.1
Total, raw materials	***	***	100.0

[1] Structural steel shapes included angles, beams, channels, columns, flange shapes, girders, HSS, sheet piling, structural steel pipes and tubes, and tees.
[2] Fabrication supplies included materials needed to cut, drill, weld, join, bolt, bend, punch, pressure fit, mold, adhere, or other process (e.g. epoxy, bolts, weld wire).
[3] Other raw materials include: painting, galvanizing, gases, and chemicals.

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

Figure VI-2
Fabricated structrual steel: Raw materials costs of large U.S. producers, 2018

* * * * * * *

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

As a share of total COGS, direct labor ranged from *** percent in 2016 to *** percent in 2018 (table VI-3). Other factory costs also declined, from *** percent to *** percent of total COGS (table VI-3).[16]

As shown in appendix G, average raw material costs, direct labor, and other factory costs varied noticeably by company. These cost differences reflect underlying differences in raw materials input costs, direct labor, and other factory costs that vary from project to project and possible variations in accounting periods for project reporting noted earlier (see page VI-12).[17]

[16] Forty-four of the large U.S. producers reported in-scope design and engineering costs associated with their fabrication operations. These design and engineering costs were included in direct labor costs (18), other factory costs (20), selling expenses (5), and general and administrative expenses (9). U.S. producer questionnaire, V-5c.

[17] Witnesses at the conference testified that fabricated structural steel price and costs vary from project to project. One witness for petitioner testified that it sells "man hours not tons" because the labor of one job is not static and that its cost model is "fluid and varies, depending on project type" and five different projects being fabricated at one plant may use the same equipment and workers. Counsel for Canadian respondents testified that prices of fabricated structural steel can vary from $1,000 to $6,000 per ton, with factors such as complexity of fabrication, scheduling, and the cost of erection as part of the determining factor. Witnesses for Canatal, Canam, Supreme testified that the costs of a project are not based on steel tonnage, but rather based on the complexity of the fabrication and the scheduling with large variations in raw material and other costs. "It is based on raw material costs, the number of hours to detail, engineer, fabricate, and erect the structural steel." Canatal provided examples of two projects it worked on where the tonnage is not reflective of costs: Wynn Casino and Four Seasons Hotel in Boston. The Wynn Casino project had more steel involved, with 10 miles of welds and over 250,000 bolts while the Four Seasons project had custom made plates and 800 tons. The dollar per ton was more than twice as much in the Four Seasons project as in the Wynn Casino project. Conference transcript, p. 19 (Noonan), p. 79 (Cooper), p. 81 (Cooper), pp. 158-159 (Posteraro), p. 175 (Guile), and p. 173 (Caso).

Hearing testimony by petitioning group emphasized that square footage as a factor determining a facility's ability to calculate necessary capacity to fulfill project requirements. Hearing transcript, pp. 136-137 (Zalesne). Respondent included additional factors such as reducing "field hours" by increasing fabrication at the plant (less costly than "field hours") as another cost factor. Hearing transcript, pp. 213 (Guile) and 339-341 (Rooney, Guile, and Koppelaar).

In both absolute and per unit values, gross profit increased by approximately 10 percent from 2016 to 2018 for the aggregated responses of all U.S. producers (tables VI-1 and C-2) and also when grouped as large producers (table VI-3) and small producers (table VI-5). Gross profit margins declined for the aggregated U.S. producers (table VI-1) and also when grouped as large producers (table VI-3) from 2016 to 2018. The gross profit margin fluctuated for small producers, with an increase from 2016 to 2018 (table VI-5). The gross profit margin was higher in interim 2019 than in interim 2018 for the fabricated structural steel industry as a whole and also when grouped as large and small producers. Gross profit margins moved within a narrow range of less than three percentage points in the five periods for the aggregated industry and also broken out as large and small produces (presented in tables VI-1, VI-3, and VI-5).

Selling, general, and administrative expenses and operating income or (loss)

From 2016 to interim 2019, aggregated SG&A expense ratios (i.e., total SG&A expenses divided by net sales) for all responding U.S. producers were relatively constant, starting at a high of 18.9 percent in 2016 to a low of 16.7 in 2018, with the same SG&A expense ratio in interim 2018 and interim 2019 (table VI-1). Large U.S. producers reported slightly higher SG&A expense ratios than the industry total, ranging from *** percent to *** percent (table VI-3), while small U.S. producers reported slightly lower SG&A expense ratios than the industry total, ranging from *** to *** percent (table VI-5). Selling expenses were approximately one-fourth of total SG&A costs and approximately five percent as a share of revenue of the responding

large U.S. producers, increasing from 2016 to 2018 and were lower in interim 2019 than in interim 2018. Small producers were not asked to break out selling expenses from their total SG&A expenses.

From 2016 to 2018, operating income fluctuated, declining from $309.1 million in 2016 to $308.2 million in 2017 before increasing to $375.1 million in 2018 (tables VI-1 and C-1).[18] Operating income was higher in interim 2019 than in interim 2018.[19] Three of the large U.S. producers (***) reported the largest absolute value increases in operating income (over $***) from 2016 to 2018. Aggregated for the industry, operating margins (i.e. operating income divided by net sales) fluctuated within half of a percentage point, from 5.9 percent in 2016, down to 5.5 percent in 2017, and increased to 5.7 percent in 2018 (table VI-1). Like operating income, operating margins were higher in interim 2019 than in interim 2018.

From 2016 to 2018, (***) reported the highest operating income values of the top 10 U.S. producers (appendix G), with each company reporting mixed trends. *** reported the highest operating income values, ranging from $*** to $*** from 2016 to 2018. *** operating income increased from $*** in 2016 to $*** in 2017 then increased sharply to $*** in 2018, but reported lower operating income in interim 2019 than in interim 2018. ***'s operating income increased from 2016-17 but declined from 2017-18, with *** reporting an overall increase while *** reported an overall decline from 2016 to 2018 (appendix G). Operating margins of individual U.S. producers varied noticeably in the three calendar years and two interim periods, ranging from the lowest operating margin of negative *** to the highest operating margin of ***.[20] The project-based business environment of fabricated structural steel industry and revenue and cost recognition timing may explain the large variations of operating profits of U.S. producers.[21]

[18] Twenty of the large U.S. producers reported operating losses in one or more years from 2016 to 2018. U.S. producer questionnaire, V-9a.

[19] Twelve of the large U.S. producers reported operating losses in both January-September 2018 and January-September 2019. U.S. producer questionnaires, V-9a.

[20] U.S. producer questionnaires, II-1 and V-9a.

[21] The three *** U.S. producers (primarily selling PEMB parts and/or complete systems) reported large variations in operating margins. *** reported relatively steady operating margins of *** percent in 2016, *** percent in 2017, and *** percent in 2018; *** operating margins were higher in interim 2019 than in interim 2018. *** while ***.

Other expenses and net income or (loss)

Responding large U.S. producers' interest expenses decreased from 2016 to 2018 and expenses were lower in interim 2019 than in interim 2018. All other expenses and income increased from 2016 to 2018; all other expenses were higher while all other income was lower in interim 2019 than in interim 2018.[22] As a share of revenue, interest expenses and all other expenses and income fluctuated within a narrow range, and accounted for less than four percent of total reported revenue.[23]

From 2016 to 2018, net income fluctuated but increased over the period by *** percent, from $*** in 2016 to $*** in 2017 before declining to $*** in 2018; net income was lower in interim 2019 than in interim 2018 (tables VI-3 and C-1). *** reported the largest increase of net income in absolute values, from $*** while *** reported more consistent net income amounts of $*** to $*** (appendix G). Of the largest 10 U.S. producers presented in appendix G, *** is the the only top 10 U.S. producer reporting net losses in all five periods, with net losses ranging from ($*** to $*** in 2017), and reported the highest net loss margin of the large U.S. producers (*** percent in 2018).[24] Collectively, net profit margins of the *** large U.S. producers of fabricated structural steel were *** percent in 2016, *** percent in 2017, and *** percent in 2018; the net profit margin was lower in interim 2019 than in interim 2018 (table VI-3).

[22] *** reported unusually large other expenses (*** percent of total other expenses of U.S. large producers). *** accounted for most of other income over the period examined but fluctuated dramatically from period to period. Although the absolute value of the other large U.S. producers' other income was not as large as those of ***, 24 of the large U.S. producers reported dramatic variations in other income, with percent changes in both positive and negative directions of over a hundred percent over the period examined (e.g., *** reported a change in other income of *** percent from 2016-17 but a *** percent from 2017-18 and two other large U.S. producers *** also reported percent changes in the thousands).

[23] Calculated from U.S. producer questionnaires, V-9a.

[24] Four (***) of the large U.S. producers reported net losses in all five periods.

Variance analysis

A variance analysis is most useful for products that do not have substantial changes in product mix over the period examined and the methodology is most sensitive at the plant or firm level, rather than the aggregated industry level. Because of the wide variation in product mix (complexity of fabrication as well as the number of projects completed) between firms in this proceeding, a variance analysis is not presented.

Capital expenditures and research and development expenses

Table VI-8 presents capital expenditures and research and development ("R&D") expenses of the large U.S. producers. Capital expenditures of large U.S. producers increased by *** percent from 2016 to 2018 and were higher in interim 2019 than in interim 2018 (tables VI-8 and C-1). Most companies incurred capital expenditures for replacing equipment to improve efficiency and repairs related to plant, property, and equipment. *** reported R&D expenses related to product development; other large U.S. producers reported R&D expenses for computer programs, studies, and labor-related items. Two companies (***) reported R&D expenses only in 2018 for ***. Witness testimony stated that R&D is low or nonexistent because the technical advances in fabricated structural steel are by entities outside of actual fabricators, such as processes and machinery developed by other companies which are purchased by fabricated structural steel producers.[25]

[25] Conference transcript, p. 113 (McPhater).

Table VI-8
Fabricated structural steel: Capital expenditures and R&D expenses of large U.S. producers, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Capital expenditures (1,000 dollars)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Large producers	***	***	***	***	***
	Research and development expenses (1,000 dollars)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Large producers	***	***	***	***	***

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

Assets and return on assets

Table VI-9 presents data on the large U.S. producers' total assets and their return on assets ("ROA").[26] Total assets increased from 2016 to 2018 while ROA remained fairly constant, fluctuating within a half percentage point.

Table VI-9
Fabricated structrual steel: Large U.S. producers' total assets and ROA, 2016-18, January to September 2018, and January to September 2019

Firm	Calendar years		
	2016	2017	2018
	Total net assets (1,000 dollars)		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
Large producers	***	***	***
	Operating return on assets (percent)		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
Large producers	***	***	***

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

[26] 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.

Capital and investment

The Commission requested large U.S. producers of fabricated structural steel to describe any actual or potential negative effects of imports of fabricated structural steel from Canada, China, and/or Mexico on their firms' growth, investment, ability to raise capital, development and production efforts, or the scale of capital investments. Table VI-10 tabulates the responses of all responding U.S. producers on their fabricated structural steel operations. Appendix H presents the detailed narrative responses of U.S. producers regarding actual and anticipated negative effects of subject imports on their fabricated structural steel operations.

Table VI-10
Fabricated structrual steel: Actual and anticipated negative effects of imports on investment and growth and development of 55 large U.S. producers and 5 small U.S. producers

Item	No	Yes
Negative effects on investment	25	35
Cancellation, postponement, or rejection of expansion projects		12
Denial or rejection of investment proposal		2
Reduction in the size of capital investments		16
Return on specific investments negatively impacted		20
Other		18
Negative effects on growth and development	27	30
Rejection of bank loans		2
Lowering of credit rating		3
Problem related to the issue of stocks or bonds		2
Ability to service debt		10
Other		27
Anticipated negative effects of imports	11	51

Note: The count of responses includes the responses of several small U.S. producers, e.g., (***), that voluntarily provided information on the actual and anticipated negative effects of imports and does not include three large U.S. producers (***) that failed to provide this information.

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 nature of the subsidies is presented earlier in this report; 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 Canada

The Canadian respondents state that "most Canadian fabricators are large, vertically integrated producers which provide patented designs, design assistance, engineering services, and post-fabrication erection services. These comprehensive services are specifically attuned to large, complex construction projects like stadiums, large office towers, shopping malls, etc."[3] They further assert that Canada and the United States have "mutually benefitted" for generations from a market for fabricated structural steel in North America that is integrated, with many Canadian producers operating substantial U.S. facilities[4] and using U.S.-produced steel inputs in both their U.S. and Canadian facilities that produce fabricated structural steel. In fact, they argue further that many large-scale complex construction projects are staffed by highly skilled teams composed of U.S.-Canadian partnerships.[5]

The Commission issued foreign producers' or exporters' questionnaires to 41 firms believed to produce and/or export fabricated structural steel from Canada.[6] Usable responses to the Commission's questionnaire were received from 25 firms.[7] These firms' subject exports to the United States were equivalent to approximately *** percent of U.S. imports of fabricated structural steel from Canada in 2018.[8] Responding Canadian producers'

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[3] CISC's postconference brief, pp. 9-10.

[4] For example, Canam Group operates 25 facilities in North America, 18 of which are in the United States and 8 of which produce fabricated structural steel. CISC's postconference brief, p. 16.

[5] CISC's postconference brief, pp. 16-17.

[6] These firms were identified through a review of information submitted in the petition, information contained in *** records, and questionnaire data from the preliminary phase of the investigations.

[7] Five firms provided certifications that they have not produced or exported fabricated structural steel, as defined in the Commission questionnaires, at any time since January 1, 2016. Import data for Industries Canatal, Inc. ("Canatal") were treated as nonsubject after Commerce issued a negative determination in the Canada countervailing duty investigation and calculated dumping rates of 0.00 percent for in its final determination in the Canada antidumping investigation. Accordingly, data for Canatal are not included in this section.

[8] The response rate presented was calculated based on a comparison of the quantity of 2018 Canadian subject exports of fabricated structural steel to the United States as reported in the responses to the Commission's foreign producer questionnaires (subject export shipments by Canadian producers and resales by non-producer exporters in Canada) with total quantity of 2018 U.S. imports of fabricated structural steel from Canada derived from data submitted in response to Commission importer questionnaires and from official U.S. import statistics using HTS statistical reporting numbers 7308.90.3000, 7308.90.6000, and 7308.90.9590 ("primary HTS numbers"), adjusted to exclude import data (***) from companies that provided a complete response or a certified "no" response to the Commission's importer questionnaire. ("official imports, as adjusted").

questionnaire responses did not include reliable estimates of their firms' shares of the total production of fabricated structural steel in Canada. Table VII-1 presents information on the fabricated structural steel operations of the responding subject producers and exporters in Canada. Firms in Canada were also asked to report their exports to the United States of fabricated structural steel that was produced in Canada but not by their firm. This information is presented in table VII-2.[9]

[9] Canadian respondents testified that more detailed information for the Canadian industry is not readily available due to the fragmentation of the industry and the lack of data collection by either the Canadian Institute for Steel Construction or the Canadian government. Conference transcript, p. 271 (Whalen).

Table VII-1
Fabricated structural steel: Summary data on subject firms in Canada (excludes Canatal), 2018

Firm	Production (short tons)	Share of reported production (percent)	Exports to the United States (short tons)	Share of reported exports to the United States (percent)	Total shipments (short tons)	Share of firm's total shipments exported to the United States (percent)
3D Storage	***	***	***	***	***	***
Acier Fortin	***	***	***	***	***	***
ADF	***	***	***	***	***	***
AI	***	***	***	***	***	***
Breton	***	***	***	***	***	***
Burnco	***	***	***	***	***	***
Canam	***	***	***	***	***	***
Cherubini	***	***	***	***	***	***
Constructions Proco	***	***	***	***	***	***
Les Aciers Solider	***	***	***	***	***	***
Les Constructions Beauce	***	***	***	***	***	***
MacDougall	***	***	***	***	***	***
Métal Perreault	***	***	***	***	***	***
Nico Metal	***	***	***	***	***	***
Norgate	***	***	***	***	***	***
Ocean Steel	***	***	***	***	***	***
Robertson Building	***	***	***	***	***	***
Saskarc	***	***	***	***	***	***
Sofab	***	***	***	***	***	***
Structure SBL	***	***	***	***	***	***
Sturo	***	***	***	***	***	***
Supreme Steel	***	***	***	***	***	***
Trimax	***	***	***	***	***	***
Walters	***	***	***	***	***	***
Total	***	100.0	***	100.0	***	***

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.

Table VII-2
Fabricated structural steel: Summary data on subject non-producer exporters in Canada (excludes Canatal), 2018

Non-producer exporters	Resales exported to the United States (short tons)	Share of resales exported to the United States (percent)
3D Storage	***	***
AI	***	***
Breton	***	***
Canam	***	***
Les Constructions Beauce	***	***
Norgate	***	***
Ocean Steel	***	***
Sofab	***	***
Sturo	***	***
Walters	***	***
Total	***	***

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

Changes in operations

As presented in table VII-3 producers in Canada reported numerous operational and organizational changes since January 1, 2016.

Table VII-3
Fabricated structural steel: Reported changes in operations by subject producers in Canada (excludes Canatal), since January 1, 2016

Item / Firm	Reported changes in operations
Plant openings:	
***	***
Plant closings:	
***	***
Expansions:	
***	***
***	***
***	***
***	***
***	***
Acquisitions:	
***	***
***	***
***	***

Table continued on next page.

Table VII-3--Continued
Fabricated structural steel: Reported changes in operations by subject producers in Canada (excludes Canatal), since January 1, 2016

Item / Firm	Reported changes in operations
Prolonged shutdowns or curtailments:	
***	***
***	***
Revised labor agreements:	
***	***
***	***
***	***
***	***
***	***
***	***
Other:	
***	***
***	***
***	***
***	***
***	***

Table continued on next page.

Table VII-3--Continued
Fabricated structural steel: Reported changes in operations by subject producers in Canada (excludes Canatal), since January 1, 2016

Item / Firm	Reported changes in operations
Other:	
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***

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

Operations on fabricated structural steel

Table VII-4 presents information on the fabricated structural steel operations of the responding subject producers and exporters in Canada. Canadian producers' capacity increased overall by *** percent from *** short tons in 2016 to *** short tons in 2018, reflecting in particular ***. Capacity in Canada was higher in interim 2019 than in interim 2018, although projections for 2020 indicate that a *** percent decrease in capacity is expected relative to 2018 levels. Production increased overall by *** percent from *** short tons in 2016 to *** short tons in 2018 and was higher in interim 2019 than in interim 2018. An increase of *** percent relative to 2018 production levels is projected for 2020. Capacity utilization increased from *** percent in 2016 to *** percent in 2018 and is projected to increase to *** percent in 2020.

Canadian producers' export shipments of fabricated structural steel to the United States increased from *** percent of total shipments in 2016 to *** percent in 2018 but were less in interim 2019 (*** percent) than in interim 2018 (*** percent). Exports to the United States are projected to decline to *** percent of Canadian producers' total shipments in 2020. Total home market shipments, on the other hand, declined as a share of Canadian producers' total shipments from *** percent in 2016 to *** percent in 2018. Total home market shipments were equivalent to *** percent of Canadian producers' total shipments in interim 2019 and are projected to account for *** percent in 2020.

Table VII-4
Fabricated structural steel: Data on industry in Canada (excludes Canatal), 2016-18, January to September 2018, and January to September 2019 and projection calendar years 2019 and 2020

Item	Actual experience					Projections	
	Calendar year			January to September		Calendar year	
	2016	2017	2018	2018	2019	2019	2020
	Quantity (short tons)						
Capacity	***	***	***	***	***	***	***
Production	***	***	***	***	***	***	***
End-of-period inventories	***	***	***	***	***	***	***
Internal consumption/transfers home market shipments	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to: United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
	Ratios and shares (percent)						
Capacity utilization	***	***	***	***	***	***	***
Inventories/production	***	***	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***	***	***
Internal consumption/transfers home market shipments	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to: United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
	Quantity (short tons)						
Resales exported to the United States	***	***	***	***	***	***	***
Total exports to the United States	***	***	***	***	***	***	***
	Ratios and shares (percent)						
Share of total exports to the United States.-- Exported by producers	***	***	***	***	***	***	***
Exported by resellers	***	***	***	***	***	***	***
Adjusted share of total shipments exported to US	***	***	***	***	***	***	***

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

Three Canadian producers reported exports to markets other than the United States since 2016. These exports, which accounted for between *** percent of Canadian producers' total shipments since 2016, were destined for the following export markets: ***.

Alternative products

As shown in table VII-5, responding subject Canadian firms produced other products on the same equipment and machinery used to produce fabricated structural steel. Twelve of the twenty-four responding Canadian firms reported production of other products in their facilities that are used to produce in-scope fabricated structural steel (table VII-5). These producers reported producing not only in-scope fabricated structural steel, but also excluded fabricated structural steel for bridges and bridge sections and/or other out-of-scope products such as conveyor sections. Seven of these 12 firms reported that they are able to switch production between in-scope fabricated structural steel and other products using the same equipment and/or labor.

Several Canadian firms noted that, although they are able to use the same production facilities and some of the same production equipment and/or labor to switch between the production of in-scope fabricated structural steel and ***, there are limiting factors such as ***.[10] On an aggregate basis, in-scope fabricated structural steel was equivalent to *** percent of total production by responding subject producers in Canada during 2018, excluded fabricated structural steel used for bridges and sections was equivalent to *** percent, and other specifically excluded

[10] ***.

fabricated structural steel products were equivalent to *** percent. Overall plant capacity of the Canadian producers followed the same general trend as plant capacity specific to in-scope fabricated structural steel production (see table VII-4), increasing slightly overall from 2016 to 2018.

Table VII-5
Fabricated structural steel: Overall capacity and production on the same equipment as in-scope production by subject producers in Canada (excludes Canatal), 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
Overall capacity	***	***	***	***	***
Production: Fabricated structural steel (FSS)	***	***	***	***	***
Bridge sections	***	***	***	***	***
Other FSS exclusions	***	***	***	***	***
All other products	***	***	***	***	***
Out-of-scope production	***	***	***	***	***
Total production on same machinery	***	***	***	***	***
	Ratios and shares (percent)				
Overall capacity utilization	***	***	***	***	***
Share of production: Fabricated structural steel (FSS)	***	***	***	***	***
Bridge sections	***	***	***	***	***
Other FSS exclusions	***	***	***	***	***
All other products	***	***	***	***	***
Out-of-scope production	***	***	***	***	***
Total production on same machinery	***	***	***	***	***

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.

Exports

According to the Global Trade Atlas (“GTA”), the leading export market for certain fabricated steel from Canada is the United States (table VII-6). During 2018, the United States was the largest export market for certain fabricated steel from Canada, accounting for 96.2 percent of Canadian exports. In 2018, exports of certain fabricated steel from Canada to the United States were valued at an estimated $759.7 million. The overall value of Canadian exports of these products to the United States has increased by more than 14.1 percent between 2016 and 2018.

Table VII-6
Certain fabricated steel: Exports (constructed) from Canada by destination market, 2016-18

Destination market	Calendar year		
	2016	2017	2018
	Quantity (short tons)		
United States	253,486	255,173	276,679
Canada	1,130	915	2,378
France	1,396	1,535	1,817
United Arab Emirates	881	304	1,493
Colombia	72	1,685	668
Mexico	1,432	968	499
Netherlands	193	252	300
Chile	33	21	290
Germany	82	248	279
All other destination markets	6,717	7,859	3,136
Total exports	265,422	268,962	287,540
	Value (1,000 dollars)		
United States	665,818	690,020	759,668
Canada	3,358	3,069	4,901
France	2,548	3,463	4,517
United Arab Emirates	1,116	1,471	6,158
Colombia	524	3,928	1,514
Mexico	5,084	2,689	2,807
Netherlands	787	1,335	1,973
Chile	678	344	2,807
Germany	448	1,766	1,863
All other destination markets	38,211	29,349	20,821
Total exports	718,573	737,434	807,030

Table continued on next page.

Table VII-6--Continued
Certain fabricated steel: Exports (constructed) from Canada by destination market, 2016-18

Destination market	Calendar year		
	2016	2017	2018
	Unit value (dollars per short ton)		
United States	2,627	2,704	2,746
Canada	2,971	3,352	2,061
France	1,825	2,256	2,485
United Arab Emirates	1,267	4,840	4,124
Colombia	7,231	2,330	2,267
Mexico	3,549	2,777	5,629
Netherlands	4,083	5,292	6,571
Chile	20,804	16,215	9,678
Germany	5,491	7,126	6,675
All other destination markets	5,689	3,734	6,639
Total exports	2,707	2,742	2,807
	Share of quantity (percent)		
United States	95.5	94.9	96.2
Canada	0.4	0.3	0.8
France	0.5	0.6	0.6
United Arab Emirates	0.3	0.1	0.5
Colombia	0.0	0.6	0.2
Mexico	0.5	0.4	0.2
Netherlands	0.1	0.1	0.1
Chile	0.0	0.0	0.1
Germany	0.0	0.1	0.1
All other destination markets	2.5	2.9	1.1
Total exports	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 export destinations shown in descending order of 2018 data. Subject export figures to the United States represented in this table are over-inclusive since they include all Canadian certain fabricated steel exports. In its final determination in the Canada antidumping investigation Commerce calculated dumping rates of 0.00 percent for Industries Canatal, Inc. and its imports were treated as nonsubject. In its questionnaire response, Industries Canatal, Inc. reported ***, ***, and *** short tons of fabricated structural steel exports to the United States in 2016, 2017, and 2018, respectively.

Source: Export statistics constructed based on imports reported by all reporting statistical authorities from Statistics Canada under HS subheading 7308.90 in the Global Trade Atlas database, accessed December 13, 2019.

The industry in China

The petitioner estimated that, in 2016, there were approximately 8,644 entities in the Chinese metal fabrication industry, a majority of which it believed to be steel fabricators.[11] The Commission issued foreign producers' or exporters' questionnaires to 224 firms believed to produce and/or export fabricated structural steel from China.[12] Usable responses to the Commission's questionnaire were received from 10 firms: nine producers/exporters and one non-producer/exporter.[13] These firms' exports to the United States accounted for approximately 15.7 percent of U.S. imports of fabricated structural steel from China in 2018.[14] Responding Chinese producers' questionnaire responses did not include reliable estimates of their firms' shares of the total production of fabricated structural steel in China. Table VII-7 presents information on the fabricated structural steel operations of the responding producers and exporters in China. Firms in China were also asked to report their exports to the United States of fabricated structural steel that were produced in China but not by their firm. This information is presented in table VII-8.

[11] Petition, p. 39.

[12] These firms were identified through a review of information submitted in the petition, contained in *** records, and questionnaire data from the preliminary phase of the investigations.

[13] Twenty-seven firms provided certifications that they have not produced or exported fabricated structural steel, as defined in the Commission questionnaires, at any time since January 1, 2016. The Commission received one questionnaire response that was unusable.

[14] The response rate presented was calculated based on a comparison of the quantity of 2018 Chinese exports of fabricated structural steel to the United States as reported in the responses to the Commission's foreign producer questionnaires (export shipments by Chinese producers and resales by non-producer exporters in China) with total quantity of 2018 U.S. official imports, as adjusted.

Table VII-7
Fabricated structural steel: Summary data on firms in China, 2018

Firm	Production (short tons)	Share of reported production (percent)	Exports to the United States (short tons)	Share of reported exports to the United States (percent)	Total shipments (short tons)	Share of firm's total shipments exported to the United States (percent)
Bomesc	***	***	***	***	***	***
China Railway Baoji Bridge	***	***	***	***	***	***
Fujian Tung Kang	***	***	***	***	***	***
Jinhuan Construction	***	***	***	***	***	***
Shanghai Cosco Kawasaki	***	***	***	***	***	***
Shanghai Matsuo	***	***	***	***	***	***
United Steel	***	***	***	***	***	***
Wison (Nantong)	***	***	***	***	***	***
Yanda (Haimen)	***	***	***	***	***	***
Total	140,705	100.0	56,352	100.0	139,106	40.5

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

Table VII-8
Fabricated structural steel: Summary data on non-producer exporters in China, 2018

Non-producer exporters	Resales exported to the United States (short tons)	Share of resales exported to the United States (percent)
Auriga (Shanghai)	***	***
Total	***	***

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

Changes in operations

Four of the nine responding producers of fabricated structural steel in China reported operational and organizational changes since January 1, 2016 (table VII-9). *** reported that it opened a new facility *** and expanded ***; *** reported that it closed one of its facilities and ***; *** reported expansion of *** reported ***.

Table VII-9
Fabricated structural steel: Reported changes in operations by producers in China, since January 1, 2016

Item / Firm	Reported changed in operations
Plant openings:	
***	***
***	***
Plant closings:	
***	***
Relocations:	
***	***
Expansions:	
***	***
***	***
***	***

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

Operations on fabricated structural steel

Table VII-10 presents information on the operations of the responding producers and exporters of fabricated structural steel in China. Responding Chinese producers' capacity increased overall by 3.5 percent from 331,234 short tons in 2016 to 342,843 short tons in 2018. Overall reported capacity in China was higher in interim 2019 than in interim 2018, and projections for 2020 indicate that a 6.3 percent increase in capacity is expected relative to 2018 levels. Production declined overall by 16.7 percent from 168,952 short tons in 2016 to 140,705 short tons in 2018 but was higher in interim 2019 than in interim 2018. A decrease of 4.5 percent relative to 2018 production levels is projected for 2020. Capacity utilization decreased from 51.0 percent in 2016 to 41.0 percent in 2018, was 40.1 percent in interim 2019, and is projected to further decrease to 36.9 percent in 2020.

Table VII-10
Fabricated structural steel: Data on industry in China, 2016-18, January to September 2018, and January to September 2019 and projection calendar years 2019 and 2020

Item	Actual experience					Projections	
	Calendar year			January to September		Calendar year	
	2016	2017	2018	2018	2019	2019	2020
	Quantity (short tons)						
Capacity	331,234	337,951	342,843	266,846	316,365	344,581	364,581
Production	168,952	190,126	140,705	99,490	127,014	133,163	134,363
End-of-period inventories	***	***	***	***	***	***	***
Internal consumption/transfers home market shipments	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	74,736	67,008	33,572	26,316	37,357	29,305	28,434
Export shipments to: United States	32,060	52,061	56,352	37,903	33,456	31,596	***
All other markets	62,780	70,867	49,182	34,873	54,908	76,079	***
Total exports	94,840	122,928	105,534	72,776	88,364	107,675	105,429
Total shipments	169,576	189,936	139,106	99,092	125,721	136,980	133,863
	Ratios and shares (percent)						
Capacity utilization	51.0	56.3	41.0	37.3	40.1	38.6	36.9
Inventories/production	***	***	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***	***	***
Internal consumption/transfers home market shipments	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	44.1	35.3	24.1	26.6	29.7	21.4	21.2
Export shipments to: United States	18.9	27.4	40.5	38.3	26.6	23.1	***
All other markets	37.0	37.3	35.4	35.2	43.7	55.5	***
Total exports	55.9	64.7	75.9	73.4	70.3	78.6	78.8
Total shipments	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Quantity (short tons)						
Resales exported to the United States	***	***	***	***	***	***	***
Total exports to the United States	***	***	***	***	***	***	***
	Ratios and shares (percent)						
Share of total exports to the United States.-- Exported by producers	***	***	***	***	***	***	***
Exported by resellers	***	***	***	***	***	***	***
Adjusted share of total shipments exported to US	***	***	***	***	***	***	***

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

Export shipments to markets other than the United States, which accounted for the largest share of Chinese producers' total shipments of fabricated structural steel in 2017 and 2018, decreased from 37.0 percent of total shipments in 2016 to 35.4 percent in 2018, and were 43.7 percent during interim 2019. Projections indicate that the share of total shipments held by Chinese producers' exports to markets other than the United States are expected to increase to 71.0 percent in 2020. Other export markets identified by responding Chinese producers include ***.

From 2016 to 2018, an increasing share of Chinese producers' total shipments of fabricated structural steel were exports to the United States (18.9 percent of total shipments in 2016, 27.4 percent in 2017, 40.5 percent in 2018, 38.3 percent in interim 2018, and 26.6 percent in interim 2019). Exports to the United States are projected to decline to 7.8 percent of Chinese producers' total shipments by 2020. Exports to the U.S. by Chinese resellers fluctuated between *** percent and *** percent of total Chinese export shipments to the U.S. from 2016-18.

Home market shipments declined from 44.1 percent of total Chinese producers' shipments in 2016 to 24.1 in 2018. Home market shipments were 26.6 percent in interim 2019 and are projected to account for 21.2 percent of total shipments in 2020. The majority of home market shipments are commercial shipments, with only *** percent of total shipments representing internal consumption/transfers of fabricated structural steel in 2018.

Alternative products

As shown in table VII-11, five responding Chinese firms produced other products on the same equipment and machinery used to produce fabricated structural steel. These producers reported producing not only in-scope fabricated structural steel, but also excluded fabricated structural steel for bridges and bridge sections and/or other out-of-scope products such as ***. Five of the nine responding Chinese producers reported that they are able to switch production between in-scope fabricated structural steel and other products using the same equipment and/or labor.

Table VII-11
Fabricated structural steel: Overall capacity and production on the same equipment as in-scope production by producers in China, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
Overall capacity	759,988	746,253	740,266	581,127	606,826
Production:					
Fabricated structural steel (FSS)	168,952	190,126	140,705	99,490	127,014
Bridge sections	***	***	***	***	***
Other FSS exclusions	***	***	***	***	***
All other products	***	***	***	***	***
Out-of-scope production	338,284	267,497	303,426	230,996	301,208
Total production on same machinery	507,236	457,623	444,131	330,486	428,222
	Ratios and shares (percent)				
Overall capacity utilization	66.7	61.3	60.0	56.9	70.6
Share of production:					
Fabricated structural steel (FSS)	33.3	41.5	31.7	30.1	29.7
Bridge sections	***	***	***	***	***
Other FSS exclusions	***	***	***	***	***
All other products	***	***	***	***	***
Out-of-scope production	66.7	58.5	68.3	69.9	70.3
Total production on same machinery	100.0	100.0	100.0	100.0	100.0

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

Several Chinese firms noted that, although they are able to use the same production facilities and some of the same production equipment and/or labor to switch between the production of in-scope fabricated structural steel and ***, there are limiting factors such as ***.[15] On an aggregate basis, in-scope fabricated structural steel accounted for 31.7 percent of total production by responding producers in China during 2018, excluded fabricated structural steel used for bridges and sections accounted for *** percent, and all other products accounted for *** percent.

[15] ***.

Exports

According to GTA, the largest export markets for certain fabricated steel (HS 7308.90) from China are Japan and the United States (table VII-12). During 2018, exports to Japan were equivalent to 11.4 percent of China's total exports of these products while exports to the United States were equivalent to 10.5 percent. In 2018, exports of certain fabricated steel from China to the United States amounted to 651,212 short tons ($950.8 million). The overall quantity of Chinese exports of these products to the United States has stayed relatively constant, increasing by 0.2 percent from 2016 to 2018.

Table VII-12
Certain fabricated steel: China exports by destination market, 2016-18

Destination market	Calendar year		
	2016	2017	2018
	Quantity (short tons)		
United States	649,839	660,665	651,212
Japan	697,225	690,911	710,015
Korea	722,736	648,838	472,775
Australia	313,707	353,315	424,362
Indonesia	243,349	223,819	373,930
Hong Kong	277,717	342,630	307,705
Vietnam	118,985	102,827	189,542
Philippines	111,258	163,700	188,866
Malaysia	223,404	245,757	180,342
All other destination markets	2,533,008	2,691,075	2,719,958
Total exports	5,891,228	6,123,537	6,218,707
	Value (1,000 dollars)		
United States	821,542	907,584	950,769
Japan	953,397	927,108	1,050,484
Korea	937,433	759,874	547,762
Australia	355,733	422,743	550,513
Indonesia	262,512	235,205	450,436
Hong Kong	432,112	569,308	496,821
Vietnam	150,925	180,620	296,414
Philippines	133,156	210,603	257,615
Malaysia	253,603	264,094	245,894
All other destination markets	3,777,862	3,838,320	4,154,837
Total exports	8,078,277	8,315,459	9,001,545

Table continued on next page.

Table VII-12--Continued
Certain fabricated steel: China exports by destination market, 2016-18

Destination market	Calendar year		
	2016	2017	2018
	Unit value (dollars per short ton)		
United States	1,264	1,374	1,460
Japan	1,367	1,342	1,480
Korea	1,297	1,171	1,159
Australia	1,134	1,197	1,297
Indonesia	1,079	1,051	1,205
Hong Kong	1,556	1,662	1,615
Vietnam	1,268	1,757	1,564
Philippines	1,197	1,287	1,364
Malaysia	1,135	1,075	1,363
All other destination markets	1,491	1,426	1,528
Total exports	1,371	1,358	1,447
	Share of quantity (percent)		
United States	11.0	10.8	10.5
Japan	11.8	11.3	11.4
Korea	12.3	10.6	7.6
Australia	5.3	5.8	6.8
Indonesia	4.1	3.7	6.0
Hong Kong	4.7	5.6	4.9
Vietnam	2.0	1.7	3.0
Philippines	1.9	2.7	3.0
Malaysia	3.8	4.0	2.9
All other destination markets	43.0	43.9	43.7
Total exports	100.0	100.0	100.0

Note: United States is shown at the top, all remaining top export destinations shown in descending order of 2018 data.

Source: Official exports statistics under HS subheading 7308.90 as reported by China Customs in the Global Trade Atlas database, accessed October 11, 2019.

The industry in Mexico

The Commission issued foreign producers' or exporters' questionnaires to 18 firms believed to produce and/or export fabricated structural steel from Mexico.[16] Usable responses to the Commission's questionnaire were received from eight firms.[17] These firms' exports to the United States were equivalent to approximately *** percent of U.S. imports of fabricated

[16] These firms were identified through a review of information submitted in the petition, contained in *** records, and questionnaire data from the preliminary phase of the investigations.

[17] Three firms provided certifications that they have not produced or exported fabricated structural steel, as defined in the Commission questionnaires, at any time since January 1, 2016.

structural steel from Mexico in 2018.[18] Responding Mexican producers' questionnaire responses did not include reliable estimates of their firms' shares of the total production of fabricated structural steel in Mexico. Table VII-13 presents information on the fabricated structural steel operations of the responding producers and exporters in Mexico.

Table VII-13
Fabricated structural steel: Summary data on firms in Mexico, 2018

Firm	Production (short tons)	Share of reported production (percent)	Exports to the United States (short tons)	Share of reported exports to the United States (percent)	Total shipments (short tons)	Share of firm's total shipments exported to the United States (percent)
Acero	***	***	***	***	***	***
Building Systems de Mexico	***	***	***	***	***	***
Butler de Mexico	***	***	***	***	***	***
Construcciones Industriales Tapia	***	***	***	***	***	***
Corey	***	***	***	***	***	***
Industrias Metalicas de Monclova	***	***	***	***	***	***
National Oilwell	***	***	***	***	***	***
Preacero Pellizzari	***	***	***	***	***	***
Total	211,451	100.0	***	100.0	201,033	***

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. In the Mexico antidumping investigation, Commerce calculated a de minimis dumping rate of 0.00 percent for Corey. In the Mexico countervailing duty investigation, Commerce calculated a de minimis subsidy rate of 0.01 for Building Systems de Mexico. Building Systems de Mexico and Butler de Mexico were identified in U.S. importer questionnaires as primarily exporting parts for pre-engineered metal building systems to the United States.

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

Changes in operations

As presented in table VII-14, five of the eight responding producers in Mexico reported operational and organizational changes since January 1, 2016, including ***.

[18] The response rate presented was calculated based on a comparison of the quantity of 2018 Mexican exports of fabricated structural steel to the United States as reported in the responses to the Commission's foreign producer questionnaires with total quantity of 2018 U.S. official imports, as adjusted.

Table VII-14
Fabricated structural steel: Reported changes in operations by producers in Mexico, since January 1, 2016

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

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

Operations on fabricated structural steel

Table VII-15 presents information on the operations of the responding producers and exporters of fabricated structural steel in Mexico. Mexican producers' capacity declined overall by 1.9 percent from 286,296 short tons in 2016 to 280,886 short tons in 2018. Capacity in Mexico was higher in interim 2019 than in interim 2018, and projections for 2020 indicate that a 4.3 percent increase in capacity is expected relative to 2018 levels. Production remained relatively consistent from 2016 to 2018 but declined by 0.5 percent from 212,501 short tons in 2016 to 211,451 short tons in 2018. Production in Mexico was lower in interim 2019 than in interim 2018; however, an increase of 2.3 percent relative to 2018 production levels is projected for 2020. Capacity utilization increased from 74.2 percent in 2016 to 75.3 percent in 2018, after declining to 68.8 percent in 2017. It is projected to decline to 71.3 percent in 2019 before increasing to 73.9 percent in 2020.

Table VII-15
Fabricated structural steel: Data on industry in Mexico, 2016-18, January to September 2018, and January to September 2019 and projection calendar years 2019 and 2020

Item	Actual experience					Projections	
	Calendar year			January to September		Calendar year	
	2016	2017	2018	2018	2019	2019	2020
	Quantity (short tons)						
Capacity	286,296	300,692	280,886	211,897	214,351	294,537	292,870
Production	212,501	206,735	211,451	160,628	152,644	210,118	216,370
End-of-period inventories	***	***	***	***	***	***	***
Internal consumption/transfers home market shipments	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	117,581	131,803	119,189	92,549	71,932	97,531	104,492
Export shipments to: United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	94,583	71,323	81,844	62,350	64,711	95,508	99,390
Total shipments	212,164	203,126	201,033	154,899	136,643	193,039	203,882
	Ratios and shares (percent)						
Capacity utilization	74.2	68.8	75.3	75.8	71.2	71.3	73.9
Inventories/production	***	***	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***	***	***
Internal consumption/transfers home market shipments	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	55.4	64.9	59.3	59.7	52.6	50.5	51.3
Export shipments to: United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	44.6	35.1	40.7	40.3	47.4	49.5	48.7
Total shipments	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

The majority of Mexican producers' total shipments of fabricated structural steel were home market shipments (55.4 percent in 2016, 64.9 percent in 2017, 59.3 percent in 2018, 59.7 percent in interim 2018, and 52.6 percent in interim 2019). Projections for the share of Mexican producers' total shipments of fabricated structural steel destined for the home market are 51.3 percent of total shipments in 2020. Mexican producers' export shipments of fabricated structural steel to the United States were equivalent to *** percent of total shipments in 2016, *** percent in 2017, *** percent in 2018, *** percent in interim 2018, and *** percent in interim 2019. Exports to the United States are projected to be *** percent of Mexican producers' total shipments in 2020. *** of the eight responding producers in Mexico reported exports to markets other than the United States since 2016. These exports, which were equivalent to *** percent of Mexican producers' total shipments since 2016, were primarily destined for ***.

Alternative products

*** responding firms in Mexico (***) reported production of other products in their facilities that also produce in-scope fabricated structural steel (table VII-16). These firms reported producing not only in-scope fabricated structural steel, but also excluded fabricated structural steel for bridges and bridge sections and other out-of-scope products.[19] *** firms reported that they are able to switch production between in-scope fabricated structural steel and other products using the same equipment and/or labor. Out-of-scope production almost doubled from 2016 to 2018, from 4.8 percent of total reported production in Mexico in 2016 to 9.4 percent in 2018. This was largely driven by the increase in the share of total reported production of fabricated structural steel in Mexico for bridges and bridge sections, which increased from *** percent in 2016 to *** percent in 2018. In-scope fabricated structural steel declined as a share of total production reported by the *** producers in Mexico from 95.2 percent in 2016, to 90.6 percent in 2018. Overall plant capacity of the producers of fabricated structural steel in Mexico increased from 286,872 short tons in 2016 to 293,160 short tons in 2018.

[19] Other out-of-scope products identified include ***.

Table VII-16
Fabricated structural steel: Overall capacity and production on the same equipment as in-scope production by producers in Mexico, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
Overall capacity	286,872	301,058	293,160	221,698	219,721
Production:					
Fabricated structural steel (FSS)	212,501	206,735	211,451	160,628	152,644
Bridge sections	***	***	***	***	***
Other FSS exclusions	***	***	***	***	***
All other products	***	***	***	***	***
Out-of-scope production	10,615	24,462	21,987	15,905	4,661
Total production on same machinery	223,116	231,197	233,438	176,533	157,305
	Ratios and shares (percent)				
Overall capacity utilization	77.8	76.8	79.6	79.6	71.6
Share of production:					
Fabricated structural steel FSS)	95.2	89.4	90.6	91.0	97.0
Bridge sections	***	***	***	***	***
Other FSS exclusions	***	***	***	***	***
All other products	***	***	***	***	***
Out-of-scope production	4.8	10.6	9.4	9.0	3.0
Total production on same machinery	100.0	100.0	100.0	100.0	100.0

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

Exports

According to GTA, the leading export markets for certain fabricated steel (HS 7308.90) from Mexico is the United States (table VII-17). During 2018, the United States was the top export market for certain fabricated steel from Mexico, accounting for 91.6 percent of Mexico's total exports of these products. In 2018, exports of certain fabricated steel from Mexico to the United States amounted to 341,699 short tons ($730.2 million). The overall quantity of Mexican exports of these products to the United States has increased by 33.4 percent from 2016 to 2018.

Table VII-17
Certain fabricated steel: Mexico exports by destination market, 2016-18

Destination market	Calendar year		
	2016	2017	2018
	Quantity (short tons)		
United States	256,192	253,747	341,699
Guatemala	3,935	4,369	4,205
Panama	709	3,986	4,006
El Salvador	707	770	3,082
Nicaragua	2,811	3,487	2,479
Colombia	156	2,721	2,360
Costa Rica	1,472	1,296	1,957
Peru	674	1,814	1,457
Belize	175	1,240	1,448
All other destination markets	3,836	4,504	10,146
Total exports	270,667	277,933	372,840
	Value (1,000 dollars)		
United States	501,809	502,214	730,193
Guatemala	7,495	8,282	7,715
Panama	1,612	7,348	7,968
El Salvador	911	1,324	6,002
Nicaragua	3,587	5,674	4,536
Colombia	527	3,668	3,474
Costa Rica	2,576	1,974	3,239
Peru	1,652	3,127	2,472
Belize	390	1,299	1,334
All other destination markets	13,297	12,738	24,271
Total exports	533,857	547,647	791,205

Table continued on next page.

Table VII-17--Continued
Certain fabricated steel: Mexico exports by destination market, 2016-18

Destination market	Calendar year		
	2016	2017	2018
	Unit value (dollars per short ton)		
United States	1,959	1,979	2,137
Guatemala	1,905	1,896	1,835
Panama	2,273	1,844	1,989
El Salvador	1,289	1,719	1,948
Nicaragua	1,276	1,627	1,830
Colombia	3,382	1,348	1,472
Costa Rica	1,751	1,524	1,655
Peru	2,451	1,724	1,696
Belize	2,226	1,048	921
All other destination markets	3,466	2,828	2,392
Total exports	1,972	1,970	2,122
	Share of quantity (percent)		
United States	94.7	91.3	91.6
Guatemala	1.5	1.6	1.1
Panama	0.3	1.4	1.1
El Salvador	0.3	0.3	0.8
Nicaragua	1.0	1.3	0.7
Colombia	0.1	1.0	0.6
Costa Rica	0.5	0.5	0.5
Peru	0.2	0.7	0.4
Belize	0.1	0.4	0.4
All other destination markets	1.4	1.6	2.7
Total exports	100.0	100.0	100.0

Note: United States is shown at the top, all remaining top export destinations shown in descending order of 2018 data.

Source: Official exports statistics under HS subheading 7308.90 as reported by INEGI in the Global Trade Atlas database, accessed October 11, 2019.

Subject countries combined

Table VII-18 presents summary data on fabricated structural steel operations of the reporting subject producers in Canada, China, and Mexico combined.

Aggregate subject producers' capacity increased overall by *** percent from *** short tons in 2016 to *** short tons in 2018 and was higher in interim 2019 than in interim 2018, with projections for 2020 indicating a *** percent increase in capacity over 2018 levels. Production decreased overall by *** percent from *** short tons in 2016 to *** short tons in 2018 and was lower in interim 2018 and interim 2019. An increase of *** percent over 2018 production levels is projected for 2020. Capacity utilization remained

relatively constant, ranging between *** percent and *** percent from 2016 to 2018, the interim periods, and projected 2020.

From 2016 to 2018, a generally increasing share of subject producers' total shipments of fabricated structural steel was exports to the United States (*** percent of total shipments in 2016, *** percent in 2017, and *** percent in 2018, *** percent in interim 2018, and *** percent in interim 2019). Exports to the United States are projected to decline to *** percent of subject producers' total shipments in 2020. The share of total exports to the United States exported by resellers ranged from *** percent to *** percent between 2016 and 2018 but is projected to decline to *** percent in 2020.

Table VII-18
Fabricated structural steel: Data on industry in subject countries (CA, CN, MX) (excludes Canatal), 2016-18, January to September 2018, and January to September 2019 and projection calendar years 2019 and 2020

Item	Actual experience					Projections	
	Calendar year			January to September		Calendar year	
	2016	2017	2018	2018	2019	2019	2020
	Quantity (short tons)						
Capacity	***	***	***	***	***	***	***
Production	***	***	***	***	***	***	***
End-of-period inventories	***	***	***	***	***	***	***
Internal consumption/transfers home market shipments	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to: United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
	Ratios and shares (percent)						
Capacity utilization	***	***	***	***	***	***	***
Inventories/production	***	***	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***	***	***
Internal consumption/transfers home market shipments	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to: United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
	Quantity (short tons)						
Resales exported to the United States	***	***	***	***	***	***	***
Total exports to the United States	***	***	***	***	***	***	***
	Ratios and shares (percent)						
Share of total exports to the United States.-- Exported by producers	***	***	***	***	***	***	***
Exported by resellers	***	***	***	***	***	***	***
Adjusted share of total shipments exported to US	***	***	***	***	***	***	***

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

U.S. inventories of imported merchandise

Table VII-19 presents data on U.S. importers' reported inventories of fabricated structural steel.

U.S. importers' end-of-period inventories of imports from subject sources increased by 190.3 percent from 2016 to 2018 and were 10.4 percent lower in interim 2019 than in interim 2018. From 2016 to 2018, U.S. importers' end-of-period inventories of imports increased by *** percent from China, decreased by *** percent from Canada, while Mexican firms did not report any inventories. Imports of Chinese product held the largest share of subject country end-of-period inventories in 2018, accounting for *** percent of the total, while imports of Canadian product made up the difference with *** percent. Nonsubject sources accounted for *** percent of end-of-period inventories in 2018 from all import sources.

The ratio of inventories to total shipments of imports was highest for inventories of imports from China. It increased from *** percent in 2016 to *** percent in 2017, before declining back to *** percent in 2018. For imports from Canada the ratio decreased from *** percent in 2016 to *** percent in 2017and 2018.

Parties noted that fabricated structural steel is typically shipped directly to the construction or job site because it is produced to particular job specifications and, as such, large inventories are not commonly held.[20] This is reflected in the data shown, as the ratio of inventories to U.S. imports during 2018 was *** percent for imports from Canada and *** percent for imports from China.

[20] Petitioner's postconference brief, exh. 1, p. 15.

Table VII-19
Fabricated structural steel: U.S. importers' end-of-period inventories of imports by source, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Inventories (short tons); Ratios (percent)				
Imports from Canada subject: Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from China: Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from Mexico: Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from subject sources: Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from Canada nonsubject: Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from all other sources: 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	607	3,157	3,105	3,782	3,772
Ratio to U.S. imports	0.2	1.0	0.8	0.9	1.1
Ratio to U.S. shipments of imports	0.2	1.0	0.8	0.9	1.1
Ratio to total shipments of imports	0.2	1.0	0.8	0.9	1.1

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. importers' outstanding orders

The Commission requested importers to indicate whether they imported or arranged for the importation of fabricated structural steel from Canada, China, and/or Mexico after September 30, 2019 (table VII-20). Responding importers of subject fabricated structural steel from Canada reported a total of *** short tons arranged for importation from October 2019 through September 2020. Responding importers of product from Mexico reported a total of *** short tons of arranged imports from October 2019 through September 2020. Responding importers of product from China reported *** short tons of arranged U.S. imports of fabricated structural steel after June 30, 2020 but reported a total of *** short tons of U.S. imports scheduled during the last quarter of 2019 and the first half of 2020. Responding importers of product from nonsubject sources reported a total of *** short tons of arranged imports from October 2019 through September 2020. Thirty-nine responding importers reported outstanding orders of fabricated structural steel from subject and nonsubject sources during October 2019 to September 2020.

Table VII-20
Fabricated structural steel: Arranged imports, October 2019 through September 2020

Item	Period				
	Oct-Dec 2019	Jan-Mar 2020	Apr-Jun 2020	Jul-Sept 2020	Total
	Quantity (short tons)				
Arranged U.S. imports from.--					
Canada	***	***	***	***	***
China	***	***	***	***	***
Mexico	***	***	***	***	***
Subject sources	***	***	***	***	***
Canada nonsubject	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***

Note: ***.

Source: Compiled from data submitted in response to Commission questionnaires and correspondence relating to ***.

Antidumping or countervailing duty orders in third-country markets

Canada placed preliminary antidumping and countervailing duty orders on fabricated industrial steel components ("FISCs") originating within or exported from China, effective

January 1, 2017.[21] Canada imposed final antidumping orders on FISCs (various classifications under HS 7308, 7216, and 7301) from China at rates ranging from 32.9 to 45.8 percent *ad valorem*. Final countervailing duty orders on FISCs from China were imposed on May 25, 2017, by the government of Canada at rates ranging from 11,656.06 to 675,470 Renminbi per metric ton.[22] The European Union ("EU") began an antidumping proceeding concerning imports of "hot-rolled steel sheet piles" on May 24, 2018, under HTS 7301.10.[23] However, the EU announced on July 5, 2019, that the anti-dumping proceeding concerning imports of hot-rolled steel sheet piles originating in China was terminated.[24] Based on available information, fabricated steel from Canada or Mexico has not been subject to any antidumping or countervailing duty investigations outside the United States.

The Canadian International Trade Tribunal also investigated imports of fabricated industrial steel components from Spain and Korea as part of its investigation that led to the imposition of duties on imports from China. The Tribunal arrived at several conclusions in Inquiry No. NQ-2016-004[25] with regards to volumes, price effects of the dumped and subsidized goods, and resultant impact on the domestic industry. The Tribunal found that the dumping of FISCs originating in or exported China, Korea, and Spain and the subsidization of FISCs from China caused injury to the domestic industry.

Information on nonsubject countries

Table VII-21 presents value data for global exports of certain fabricated steel (HS 7308.90) from the United States, the three subject countries, and the largest nonsubject sources (based on export value) to all worldwide destinations during 2016-18.

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[21] Canada Border Services Agency, "Notice of Preliminary Determinations", h https://www.cbsa-asfc.gc.ca/sima-lmsi/i-e/fisc2016/fisc2016-np-eng.html, (accessed December 12, 2019).

[22] Canada Border Services Agency, "Measures in Force," https://www.cbsa-asfc.gc.ca/sima-lmsi/mif-mev/fisc-eng.html, (accessed various dates).

[23] European Commission, "Investigations, Case AD647-Steel sheet piles (hot-rolled)," https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:JOC_2018_177_R_0005&from=EN, (accessed December, 2019). The product subject to this investigation is hot-rolled steel sheet piles defined as sheet piling of iron or steel, whether or not drilled, punched or made from assembled elements.

[24] European Commission, Investigations, Case AD647-Steel sheet piles (hot-rolled), http://trade.ec.europa.eu/tdi/case_history.cfm?ref=com&init=2353&sta=1&en=20&page=1&number=&prod=sheet%20piles&code=&scountry=all&proceed=all&status=all&measures=all&measure_type=all&search=ok&c_order=name&c_order_dir=Up (accessed December 12, 2019).

[25] Canadian International Trade Tribunal, Dumping and Subsiding Findings and Reasons: *Inquiry No. NQ-2016-004 Certain Fabricated Industrial Steel Components*, July 5, 2017, https://decisions.citt-tcce.gc.ca/citt-tcce/a/en/item/354750/index.do (accessed December 12, 2019).

Table VII-21
Certain fabricated steel: Global exports by exporter, 2016-18

Exporter	Calendar year		
	2016	2017	2018
	Quantity (short tons)		
United States	247,715	259,613	259,322
Canada	265,422	268,962	287,540
China	5,891,228	6,123,537	6,218,707
Mexico	270,667	277,933	372,840
Subject countries	6,427,317	6,670,432	6,879,088
Germany	1,183,377	1,220,735	1,148,942
Poland	1,006,056	1,074,334	1,069,784
Belgium	798,091	885,511	888,715
Spain	683,840	792,820	715,273
Netherlands	546,337	508,983	555,340
South Korea	748,090	588,820	528,317
Italy	560,428	542,626	519,709
Turkey	370,712	407,329	459,439
Czech Republic	461,718	491,264	449,598
United Arab Emirates	224,679	431,788	350,371
Austria	290,832	293,089	294,201
All other exporters	3,840,155	3,749,464	3,788,470
Total	17,389,348	17,916,808	17,906,568
	Value (1,000 dollars)		
United States	773,230	738,107	792,098
Canada	718,573	737,434	807,030
China	8,078,277	8,315,459	9,001,545
Mexico	533,857	547,647	791,205
Subject countries	9,330,706	9,600,540	10,599,780
Germany	2,615,742	2,890,875	3,094,646
Poland	1,827,158	2,146,595	2,414,110
Belgium	1,238,190	1,445,276	1,464,402
Spain	1,198,107	1,323,871	1,327,251
Netherlands	1,338,197	1,384,352	1,475,531
South Korea	3,457,395	4,516,562	2,061,319
Italy	1,093,144	1,220,073	1,224,680
Turkey	637,993	652,566	750,398
Czech Republic	1,038,668	1,140,110	1,163,899
United Arab Emirates	374,409	563,753	608,518
Austria	610,797	670,799	704,268
All other exporters	8,586,202	7,931,914	8,612,284
Total	34,119,939	36,225,394	36,293,184

Table continued on next page.

Table VII-21--Continued
Certain fabricated steel: Global exports by exporter, 2016-18

Exporter	Calendar year		
	2016	2017	2018
	Unit value (dollars per short ton)		
United States	3,121	2,843	3,055
Canada	2,707	2,742	2,807
China	1,371	1,358	1,447
Mexico	1,972	1,970	2,122
Subject countries	1,452	1,439	1,541
Germany	2,210	2,368	2,693
Poland	1,816	1,998	2,257
Belgium	1,551	1,632	1,648
Spain	1,752	1,670	1,856
Netherlands	2,449	2,720	2,657
South Korea	4,622	7,671	3,902
Italy	1,951	2,248	2,356
Turkey	1,721	1,602	1,633
Czech Republic	2,250	2,321	2,589
United Arab Emirates	1,666	1,306	1,737
Austria	2,100	2,289	2,394
All other exporters	2,236	2,115	2,273
Total	1,962	2,022	2,027
	Share of quantity (percent)		
United States	1.4	1.4	1.4
Canada	1.5	1.5	1.6
China	33.9	34.2	34.7
Mexico	1.6	1.6	2.1
Subject countries	37.0	37.2	38.4
Germany	6.8	6.8	6.4
Poland	5.8	6.0	6.0
Belgium	4.6	4.9	5.0
Spain	3.9	4.4	4.0
Netherlands	3.1	2.8	3.1
South Korea	4.3	3.3	3.0
Italy	3.2	3.0	2.9
Turkey	2.1	2.3	2.6
Czech Republic	2.7	2.7	2.5
United Arab Emirates	1.3	2.4	2.0
Austria	1.7	1.6	1.6
All other exporters	22.1	20.9	21.2
Total	100.0	100.0	100.0

Note: GTA data from certain countries were excluded due to quantities reported without weights.

Source: Official exports statistics under HS subheading 7308.90 reported by various national statistical authorities in the Global Trade Atlas database, accessed January 10, 2020.

GTA did not include Canada export quantities, but values were reported. Constructed imports quantity and value were used for Canada.

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
84 FR 3245, February 11, 2019	*Fabricated Structural Steel From Canada, China, and Mexico; Institution of Antidumping and Countervailing Duty Investigations and Scheduling of Preliminary Phase Investigations*	https://www.govinfo.gov/content/pkg/FR-2019-02-11/pdf/2019-01730.pdf
84 FR 7330, March 4, 2019	*Certain Fabricated Structural Steel From Canada, Mexico, and the People's Republic of China: Initiation of Less-Than-Fair-Value Investigations*	https://www.govinfo.gov/content/pkg/FR-2019-03-04/pdf/2019-03818.pdf
84 FR 7339, March 4, 2019	*Certain Fabricated Structural Steel From Canada, Mexico, and the People's Republic of China: Initiation of Countervailing Duty Investigations*	https://www.govinfo.gov/content/pkg/FR-2019-03-04/pdf/2019-03819.pdf
84 FR 11554, March 27, 2019	*Fabricated Structural Steel from Canada, China, and Mexico*	https://www.govinfo.gov/content/pkg/FR-2019-03-27/pdf/2019-05884.pdf

Citation	Title	Link
84 FR 15581, April 16, 2019	*Certain Fabricated Structural Steel From Canada, Mexico, and the People's Republic of China: Postponement of Preliminary Determinations in the Countervailing Duty Investigations*	https://www.govinfo.gov/content/pkg/FR-2019-04-16/pdf/2019-07539.pdf
84 FR 31301, July 1, 2019	*Certain Fabricated Structural Steel From Canada, Mexico, and the People's Republic of China: Postponement of Preliminary Determinations in the Less-Than-Fair-Value Investigations*	https://www.govinfo.gov/content/pkg/FR-2019-07-01/pdf/2019-13986.pdf
84 FR 33232, July 12, 2019	*Certain Fabricated Structural Steel From Canada: Preliminary Negative Countervailing Duty Determination and Alignment of Final Determination With Final Antidumping Duty Determination*	https://www.govinfo.gov/content/pkg/FR-2019-07-12/pdf/2019-14872.pdf
84 FR 33232, July 12, 2019	*Certain Fabricated Structural Steel From the People's Republic of China: Preliminary Affirmative Countervailing Duty Determination, and Alignment of Final Determination With Final Antidumping Duty Determination*	https://www.govinfo.gov/content/pkg/FR-2019-07-12/pdf/2019-14870.pdf
84 FR 33227, July 12, 2019	*Certain Fabricated Structural Steel From Mexico: Preliminary Affirmative Countervailing Duty Determination, and Alignment of Final Determination With Final Antidumping Duty Determination*	https://www.govinfo.gov/content/pkg/FR-2019-07-12/pdf/2019-14871.pdf

Citation	Title	Link
84 FR 47481, September 10, 2019	*Certain Fabricated Structural Steel From Canada: Preliminary Negative Determination of Sales at Less Than Fair Value and Postponement of Final Determination*	https://www.govinfo.gov/content/pkg/FR-2019-09-10/pdf/2019-19511.pdf
84 FR 47491, September 10, 2019	*Certain Fabricated Structural Steel From the People's Republic of China: Preliminary Determination of Sales at Less Than Fair Value and Postponement of Final Determination*	https://www.govinfo.gov/content/pkg/FR-2019-09-10/pdf/2019-19512.pdf
84 FR 47487, September 10, 2019	*Certain Fabricated Structural Steel From Mexico: Preliminary Affirmative Determination of Sales at Less Than Fair Value and Postponement of Final Determination*	https://www.govinfo.gov/content/pkg/FR-2019-09-10/pdf/2019-19513.pdf
84 FR 49765, September 23, 2019	*Fabricated Structural Steel From Canada, China, and Mexico; Scheduling of the Final Phase of Countervailing Duty and Antidumping Duty Investigations*	https://www.govinfo.gov/content/pkg/FR-2019-09-23/pdf/2019-20493.pdf
85 FR 5387, January 30, 2020	*Certain Fabricated Structural Steel From Canada: Final Negative Countervailing Duty Determination*	https://www.govinfo.gov/content/pkg/FR-2020-01-30/pdf/2020-01719.pdf
85 FR 5384, January 30, 2020	*Certain Fabricated Structural Steel From the People's Republic of China: Final Affirmative Countervailing Duty Determination*	https://www.govinfo.gov/content/pkg/FR-2020-01-30/pdf/2020-01719.pdf

Citation	Title	Link
85 FR 5381, January 30, 2020	*Certain Fabricated Structural Steel From Mexico: Final Affirmative Countervailing Duty Determination*	https://www.govinfo.gov/content/pkg/FR-2020-01-30/pdf/2020-01723.pdf
85 FR 5387, January 30, 2020	*Certain Fabricated Structural Steel From Canada: Final Determination of Sales at Less Than Fair Value*	https://www.govinfo.gov/content/pkg/FR-2020-01-30/pdf/2020-01718.pdf
85 FR 5387, January 30, 2020	*Certain Fabricated Structural Steel From the People's Republic of China: Final Affirmative Determination of Sales at Less Than Fair Value*	https://www.govinfo.gov/content/pkg/FR-2020-01-30/pdf/2020-01720.pdf
85 FR 5387, January 30, 2020	*Certain Fabricated Structural Steel From Mexico: Final Determination of Sales at Less Than Fair Value*	https://www.govinfo.gov/content/pkg/FR-2020-01-30/pdf/2020-01722.pdf
85 FR 8321, February 13, 2020	*Fabricated Structural Steel From Canada: Termination of Investigation*	https://www.govinfo.gov/content/pkg/FR-2020-02-13/pdf/2020-02855.pdf

APPENDIX B

LIST OF HEARING WITNESSES

CALENDAR OF PUBLIC HEARING

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

Subject: Fabricated Structural Steel from Canada, China, and Mexico

Inv. Nos.: 701-TA-615-617 and 731-TA-1432-1434 (Final)

Date and Time: January 28, 2019 - 9:30 a.m.

Sessions were held in connection with these investigations in the Main Hearing Room (Room 101), 500 E Street, SW., Washington, DC.

CONGRESSIONAL APPEARANCES:

The Honorable Richard Blumenthal, United States Senator, Connecticut

The Honorable Steve Daines, United States Senator, Montana

The Honorable Rick Crawford, United States Representative, 1st District, Arkansas

The Honorable Kendra S. Horn, United States Representative, 5th District, Oklahoma

OPENING REMARKS:

Petitioners (**Christopher B. Weld**, Wiley Rein LLP)
Respondents (**Matthew R. Nicely**, Hughes Hubbard & Reed LLP)

In Support of the Imposition of
Antidumping and Countervailing Duty Orders:

Wiley Rein LLP
Washington, DC
on behalf of

American Institute of Steel Construction, LLC

Rick Cooper, Chief Executive Officer and President, W & W/AFCO Steel

James E. (Jed) Downs, President, Qualico Steel Company, Inc.

Peter Labbe, President and General Manager, Cives Steel Company,
New England Division

Hollie Noveletsky, Chief Executive Officer and Owner,
Novel Iron Works Inc.

Kevin Reynolds, Senior Vice President, Sales and Estimating, W & W/AFCO Steel

David Zalesne, President, Owen Steel Company, Government Relations Chairman,
Board of Directors, American Institute of Steel Construction

In Support of the Imposition of
Antidumping and Countervailing Duty Orders (continued):

Dr. Seth T. Kaplan, President, International Economic Research LLC

Travis Pope, Economist, Capital Trade, Inc.

Alan H. Price)
Christopher B. Weld)
) – OF COUNSEL
Tessa V. Capeloto)
Adam M. Teslik)

King & Spalding LLP
Washington, DC
on behalf of

Banker Steel Company ("Banker Steel")

Chet McPhatter, President, Banker Steel

J. Michael Taylor)
) – OF COUNSEL
Neal J. Reynolds)

In Opposition to the Imposition of
Antidumping and Countervailing Duty Orders:

Sidley Austin LLP
Washington, DC
on behalf of

ExxonMobil Chemical Company
Gulf Coast Growth Ventures, LLC

Paul J. Guilfoyle, Venture Executive, Gulf Coast Growth Venture Project, Exxon Mobil Corporation

Gindi E. Vincent, Senior Counsel, Exxon Mobil Corporation

Richard L.A. Weiner)
Rajib Pal)
) – OF COUNSEL
Alex L. Young)
Weijia Rao)

In Opposition to the Imposition of
Antidumping and Countervailing Duty Orders (continued):

Gilliland & McKinney International Counselors LLC
Washington, DC
on behalf of

Corey, S.A. de C.V.

Javier Salas, Vice President, Corey, S.A. de C.V.

John Kelly, Vice President, The Related Companies L.P.

Sheridan S. McKinney) – OF COUNSEL

Grunfeld Desiderio Lebowitz Silverman & Klestadt LLP
Washington, DC
on behalf of

Jinhuan Construction Group Co., Ltd.
Wison (Nantong) Heavy Industry Co., Ltd.
Shanghai Matsuo Steel Structure Co., Ltd.
Yanda (Haimen) Heavy Equipment Manufacturing Co., Ltd.
Shanghai Cosco Kawasaki Heavy Industries Steel Structure Co., Ltd.
(collectively, "Chinese Respondents')
Dickerson Enterprises, Inc.
Steel Construction Group, LLC
(collectively, "DEI")

Sid Dickerson, Vice President, Dickerson Enterprises, Inc.

Maggie Zhao, Business Development Account Manager,
Wison Petrochemicals (NA) LLC

Xuanmin Zhang, General Manager,
Shanghai Matsuo Steel Structure Co., Ltd.

Max F. Schutzman)
Ned H. Marshak)
) – OF COUNSEL
Jordan C. Kahn)
Eve Q. Wang)

In Opposition to the Imposition of
Antidumping and Countervailing Duty Orders (continued):

Arent Fox LLP
Washington, DC
on behalf of

Canadian Institute of Steel Construction
Canam Buildings and Structures, Inc.
Industries Canatal, Inc.
Walters Inc.
(collectively "CISC")

Ed Whalen, President & Chief Executive Officer,
Canadian Institute of Steel Construction

Walt Koppelaar, Executive Vice President of Sales & U.S. Operations,
Walters Inc.

Kevin Guile, President, Supreme Group

Martin Savoie, Vice President of Operations, Beauce-Atlas

Serge Marcoux, Vice President & Chief Financial Officer, Beauce-Atlas

Serge Dussault, Senior Vice President, Canam Buildings and Structures, Inc.

Dan Rooney, President and General Manager, ADF International

Lise-Andrée Lessard, Director of Finance, Groupe Canatal

Mario Giguère, Controller, Groupe Canatal

Joseph Posteraro, Director of Projects & Contract Administration,
Industries Canatal, Inc./Canatal Steel USA Inc.

Robert M. Grillo, Account Executive,
Industries Canatal, Inc./Canatal Steel USA Inc.

Nicolas Leclerc, Director of Operations, Métal Perreault, Inc.

Sabrina Kanner, Executive Vice President, Design & Construction,
U.S. Office Division, Bookfield Properties

Ross Templeton, Political and Legislative Director,
Ironworkers Political Action League

James P. Dougan, Vice President, Economic Consulting Services LLC

Susannah Perkins, Staff Economist, Economic Consulting Services LLC

Nancy A. Noonan)
Matthew M. Nolan) – OF COUNSEL
Leah N. Scarpelli)

In Opposition to the Imposition of
Antidumping and Countervailing Duty Orders (continued):

Hughes Hubbard & Reed LLP
Washington, DC
on behalf of

Cornerstone Building Brands, Inc. ("CBB")
Building Systems de Mexico, S.A. de C.V. ("BSM")

Matthew Thiem, Vice President – Legal,
Cornerstone Building Brands, Inc.

Bradley Graham, Division Counsel, Cornerstone Building Brands, Inc.

Andrew Smith, Controller, Buildings and Components,
Cornerstone Building Brands, Inc.

Mark Golladay, Consultant, Cornerstone Building Brands, Inc.

Mark Detwiler, Lead R&D Engineer, Buildings,
Cornerstone Building Brands, Inc.

Matthew R. Nicely)
Dean A. Pinkert) – OF COUNSEL
Daniel M. Witkowski)

Curtis, Mallet-Prevost, Colt & Mosle LLP
Washington, DC
on behalf of

BlueScope Buildings North America, Inc.
Butler de Mexico, S. de R.L. de C.V.
(collectively, "BlueScope")

Greg Pasley, President, Butler Manufacturing

Mishca Waliczek, General Counsel,
BlueScope Buildings North America, Inc.

Christopher Dunn)
Daniel L. Porter) – OF COUNSEL
Gina M. Colarusso)

REBUTTAL/CLOSING REMARKS:

Petitioners (**Alan H. Price** and **Christopher B. Weld**, Wiley Rein LLP; and
Dr. Seth T. Kaplan, International Economic Research LLC;
Respondents (**Nancy A. Noonan**, Arent Fox LLP; and
Ned H. Marshak, Grunfeld Desiderio Lebowitz Silverman & Klestadt LLP)

-END-

APPENDIX C

SUMMARY DATA

Single Like Product: All U.S. producers

Table C-1

Fabricated structural steel: Summary data concerning the U.S. market, 2016-18, January to September 2018, and January to September 201

(Quantity=short tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short ton; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	Calendar year			January to September		Calendar year			Jan-Sep
	2016	2017	2018	2018	2019	2016-18	2016-17	2017-18	2018-19
U.S. consumption quantity:									
Amount	2,924,186	2,924,091	3,096,687	2,328,279	2,308,342	▲5.9	▼(0.0)	▲5.9	▼(0.9)
Producers' share (fn1)	65.9	66.9	67.5	66.4	65.6	▲1.7	▲1.1	▲0.6	▼(0.8)
Importers' share (fn1):									
Canada subject	6.7	7.8	7.9	7.8	8.1	▲1.2	▲1.1	▲0.1	▲0.4
China	13.7	12.9	11.8	13.4	6.5	▼(1.9)	▼(0.8)	▼(1.1)	▼(6.9)
Mexico	5.0	4.3	5.5	5.2	6.6	▲0.5	▼(0.7)	▲1.2	▲1.4
Subject sources	25.3	25.0	25.2	26.3	21.2	▼(0.1)	▼(0.3)	▲0.2	▼(5.1)
Canada nonsubject	***	***	***	***	***	▼***	▲***	▼***	▼***
All other sources	***	***	***	***	***	▼***	▼***	▼***	▲***
Nonsubject sources	8.8	8.1	7.3	7.3	13.2	▼(1.5)	▼(0.7)	▼(0.8)	▲5.9
All import sources	34.1	33.1	32.5	33.6	34.4	▼(1.7)	▼(1.1)	▼(0.6)	▲0.8
U.S. consumption value:									
Amount	7,544,574	7,909,978	8,998,286	6,698,026	6,820,219	▲19.3	▲4.8	▲13.8	▲1.8
Producers' share (fn1)	66.8	67.6	70.8	69.6	69.0	▲4.0	▲0.8	▲3.2	▼(0.6)
Importers' share (fn1):									
Canada subject	7.8	8.5	7.8	7.8	8.3	▼(0.0)	▲0.7	▼(0.7)	▲0.5
China	10.1	10.0	9.4	10.5	5.8	▼(0.7)	▼(0.1)	▼(0.7)	▼(4.7)
Mexico	3.5	3.0	3.3	3.3	3.8	▼(0.2)	▼(0.5)	▲0.3	▲0.5
Subject sources	21.4	21.6	20.4	21.5	17.9	▼(1.0)	▲0.1	▼(1.1)	▼(3.7)
Canada nonsubject	***	***	***	***	***	▼***	▼***	▼***	▼***
All other sources	***	***	***	***	***	▼***	▼***	▼***	▲***
Nonsubject sources	11.8	10.8	8.7	8.9	13.2	▼(3.1)	▼(1.0)	▼(2.1)	▲4.3
All import sources	33.2	32.4	29.2	30.4	31.0	▼(4.0)	▼(0.8)	▼(3.2)	▲0.6
U.S. imports from:									
Canada subject:									
Quantity	195,090.9	227,971.7	245,246.0	180,566.6	187,314.8	▲25.7	▲16.9	▲7.6	▲3.7
Value	588,777.8	672,860.7	700,431.1	521,560.7	563,542.9	▲19.0	▲14.3	▲4.1	▲8.0
Unit value	$3,018	$2,952	$2,856	$2,888	$3,009	▼(5.4)	▼(2.2)	▼(3.2)	▲4.2
Ending inventory quantity	***	***	***	***	***	▼***	▼***	▼***	▲***
China:									
Quantity	400,618.9	377,465.8	364,265.3	311,384.9	149,767.7	▼(9.1)	▼(5.8)	▼(3.5)	▼(51.9)
Value	761,739.0	794,439.4	841,396.9	703,321.3	395,946.6	▲10.5	▲4.3	▲5.9	▼(43.7)
Unit value	$1,901	$2,105	$2,310	$2,259	$2,644	▲21.5	▲10.7	▲9.7	▲17.0
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▼***	▼***
Mexico:									
Quantity	144,917.3	125,285.1	170,194.4	120,637.0	151,863.8	▲17.4	▼(13.5)	▲35.8	▲25.9
Value	265,225.8	238,532.3	298,320.8	218,056.5	258,400.9	▲12.5	▼(10.1)	▲25.1	▲18.5
Unit value	$1,830	$1,904	$1,753	$1,808	$1,702	▼(4.2)	▲4.0	▼(7.9)	▼(5.9)
Ending inventory quantity	***	***	***	***	***	***	***	***	▲***
Subject sources:									
Quantity	740,627.1	730,722.6	779,705.7	612,588.5	488,946.2	▲5.3	▼(1.3)	▲6.7	▼(20.2)
Value	1,615,742.7	1,705,832.4	1,840,148.9	1,442,938.5	1,217,890.4	▲13.9	▲5.6	▲7.9	▼(15.6)
Unit value	$2,182	$2,334	$2,360	$2,355	$2,491	▲8.2	▲7.0	▲1.1	▲5.7
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▼***	▼***
Canada nonsubject:									
Quantity	***	***	***	***	***	▲***	▲***	▼***	▼***
Value	***	***	***	***	***	▼***	▼***	▲***	▼***
Unit value	***	***	***	***	***	▼***	▼***	▲***	▲***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
All other sources:									
Quantity	***	***	***	***	***	▼***	▼***	▼***	▲***
Value	***	***	***	***	***	▼***	▼***	▼***	▲***
Unit value	***	***	***	***	***	▲***	▲***	▼***	▼***
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▲***	▲***
Nonsubject sources:									
Quantity	257,591.3	236,647.6	226,275.1	169,217.5	305,007.7	▼(12.2)	▼(8.1)	▼(4.4)	▲80.2
Value	888,065.1	853,436.7	784,431.4	594,955.4	898,054.5	▼(11.7)	▼(3.9)	▼(8.1)	▲50.9
Unit value	$3,448	$3,606	$3,467	$3,516	$2,944	▲0.6	▲4.6	▼(3.9)	▼(16.3)
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▲***	▲***
All import sources:									
Quantity	998,218	967,370	1,005,981	781,806	793,954	▲0.8	▼(3.1)	▲4.0	▲1.6
Value	2,503,808	2,559,269	2,624,580	2,037,894	2,115,945	▲4.8	▲2.2	▲2.6	▲3.8
Unit value	$2,508	$2,646	$2,609	$2,607	$2,665	▲4.0	▲5.5	▼(1.4)	▲2.2
Ending inventory quantity	607	3,157	3,105	3,782	3,772	▲411.5	▲420.1	▼(1.6)	▼(0.3)

Table continued on next page.

Table C-1--Continued
Fabricated structural steel: Summary data concerning the U.S. market, 2016-18, January to September 2018, and January to September 201
(Quantity=short tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short ton; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	Calendar year			January to September		Calendar year			Jan-Sep
	2016	2017	2018	2018	2019	2016-18	2016-17	2017-18	2018-19
U.S. producers':									
Average capacity quantity	3,006,986	3,091,358	3,150,839	2,351,889	2,382,289	▲4.8	▲2.8	▲1.9	▲1.3
Production quantity	1,971,290	2,002,683	2,148,023	1,595,223	1,527,127	▲9.0	▲1.6	▲7.3	▼(4.3)
Capacity utilization (fn1)	65.6	64.8	68.2	67.8	64.1	▲2.6	▼(0.8)	▲3.4	▼(3.7)
U.S. shipments:									
Quantity	1,925,968	1,956,721	2,090,706	1,546,473	1,514,388	▲8.6	▲1.6	▲6.8	▼(2.1)
Value	5,040,766	5,350,709	6,373,706	4,660,132	4,704,274	▲26.4	▲6.1	▲19.1	▲0.9
Unit value	$2,617	$2,735	$3,049	$3,013	$3,106	▲16.5	▲4.5	▲11.5	▲3.1
Export shipments:									
Quantity (fn2)	***	***	***	***	***	▲***	▲***	▲***	▼***
Value (fn2)	***	***	***	***	***	▲***	▲***	▲***	▼***
Unit value (fn2)	***	***	***	***	***	▲***	▲***	▼***	▲***
Ending inventory quantity	110,174	116,598	129,419	129,664	112,554	▲17.5	▲5.8	▲11.0	▼(13.2)
Inventories/production (fn1)	5.6	5.8	6.0	6.1	5.5	▲0.4	▲0.2	▲0.2	▼(0.6)
Production workers	20,789	20,446	20,577	20,828	21,342	▼(1.0)	▼(1.6)	▲0.6	▲2.5
Hours worked (1,000s)	47,494	46,761	47,111	35,896	36,156	▼(0.8)	▼(1.5)	▲0.7	▲0.7
Wages paid ($1,000)	1,167,533	1,166,030	1,254,867	918,347	949,984	▲7.5	▼(0.1)	▲7.6	▲3.4
Hourly wages (dollars per hour)	$24.58	$24.94	$26.64	$25.58	$26.27	▲8.4	▲1.4	▲6.8	▲2.7
Productivity (short tons per 1,000 hours)	41.5	42.8	45.6	44.4	42.2	▲9.9	▲3.2	▲6.5	▼(5.0)
Unit labor costs	$592	$582	$584	$576	$622	▼(1.4)	▼(1.7)	▲0.3	▲8.1
Net sales:									
Quantity	1,966,355	1,997,097	2,139,556	1,583,672	1,540,206	▲8.8	▲1.6	▲7.1	▼(2.7)
Value	5,252,278	5,554,915	6,619,233	4,824,319	4,895,954	▲26.0	▲5.8	▲19.2	▲1.5
Unit value	$2,671	$2,781	$3,094	$3,046	$3,179	▲15.8	▲4.1	▲11.2	▲4.3
Cost of goods sold (COGS)	3,950,331	4,219,860	5,136,331	3,752,809	3,769,860	▲30.0	▲6.8	▲21.7	▲0.5
Gross profit or (loss) (fn3)	1,301,947	1,335,055	1,482,902	1,071,510	1,126,094	▲13.9	▲2.5	▲11.1	▲5.1
SG&A expenses	992,862	1,026,863	1,107,800	810,249	824,073	▲11.6	▲3.4	▲7.9	▲1.7
Operating income or (loss) (fn3)	309,085	308,192	375,102	261,261	302,021	▲21.4	▼(0.3)	▲21.7	▲15.6
Net income or (loss) (fn2) (fn3)	***	***	***	***	***	▲***	▲***	▼***	▼***
Capital expenditures (fn2)	***	***	***	***	***	▲***	▲***	▲***	▲***
R&D (fn2)	***	***	***	***	***	▼***	▼***	▼***	▲***
Net assets (fn2)	***	***	***	NA	NA	▲***	▲***	▲***	NA
Unit COGS	$2,009	$2,113	$2,401	$2,370	$2,448	▲19.5	▲5.2	▲13.6	▲3.3
Unit SG&A expenses	$505	$514	$518	$512	$535	▲2.5	▲1.8	▲0.7	▲4.6
Unit operating income or (loss) (fn3)	$157	$154	$175	$165	$196	▲11.5	▼(1.8)	▲13.6	▲18.9
Unit net income or (loss) (fn2) (fn3)	***	***	***	***	***	▲***	▲***	▼***	▼***
COGS/sales (fn1)	75.2	76.0	77.6	77.8	77.0	▲2.4	▲0.8	▲1.6	▼(0.8)
Operating income or (loss)/sales (fn1)	5.9	5.5	5.7	5.4	6.2	▼(0.2)	▼(0.3)	▲0.1	▲0.8
Net income or (loss)/sales (fn2) (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.--Data for net income or (loss), capital expenditures, research and development expenses, net assets, and export shipments are only derived from large firms (not all producers).

fn3.--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 Commission questionnaires and from *** using HTS statistical reporting numbers7308.90.3000, 7308.90.6000, and 7308.90.9590, accessed November 22, 2019.

Split like product: FSS excluding for PEMBs

Table C-2

Fabricated structural steel excluding for PEMBs: Summary data concerning the U.S. market, 2016-18, January to September 2018, and January to September 2019

(Quantity=short tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short ton; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	Calendar year			January to September		Calendar year			Jan-Sep
	2016	2017	2018	2018	2019	2016-18	2016-17	2017-18	2018-19
U.S. consumption quantity:									
Amount	***	***	***	***	***	▲***	▲***	▲***	▲***
Producers' share (fn1)	***	***	***	***	***	▲***	▲***	▲***	▲***
Importers' share (fn1):									
Canada subject	***	***	***	***	***	▲***	▲***	▼***	▼***
China	***	***	***	***	***	▼***	▼***	▼***	▼***
Mexico	***	***	***	***	***	▲***	▼***	▲***	▲***
Subject sources	***	***	***	***	***	▼***	▼***	▼***	▼***
Canada nonsubject	***	***	***	***	***	▼***	▲***	▼***	▼***
All other sources	***	***	***	***	***	▼***	▼***	▼***	▲***
Nonsubject sources	***	***	***	***	***	▼***	▼***	▼***	▲***
All import sources	***	***	***	***	***	▼***	▼***	▼***	▼***
U.S. consumption value:									
Amount	***	***	***	***	***	▲***	▲***	▲***	▲***
Producers' share (fn1)	***	***	***	***	***	▲***	▲***	▲***	▲***
Importers' share (fn1):									
Canada subject	***	***	***	***	***	▼***	▲***	▼***	▲***
China	***	***	***	***	***	▼***	▼***	▼***	▼***
Mexico	***	***	***	***	***	▼***	▼***	▲***	▲***
Subject sources	***	***	***	***	***	▼***	▲***	▼***	▼***
Canada nonsubject	***	***	***	***	***	▼***	▼***	▼***	▼***
All other sources	***	***	***	***	***	▼***	▼***	▼***	▲***
Nonsubject sources	***	***	***	***	***	▼***	▼***	▼***	▲***
All import sources	***	***	***	***	***	▼***	▼***	▼***	▼***
U.S. imports from:									
Canada subject:									
Quantity	***	***	***	***	***	▲***	▲***	▲***	▲***
Value	***	***	***	***	***	▲***	▲***	▲***	▲***
Unit value	***	***	***	***	***	▼***	▼***	▼***	▲***
China:									
Quantity	***	***	***	***	***	▼***	▼***	▼***	▼***
Value	***	***	***	***	***	▲***	▲***	▲***	▼***
Unit value	***	***	***	***	***	▲***	▲***	▲***	▲***
Mexico:									
Quantity	***	***	***	***	***	▲***	▼***	▲***	▲***
Value	***	***	***	***	***	▲***	▼***	▲***	▲***
Unit value	***	***	***	***	***	▼***	▲***	▼***	▼***
Subject sources:									
Quantity	***	***	***	***	***	▲***	▼***	▲***	▼***
Value	***	***	***	***	***	▲***	▲***	▲***	▼***
Unit value	***	***	***	***	***	▲***	▲***	▲***	▲***
Canada nonsubject:									
Quantity	***	***	***	***	***	▲***	▲***	▼***	▼***
Value	***	***	***	***	***	▼***	▼***	▲***	▼***
Unit value	***	***	***	***	***	▼***	▼***	▲***	▲***
All other sources:									
Quantity	***	***	***	***	***	▼***	▼***	▼***	▲***
Value	***	***	***	***	***	▼***	▼***	▼***	▲***
Unit value	***	***	***	***	***	▲***	▲***	▼***	▼***
Nonsubject sources:									
Quantity	***	***	***	***	***	▼***	▼***	▼***	▲***
Value	***	***	***	***	***	▼***	▼***	▼***	▲***
Unit value	***	***	***	***	***	▲***	▲***	▼***	▼***
All import sources:									
Quantity	***	***	***	***	***	▲***	▼***	▲***	▲***
Value	***	***	***	***	***	▲***	▲***	▲***	▲***
Unit value	***	***	***	***	***	▲***	▲***	▼***	▲***

Table continued on next page.

Table C-2--Continued

Fabricated structural steel excluding for PEMBs: Summary data concerning the U.S. market, 2016-18, January to September 2018, and January to September 2019

(Quantity=short tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short ton; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	Calendar year			January to September		Calendar year			Jan-Sep
	2016	2017	2018	2018	2019	2016-18	2016-17	2017-18	2018-19
U.S. producers':									
Average capacity quantity	***	***	***	***	***	▲***	▲***	▲***	▲***
Production quantity	***	***	***	***	***	▲***	▲***	▲***	▲***
Capacity utilization (fn1)	***	***	***	***	***	▲***	▼***	▲***	▲***
U.S. shipments:									
Quantity	***	***	***	***	***	▲***	▲***	▲***	▲***
Value	***	***	***	***	***	▲***	▲***	▲***	▲***
Unit value	***	***	***	***	***	▲***	▲***	▲***	▼***
Export shipments:									
Quantity (fn2)	***	***	***	***	***	▲***	▲***	▼***	▼***
Value (fn2)	***	***	***	***	***	▲***	▲***	▼***	▼***
Unit value (fn2)	***	***	***	***	***	▼***	▼***	▼***	▲***
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▲***	▼***
Inventories/production (fn1)	***	***	***	***	***	▲***	▲***	▼***	▼***
Production workers	***	***	***	***	***	▲***	▼***	▲***	▲***
Hours worked (1,000s)	***	***	***	***	***	▲***	▼***	▲***	▲***
Wages paid ($1,000)	***	***	***	***	***	▲***	▲***	▲***	▲***
Hourly wages (dollars per hour)	***	***	***	***	***	▲***	▲***	▲***	▲***
Productivity (short tons per 1,000 hours)	***	***	***	***	***	▲***	▲***	▲***	▲***
Unit labor costs	***	***	***	***	***	▼***	▼***	▼***	▲***
Net sales:									
Quantity	***	***	***	***	***	▲***	▲***	▲***	▲***
Value	***	***	***	***	***	▲***	▲***	▲***	▲***
Unit value	***	***	***	***	***	▲***	▲***	▲***	▲***
Cost of goods sold (COGS)	***	***	***	***	***	▲***	▲***	▲***	▲***
Gross profit or (loss) (fn3)	***	***	***	***	***	▲***	▲***	▲***	▲***
SG&A expenses	***	***	***	***	***	▲***	▲***	▲***	▲***
Operating income or (loss) (fn3)	***	***	***	***	***	▲***	▼***	▲***	▲***
Net income or (loss) (fn2) (fn3)	***	***	***	***	***	▲***	▼***	▲***	▲***
Capital expenditures (fn2)	***	***	***	***	***	▲***	▲***	▲***	▼***
R&D (fn2)	***	***	***	***	***	▼***	▲***	▼***	▼***
Net assets (fn2)	***	***	***	***	***	▲***	▲***	▲***	***
Unit COGS	***	***	***	***	***	▲***	▲***	▲***	▼***
Unit SG&A expenses	***	***	***	***	***	▲***	▲***	▼***	▲***
Unit operating income or (loss) (fn3)	***	***	***	***	***	▼***	▼***	▲***	▲***
Unit net income or (loss) (fn2) (fn3)	***	***	***	***	***	▼***	▼***	▼***	▲***
COGS/sales (fn1)	***	***	***	***	***	▲***	▲***	▲***	▼***
Operating income or (loss)/sales (fn1)	***	***	***	***	***	▼***	▼***	▼***	▲***
Net income or (loss)/sales (fn2) (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. This table excludes three U.S. producers BlueScope, NCI, and Nucor that are *** producers of FSS for PEMBs.

fn1.--Reported data are in percent and period changes are in percentage points.

fn2.--Data for net income or (loss), capital expenditures, research and development expenses, net assets, and export shipments are only derived from large firms (not all producers).

fn3.--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 Commission questionnaires and from *** using HTS statistical reporting numbers7308.90.3000, 7308.90.6000, and 7308.90.9590, accessed November 22, 2019.

Split like product: FSS for PEMBs

Table C-3

Fabricated structural steel for PEMBs: Summary data concerning the U.S. market, 2016-18, January to September 2018, and January to September 2019

(Quantity=short tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short ton; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	Calendar year			January to September		Calendar year			Jan-Sep
	2016	2017	2018	2018	2019	2016-18	2016-17	2017-18	2018-19
U.S. consumption quantity:									
Amount	***	***	***	***	***	▼***	▼***	▼***	▼***
Producers' share (fn1)	***	***	***	***	***	▼***	▲***	▼***	▼***
Importers' share (fn1):									
Canada subject	***	***	***	***	***	▼***	▲***	▼***	▲***
China	***	***	***	***	***	***	***	***	***
Mexico	***	***	***	***	***	▲***	▼***	▲***	▼***
Subject sources	***	***	***	***	***	▲***	▼***	▲***	▼***
Canada nonsubject	***	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***	▲***
Subject less Canada and China:	***	***	***	***	***	▲***	▼***	▲***	▼***
Nonsubject sources	***	***	***	***	***	***	***	***	▲***
Nonsubject plus Canada and China:	***	***	***	***	***	▼***	▲***	▼***	▲***
All import sources	***	***	***	***	***	▲***	▼***	▲***	▲***
U.S. consumption value:									
Amount	***	***	***	***	***	▲***	▲***	▲***	▼***
Producers' share (fn1)	***	***	***	***	***	▼***	▲***	▼***	▲***
Importers' share (fn1):									
Canada subject	***	***	***	***	***	▲***	▲***	▼***	▲***
China	***	***	***	***	***	***	***	***	***
Mexico	***	***	***	***	***	▲***	▼***	▲***	▼***
Subject sources	***	***	***	***	***	▲***	▼***	▲***	▼***
Canada nonsubject	***	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***	▲***
Subject less Canada and China:	***	***	***	***	***	▲***	▼***	▲***	▼***
Nonsubject sources	***	***	***	***	***	***	***	***	▲***
Nonsubject plus Canada and China:	***	***	***	***	***	▲***	▲***	▼***	▲***
All import sources	***	***	***	***	***	▲***	▼***	▲***	▼***
U.S. importers' U.S. shipments of imports.--									
Canada subject:									
Quantity	***	***	***	***	***	▼***	▲***	▼***	▲***
Value	***	***	***	***	***	▲***	▲***	▼***	▲***
Unit value	***	***	***	***	***	▲***	▲***	▲***	▼***
China:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Mexico:									
Quantity	***	***	***	***	***	▲***	▼***	▲***	▼***
Value	***	***	***	***	***	▲***	▼***	▲***	▼***
Unit value	***	***	***	***	***	▲***	▼***	▲***	▲***
Subject sources:									
Quantity	***	***	***	***	***	▲***	▼***	▲***	▼***
Value	***	***	***	***	***	▲***	▼***	▲***	▼***
Unit value	***	***	***	***	***	▲***	▼***	▲***	▲***
Canada nonsubject:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
All other sources:									
Quantity	***	***	***	***	***	***	***	***	▲***
Value	***	***	***	***	***	***	***	***	▲***
Unit value	***	***	***	***	***	***	***	***	▲***
Subject less Canada and China:									
Quantity	***	***	***	***	***	▲***	▼***	▲***	▼***
Value	***	***	***	***	***	▲***	▼***	▲***	▼***
Unit value	***	***	***	***	***	▲***	▼***	▲***	▲***
Nonsubject sources:									
Quantity	***	***	***	***	***	***	***	***	▲***
Value	***	***	***	***	***	***	***	***	▲***
Unit value	***	***	***	***	***	***	***	***	▲***
Nonsubject plus Canada and China:									
Quantity	***	***	***	***	***	▼***	▲***	▼***	▲***
Value	***	***	***	***	***	▲***	▲***	▼***	▲***
Unit value	***	***	***	***	***	▲***	▲***	▲***	▼***
All import sources:									
Quantity	***	***	***	***	***	▲***	▼***	▲***	▼***
Value	***	***	***	***	***	▲***	▼***	▲***	▼***
Unit value	***	***	***	***	***	▲***	▼***	▲***	▲***

Table continued on next page.

Table C-3--Continued

Fabricated structural steel for PEMBs: Summary data concerning the U.S. market, 2016-18, January to September 2018, and January to September 2019

(Quantity=short tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short ton; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	Calendar year			January to September		Calendar year			Jan-Sep
	2016	2017	2018	2018	2019	2016-18	2016-17	2017-18	2018-19
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/production (fn1)	***	***	***	***	***	▲***	▲***	▲***	▲***
Production workers	***	***	***	***	***	▼***	▼***	▼***	▲***
Hours worked (1,000s)	***	***	***	***	***	▼***	▼***	▼***	▼***
Wages paid ($1,000)	***	***	***	***	***	▲***	▼***	▲***	▼***
Hourly wages (dollars per hour)	***	***	***	***	***	▲***	▼***	▲***	▼***
Productivity (short tons per 1,000 hours)	***	***	***	***	***	▲***	▲***	▲***	▼***
Unit labor costs	***	***	***	***	***	▲***	▼***	▲***	▲***
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	***	***	***	***	***	▼***	▼***	▼***	▲***
Net assets	***	***	***	***	***	▲***	▼***	▲***	***
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)	***	***	***	***	***	▲***	▲***	▼***	▼***

Notes:

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. This table includes the three U.S. producers BlueScope, NCI, and Nucor that are *** producers of FSS for PEMBs.

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 Commission questionnaires.

Single Like Product; Related Party Exclusion

Table C-4
Fabricated structural steel: Summary data concerning the U.S. market excluding related parties ADF and Ocean, 2016-18, January to September 2018, and January to September 2019

(Quantity=short tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short ton; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	Calendar year			January to September		Calendar year			Jan-Sep
	2016	2017	2018	2018	2019	2016-18	2016-17	2017-18	2018-19
U.S. consumption quantity:									
Amount	2,924,186	2,924,091	3,096,687	2,328,279	2,308,342	▲5.9	▼(0.0)	▲5.9	▼(0.9)
Producers' share (fn1):									
Included producers	***	***	***	***	***	▲***	▲***	▲***	▼***
Excluded producers	***	***	***	***	***	▲***	▲***	▼***	▼***
All producers	65.9	66.9	67.5	66.4	65.6	▲1.7	▲1.1	▲0.6	▼(0.8)
Importers' share (fn1):									
Canada subject	6.7	7.8	7.9	7.8	8.1	▲1.2	▲1.1	▲0.1	▲0.4
China	13.7	12.9	11.8	13.4	6.5	▼(1.9)	▼(0.8)	▼(1.1)	▼(6.9)
Mexico	5.0	4.3	5.5	5.2	6.6	▲0.5	▼(0.7)	▲1.2	▲1.4
Subject sources	25.3	25.0	25.2	26.3	21.2	▼(0.1)	▼(0.3)	▲0.2	▼(5.1)
Canada nonsubject	***	***	***	***	***	▼***	▲***	▼***	▼***
All other sources	***	***	***	***	***	▼***	▼***	▼***	▲***
Nonsubject sources	8.8	8.1	7.3	7.3	13.2	▼(1.5)	▼(0.7)	▼(0.8)	▲5.9
All import sources	34.1	33.1	32.5	33.6	34.4	▼(1.7)	▼(1.1)	▼(0.6)	▲0.8
U.S. consumption value:									
Amount	7,544,574	7,909,978	8,998,286	6,698,026	6,820,219	▲19.3	▲4.8	▲13.8	▲1.8
Producers' share (fn1):									
Included producers	***	***	***	***	***	▲***	▲***	▲***	▼***
Excluded producers	***	***	***	***	***	▲***	▲***	▼***	▼***
All producers	66.8	67.6	70.8	69.6	69.0	▲4.0	▲0.8	▲3.2	▼(0.6)
Importers' share (fn1):									
Canada subject	7.8	8.5	7.8	7.8	8.3	▼(0.0)	▲0.7	▼(0.7)	▲0.5
China	10.1	10.0	9.4	10.5	5.8	▼(0.7)	▼(0.1)	▼(0.7)	▼(4.7)
Mexico	3.5	3.0	3.3	3.3	3.8	▼(0.2)	▼(0.5)	▲0.3	▲0.5
Subject sources	21.4	21.6	20.4	21.5	17.9	▼(1.0)	▲0.1	▼(1.1)	▼(3.7)
Canada nonsubject	***	***	***	***	***	▼***	▼***	▼***	▼***
All other sources	***	***	***	***	***	▼***	▼***	▼***	▲***
Nonsubject sources	11.8	10.8	8.7	8.9	13.2	▼(3.1)	▼(1.0)	▼(2.1)	▲4.3
All import sources	33.2	32.4	29.2	30.4	31.0	▼(4.0)	▼(0.8)	▼(3.2)	▲0.6
U.S. imports from:									
Canada subject:									
Quantity	195,090.9	227,971.7	245,246.0	180,566.6	187,314.8	▲25.7	▲16.9	▲7.6	▲3.7
Value	588,777.8	672,860.7	700,431.1	521,560.7	563,542.9	▲19.0	▲14.3	▲4.1	▲8.0
Unit value	$3,018	$2,952	$2,856	$2,888	$3,009	▼(5.4)	▼(2.2)	▼(3.2)	▲4.2
Ending inventory quantity	***	***	***	***	***	▼***	▼***	▼***	▲***
China:									
Quantity	400,618.9	377,465.8	364,265.3	311,384.9	149,767.7	▼(9.1)	▼(5.8)	▼(3.5)	▼(51.9)
Value	761,739.0	794,439.4	841,396.9	703,321.3	395,946.6	▲10.5	▲4.3	▲5.9	▼(43.7)
Unit value	$1,901	$2,105	$2,310	$2,259	$2,644	▲21.5	▲10.7	▲9.7	▲17.0
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▼***	▼***
Mexico:									
Quantity	144,917.3	125,285.1	170,194.4	120,637.0	151,863.8	▲17.4	▼(13.5)	▲35.8	▲25.9
Value	265,225.8	238,532.3	298,320.8	218,056.5	258,400.9	▲12.5	▼(10.1)	▲25.1	▲18.5
Unit value	$1,830	$1,904	$1,753	$1,808	$1,702	▼(4.2)	▲4.0	▼(7.9)	▼(5.9)
Ending inventory quantity	***	***	***	***	***	***	***	***	▲***
Subject sources:									
Quantity	740,627.1	730,722.6	779,705.7	612,588.5	488,946.2	▲5.3	▼(1.3)	▲6.7	▼(20.2)
Value	1,615,742.7	1,705,832.4	1,840,148.9	1,442,938.5	1,217,890.4	▲13.9	▲5.6	▲7.9	▼(15.6)
Unit value	$2,182	$2,334	$2,360	$2,355	$2,491	▲8.2	▲7.0	▲1.1	▲5.7
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▼***	▼***
Canada nonsubject:									
Quantity	***	***	***	***	***	▲***	▲***	▼***	▼***
Value	***	***	***	***	***	▼***	▼***	▲***	▼***
Unit value	***	***	***	***	***	▼***	▼***	▲***	▲***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
All other sources:									
Quantity	***	***	***	***	***	▼***	▼***	▼***	▲***
Value	***	***	***	***	***	▼***	▼***	▼***	▲***
Unit value	***	***	***	***	***	▲***	▲***	▼***	▼***
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▲***	▲***

Table continued on next page.

Table C-4--Continued

Fabricated structural steel: Summary data concerning the U.S. market excluding related parties ADF and Ocean, 2016-18, January to September 2018, and January to September 2019

(Quantity=short tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short ton; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	Calendar year			January to September		Calendar year			Jan-Sep
	2016	2017	2018	2018	2019	2016-18	2016-17	2017-18	2018-19
U.S. imports from:									
Nonsubject sources:									
Quantity	257,591	236,648	226,275	169,217	305,008	▼(12.2)	▼(8.1)	▼(4.4)	▲80.2
Value	888,065	853,437	784,431	594,955	898,055	▼(11.7)	▼(3.9)	▼(8.1)	▲50.9
Unit value	$3,448	$3,606	$3,467	$3,516	$2,944	▲0.6	▲4.6	▼(3.9)	▼(16.3)
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▲***	▲***
All import sources:									
Quantity	998,218	967,370	1,005,981	781,806	793,954	▲0.8	▼(3.1)	▲4.0	▲1.6
Value	2,503,808	2,559,269	2,624,580	2,037,894	2,115,945	▲4.8	▲2.2	▲2.6	▲3.8
Unit value	$2,508	$2,646	$2,609	$2,607	$2,665	▲4.0	▲5.5	▼(1.4)	▲2.2
Ending inventory quantity	607	3,157	3,105	3,782	3,772	▲411.5	▲420.1	▼(1.6)	▼(0.3)
Included U.S. producers':									
Average capacity quantity	***	***	***	***	***	▲***	▲***	▲***	▲***
Production quantity	***	***	***	***	***	▲***	▲***	▲***	▼***
Capacity utilization (fn1)	***	***	***	***	***	▲***	▼***	▲***	▼***
U.S. shipments:									
Quantity	***	***	***	***	***	▲***	▲***	▲***	▼***
Value	***	***	***	***	***	▲***	▲***	▲***	▲***
Unit value	***	***	***	***	***	▲***	▲***	▲***	▲***
Export shipments:									
Quantity (fn2)	***	***	***	***	***	▲***	▲***	▲***	▼***
Value (fn2)	***	***	***	***	***	▲***	▲***	▲***	▼***
Unit value (fn2)	***	***	***	***	***	▲***	▲***	▼***	▲***
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▲***	▼***
Inventories/production (fn1)	***	***	***	***	***	▲***	▲***	▲***	▼***
Production workers	***	***	***	***	***	▼***	▼***	▲***	▲***
Hours worked (1,000s)	***	***	***	***	***	▼***	▼***	▲***	▲***
Wages paid ($1,000)	***	***	***	***	***	▲***	▼***	▲***	▲***
Hourly wages (dollars per hour)	***	***	***	***	***	▲***	▲***	▲***	▲***
Productivity (short tons per 1,000 hours)	***	***	***	***	***	▲***	▲***	▲***	▼***
Unit labor costs	***	***	***	***	***	▼***	▼***	▲***	▲***
Net sales:									
Quantity	***	***	***	***	***	▲***	▲***	▲***	▼***
Value	***	***	***	***	***	▲***	▲***	▲***	▲***
Unit value	***	***	***	***	***	▲***	▲***	▲***	▲***
Cost of goods sold (COGS)	***	***	***	***	***	▲***	▲***	▲***	▲***
Gross profit or (loss) (fn3)	***	***	***	***	***	▲***	▲***	▲***	▲***
SG&A expenses	***	***	***	***	***	▲***	▲***	▲***	▲***
Operating income or (loss) (fn3)	***	***	***	***	***	▲***	▲***	▲***	▲***
Net income or (loss) (fn2) (fn3)	***	***	***	***	***	▲***	▲***	▼***	▼***
Capital expenditures (fn2)	***	***	***	***	***	▲***	▲***	▲***	▲***
R&D (fn2)	***	***	***	***	***	▼***	▼***	▼***	▲***
Net assets (fn2)	***	***	***	NA	NA	▲***	▲***	▲***	***
Unit COGS	***	***	***	***	***	▲***	▲***	▲***	▲***
Unit SG&A expenses	***	***	***	***	***	▲***	▲***	▲***	▲***
Unit operating income or (loss) (fn3)	***	***	***	***	***	▲***	▼***	▲***	▲***
Unit net income or (loss) (fn2) (fn3)	***	***	***	***	***	▲***	▲***	▼***	▼***
COGS/sales (fn1)	***	***	***	***	***	▲***	▲***	▲***	▼***
Operating income or (loss)/sales (fn1)	***	***	***	***	***	▼***	▼***	▲***	▲***
Net income or (loss)/sales (fn2) (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.--Data for net income or (loss), capital expenditures, research and development expenses, net assets, and export shipments are only derived from large firms (not all producers).

fn3.--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 Commission questionnaires and from *** using HTS statistical reporting numbers7308.90.3000, 7308.90.6000, and 7308.90.9590, accessed November 22, 2019.

APPENDIX D

SECTION 301 PROCEEDINGS AND SECTION 232 PROCLAMATIONS

Table D-1
Section 301 actions: Office of the United States Trade Representative ("USTR") proceedings, 2018-19

Product list	Effective date	Action
Tranche 1	July 6, 2018	**Enacted:** Additional 25 percent ad valorem duties on approximately $34 billion of imports classifiable under 818 HTS tariff subheadings (Annex A to 83 FR 28710).[1]
Tranche 2	August 23, 2018	**Enacted:** Additional 25 percent ad valorem duties on approximately $16 billion of imports classifiable under 279 HTS tariff subheadings (Annex A to 83 FR 40823).[2]
Tranche 3	September 24, 2018	**Enacted:** Additional 10 percent ad valorem duties on approximately $200 billion of imports classifiable under 5,745 HTS tariff subheadings and partial subheadings (Annex A to 83 FR 47974), which are scheduled to increase to 25 percent on January 1, 2019 (Annex B to 83 FR 47974).[3]
Tranche 3	October 1, 2018	**Amendment:** Fourteen HTS tariff subheadings in chapter 44 (under Annex A to 83 FR 47974, September 21, 2018) were removed and replaced by 38 corresponding new HTS subheadings to conform to the International Convention on the Harmonized Commodity Description and Coding System.[4]
Tranche 3	March 2, 2019	**Postponed:** Duty increases from 10 percent to 25 percent were rescheduled (83 FR 65198).[5]
Tranche 3	Not applicable	**Postponed:** Additional ad valorem duties to remain at 10 percent until further notice (84 FR 7966).[6]
Tranche 3	May 10, 2019	**Enacted:** Duty increases from 10 percent to 25 percent ad valorem were rescheduled (84 FR 20459).[7]
Tranche 3	Prior to June 1, 2019	**Enacted:** Delayed duty increases from 10 percent to 25 percent ad valorem enacted May 10, 2019 on certain products exported from China before May 10, 2019, that enter into the United States before June 1, 2019 (84 FR 21892).[8]
Tranche 3	Prior to June 15, 2019	**Enacted:** The date was extended for the delayed duty increase from 10 percent to 25 percent ad valorem on certain products exported from China before May 10, 2019 that enter into the United States before June 15, 2019 (84 FR 26930).[9]
Tranche 4, List 1	September 1, 2019	**Enacted:** Additional 10 percent ad valorem duties on imports classifiable under 3,229 full HTS tariff subheadings and 4 partial HTS subheadings (Annexes A and B to 84 FR 43304). Imports on products classifiable under HTS subheadings on lists 1 and 2 totaled approximately $300 billion.[10]
Tranches 1, 2, and 3	October 1, 2019	**Proposed:** Additional 25 percent ad valorem duties to be increased 30 percent ad valorem on products covered by Annex C – List 3, Part 1 (84 FR 46212).[12]
Tranche 4, List 1	September 1, 2019	**Amendment:** Additional 10 percent ad valorem duties were increased to 15 percent ad valorem on products covered by Annex A (84 FR 45821).[11]
Tranche 4, List 2	December 15, 2019	**Enacted:** Additional 10 percent ad valorem duties on imports classifiable under 542 full HTS tariff subheadings and 8 partial HTS subheadings (Annexes C and D to 84 FR 43304). Imports on products classifiable under HTS subheadings on lists 1 and 2 totaled approximately $300 billion.[10]
Tranche 4, List 2	December 15, 2019	**Amendment:** Additional 10 percent ad valorem duties were increased to 15 percent ad valorem on products covered by Annex C (84 FR 45821).[11]

[1] USTR, *Notice of Action and Request for Public Comment Concerning Proposed Determination of Action Pursuant to Section 301 Action: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 83 FR 28710, June 20, 2018.

[2] USTR, *Notice of Action Pursuant to Section 301: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 83 FR 40823, August 16, 2018.

[3] USTR, *Notice of Modification of Section 301 Action: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 83 FR 47974, September 21, 2018.

[4] USTR, *Conforming Amendment and Modification to Section 301 Action: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 83 FR 49153, September 28, 2018.

[5] USTR, *Notice of Modification of Section 301 Action: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 83 FR 65198, December 19, 2018.

[6] USTR, *Notice of Modification of Section 301 Action: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 84 FR 7966, March 5, 2019.

[7] USTR, *Notice of Modification of Section 301 Action: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 84 FR 20459, May 9, 2019.

[8] USTR, *Implementing Modification to Section 301 Action: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 84 FR 21892, May 15, 2019

[9] USTR, *Additional Implementing Modification to Section 301 Action: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation,* 84 FR 26930, June 10, 2019.

[10] USTR, *Notice of Modification of Section 301 Action: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 84 FR 43304, August 20, 2019.

[11] USTR, *Notice of Modification of Section 301 Action: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 84 FR 45821, August 30, 2019.

[12] USTR, *Notice of Modification of Section 301 Action: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 84 FR 46212, September 3, 2019.

Table D-2
Section 232 actions: Presidential proclamations, 2017-19

Effective date	Action
April 19, 2017	Commerce announced the institution of an investigation, by its U.S. Bureau of Industry and Security ("BIS") into the potential impact of imported steel mill products on national security (82 FR 19205).[1]
January 11, 2018	The Secretary of Commerce submitted the BIS Section 232 steel imports report to the President.[2]
March 23, 2018	The President announced the imposition of 25 percent ad valorem national-security duties on U.S. steel imports. Initially exempted— Canada and Mexico (83 FR 11625).[3]
March 23 through May 1, 2018	**Adjustment:** Exempted— Argentina, Australia, Brazil, Canada, the European Union ("EU") member states, Korea, and Mexico (83 FR 13361).[4]
May 1 through June 1, 2018	**Adjustment:** Exemptions continued with annual quota limits— Argentina, Brazil, and Korea. Exemptions not continued— Canada, Mexico, and EU member states (83 FR 20683, 83 FR 25857).[5]
August 13, 2018	**Adjustment:** Exemptions continued— Argentina, Australia, Brazil, and Korea. Duty rate doubled to 50 percent ad valorem— Turkey (83 FR 40429).[6]
May 20, 2019	**Adjustment:** Exemptions reinstated— Canada and Mexico (84 FR 23421).[7]
May 21, 2019	**Adjustment:** Duty rate cut from 50 percent back to 25 percent ad valorem— Turkey (84 FR 23987).[8]

[1] *Notice Request for Public Comments and Public Hearing on Section 232 National Security Investigation of Imports of Steel*, April 17, 2017, 82 FR 19205, April 26, 2017.

[2] "Statement from the Department of Commerce on Submission of Steel Section 232 Report to the President," News Release January 11, 2018, https://www.commerce.gov/news/press-releases/2018/01/statement-department-commerce-submission-steel-section-232-report.

[3] *Adjusting Imports of Steel Into the United States*, Presidential Proclamation 9705, March 8, 2018, 83 FR 11625, March 15, 2018.

[4] *Adjusting Imports of Steel Into the United States*, Presidential Proclamation 9711, March 22, 2018, 83 FR 13361, March 28, 2018.

[5] *Adjusting Imports of Steel Into the United States*, Presidential Proclamation 9740, April 30, 2018, 83 FR 20683, May 7, 2018; *Adjusting Imports of Steel Into the United States*, Presidential Proclamation 9759, May 31, 2018, 83 FR 25857, June 5, 2018. Continuation of the exemption for Australia, as of June 1, 2018, was included in subsequent Presidential Proclamation 9772, August 10, 2018.

[6] *Adjusting Imports of Steel Into the United States*, Presidential Proclamation 9772, August 10, 2018, 83 FR 40429, August 15, 2018.

[7] *Adjusting Imports of Steel Into the United States*, Presidential Proclamation 9886, May 16, 2019, 84 FR 23421, May 21, 2019.

[8] *Adjusting Imports of Steel Into the United States*, Presidential Proclamation 9894, May 19, 2019, 84 FR 23987, May 23, 2019.

APPENDIX E

SPECIFIC PRODUCTS: DATA AND LIKE PRODUCT FACTOR COMPARISONS

This appendix contains information comparing large producers[1] that provided fabricated structural steel shipment data as well as other information on three specific products—process plant modules, solar steel beams, and parts used in pre-engineered metal building systems ("PEMBs")—for which the Commission collected detailed U.S. shipment data, as well as narrative responses concerning the factors the Commission typically considers regarding the domestic product(s) that are "like" the subject imported product. (Small producers were not required to provide this information.)

Firms with sales of 50 percent or more of a given product are collected in the respective tables presenting metrics of U.S. producers "predominately" producing that product. All other firms that did not predominately sell that product are listed in the adjoining table for that product. Tables presenting narrative responses comparing each product to fabricated structural steel are included as well.

For process plant modules, six firms (***) reported sales in this product. Two of these firms are identified in the predominant sales table, but none of them provided narrative responses for the factor comparisons. Two other firms provided narrative responses, but neither predominantly sold this product.

For solar steel beams, four firms (***) reported sales in this product. However, no firm predominately sold this product. All firms did provide narrative responses for the factor comparisons.

For parts used in PEMBs, three firms overall (BlueScope, NCI, and Nucor) reported any sales of this product, and all firms are included in the relevant sales and narrative response tables. ***.

Finally, the end of this appendix provides additional data for PEMB components, as well as for fabricated structural steel other than such components. These data concern negligibility and the foreign industry.

[1] Large producers comprised *** percent of production in 2018.

Table E-1
Fabricated structural steel: Select metrics of large U.S. producers predominately producing FSS for process plant modules, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
Process plant modules.-- Capacity (short tons)	***	***	***	***	***
Production (short tons)	***	***	***	***	***
Capacity utilization (percent)	***	***	***	***	***
U.S. shipments (short tons)	***	***	***	***	***
U.S. shipments (1,000 dollars)	***	***	***	***	***
U.S. shipments (dollars per short ton)	***	***	***	***	***
Net sales (short tons)	***	***	***	***	***
Net sales (1,000 dollars)	***	***	***	***	***
Net sales (dollars per short ton)	***	***	***	***	***
COGS (1,000 dollars)	***	***	***	***	***
Unit COGS (dollars per short ton)	***	***	***	***	***
COGS/Sales (percent)	***	***	***	***	***
Gross profit (1,000 dollars)	***	***	***	***	***
Unit gross profit (dollars per short ton)	***	***	***	***	***
Gross profit/Sales (percent)	***	***	***	***	***
SG&A (1,000 dollars)	***	***	***	***	***
Unit SG&A (dollars per short ton)	***	***	***	***	***
SG&A/Sales (percent)	***	***	***	***	***
Operating income (1,000 dollars)	***	***	***	***	***
Unit operating income (dollars per short ton)	***	***	***	***	***
Operating income /Sales (percent)	***	***	***	***	***

Note: Producers included in this table include ***.

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

Table E-2
Fabricated structural steel: Select metrics of large U.S. producers not predominately producing FSS for process plant modules, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
Other than process plant modules.-- Capacity (short tons)	***	***	***	***	***
Production (short tons)	***	***	***	***	***
Capacity utilization (percent)	***	***	***	***	***
U.S. shipments (short tons)	***	***	***	***	***
U.S. shipments (1,000 dollars)	***	***	***	***	***
U.S. shipments (dollars per short ton)	***	***	***	***	***
Net sales (short tons)	***	***	***	***	***
Net sales (1,000 dollars)	***	***	***	***	***
Net sales (dollars per short ton)	***	***	***	***	***
COGS (1,000 dollars)	***	***	***	***	***
Unit COGS (dollars per short ton)	***	***	***	***	***
COGS/Sales (percent)	***	***	***	***	***
Gross profit (1,000 dollars)	***	***	***	***	***
Unit gross profit (dollars per short ton)	***	***	***	***	***
Gross profit/Sales (percent)	***	***	***	***	***
SG&A (1,000 dollars)	***	***	***	***	***
Unit SG&A (dollars per short ton)	***	***	***	***	***
SG&A/Sales (percent)	***	***	***	***	***
Operating income (1,000 dollars)	***	***	***	***	***
Unit operating income (dollars per short ton)	***	***	***	***	***
Operating income /Sales (percent)	***	***	***	***	***

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

Table E-3
Fabricated structural steel: Large U.S. producers' narrative responses to the like product factors for FSS for plant process modules, since January 1, 2016

Firm	Narrative
Process plant modules:	
***	***.
***	***.

Note: Not all producers providing data for this specified product provided a response for this table.

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

Table E-4
Fabricated structural steel: Select metrics of large U.S. producers predominately producing solar steel beams, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
Solar steel beams.-- Capacity (short tons)	***	***	***	***	***
Production (short tons)	***	***	***	***	***
Capacity utilization (percent)	***	***	***	***	***
U.S. shipments (short tons)	***	***	***	***	***
U.S. shipments (1,000 dollars)	***	***	***	***	***
U.S. shipments (dollars per short ton)	***	***	***	***	***
Net sales (short tons)	***	***	***	***	***
Net sales (1,000 dollars)	***	***	***	***	***
Net sales (dollars per short ton)	***	***	***	***	***
COGS (1,000 dollars)	***	***	***	***	***
Unit COGS (dollars per short ton)	***	***	***	***	***
COGS/Sales (percent)	***	***	***	***	***
Gross profit (1,000 dollars)	***	***	***	***	***
Unit gross profit (dollars per short ton)	***	***	***	***	***
Gross profit/Sales (percent)	***	***	***	***	***
SG&A (1,000 dollars)	***	***	***	***	***
Unit SG&A (dollars per short ton)	***	***	***	***	***
SG&A/Sales (percent)	***	***	***	***	***
Operating income (1,000 dollars)	***	***	***	***	***
Unit operating income (dollars per short ton)	***	***	***	***	***
Operating income /Sales (percent)	***	***	***	***	***

Note: No producer reported predominately selling solar steel beams. Only four producers reported any sales of solar steel beams.

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

Table E-5
Fabricated structural steel: Select metrics of large U.S. producers not predominately producing solar steel beams, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
Other than solar steel beams.-- Capacity (short tons)	***	***	***	***	***
Production (short tons)	***	***	***	***	***
Capacity utilization (percent)	***	***	***	***	***
U.S. shipments (short tons)	***	***	***	***	***
U.S. shipments (1,000 dollars)	***	***	***	***	***
U.S. shipments (dollars per short ton)	***	***	***	***	***
Net sales (short tons)	***	***	***	***	***
Net sales (1,000 dollars)	***	***	***	***	***
Net sales (dollars per short ton)	***	***	***	***	***
COGS (1,000 dollars)	***	***	***	***	***
Unit COGS (dollars per short ton)	***	***	***	***	***
COGS/Sales (percent)	***	***	***	***	***
Gross profit (1,000 dollars)	***	***	***	***	***
Unit gross profit (dollars per short ton)	***	***	***	***	***
Gross profit/Sales (percent)	***	***	***	***	***
SG&A (1,000 dollars)	***	***	***	***	***
Unit SG&A (dollars per short ton)	***	***	***	***	***
SG&A/Sales (percent)	***	***	***	***	***
Operating income (1,000 dollars)	***	***	***	***	***
Unit operating income (dollars per short ton)	***	***	***	***	***
Operating income /Sales (percent)	***	***	***	***	***

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

Table E-6
Fabricated structural steel: Large U.S. producers' narrative responses to the like product factors for solar steel beams, since January 1, 2016

Firm	Narrative
Solar beams:	
***	***.
***	***.
***	***.
***	***.

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

Table E-7
Fabricated structural steel: Select metrics of large U.S. producers predominately producing parts used in pre-engineered metal building systems ("PEMBs"), 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
Parts for PEMBs.-- Capacity (short tons)	***	***	***	***	***
Production (short tons)	***	***	***	***	***
Capacity utilization (percent)	***	***	***	***	***
U.S. shipments (short tons)	***	***	***	***	***
U.S. shipments (1,000 dollars)	***	***	***	***	***
U.S. shipments (dollars per short ton)	***	***	***	***	***
Net sales (short tons)	***	***	***	***	***
Net sales (1,000 dollars)	***	***	***	***	***
Net sales (dollars per short ton)	***	***	***	***	***
COGS (1,000 dollars)	***	***	***	***	***
Unit COGS (dollars per short ton)	***	***	***	***	***
COGS/Sales (percent)	***	***	***	***	***
Gross profit (1,000 dollars)	***	***	***	***	***
Unit gross profit (dollars per short ton)	***	***	***	***	***
Gross profit/Sales (percent)	***	***	***	***	***
SG&A (1,000 dollars)	***	***	***	***	***
Unit SG&A (dollars per short ton)	***	***	***	***	***
SG&A/Sales (percent)	***	***	***	***	***
Operating income (1,000 dollars)	***	***	***	***	***
Unit operating income (dollars per short ton)	***	***	***	***	***
Operating income /Sales (percent)	***	***	***	***	***

Note: Producers included in this table include ***.

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

Table E-8
Fabricated structural steel: Select metrics of large U.S. producers not predominately producing parts used in PEMBs, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
Other than parts for PEMBs.-- Capacity (short tons)	***	***	***	***	***
Production (short tons)	***	***	***	***	***
Capacity utilization (percent)	***	***	***	***	***
U.S. shipments (short tons)	***	***	***	***	***
U.S. shipments (1,000 dollars)	***	***	***	***	***
U.S. shipments (dollars per short ton)	***	***	***	***	***
Net sales (short tons)	***	***	***	***	***
Net sales (1,000 dollars)	***	***	***	***	***
Net sales (dollars per short ton)	***	***	***	***	***
COGS (1,000 dollars)	***	***	***	***	***
Unit COGS (dollars per short ton)	***	***	***	***	***
COGS/Sales (percent)	***	***	***	***	***
Gross profit (1,000 dollars)	***	***	***	***	***
Unit gross profit (dollars per short ton)	***	***	***	***	***
Gross profit/Sales (percent)	***	***	***	***	***
SG&A (1,000 dollars)	***	***	***	***	***
Unit SG&A (dollars per short ton)	***	***	***	***	***
SG&A/Sales (percent)	***	***	***	***	***
Operating income (1,000 dollars)	***	***	***	***	***
Unit operating income (dollars per short ton)	***	***	***	***	***
Operating income /Sales (percent)	***	***	***	***	***

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

Table E-9
Fabricated structural steel: Large U.S. producers' narrative responses to the like product factors for parts used in PEMBs, since January 1, 2016

Firm	Narrative
Parts for PEMBs:	
***	***

Table E-9
Fabricated structural steel: Large U.S. producers' narrative responses to the like product factors for parts used in PEMBs, since January 1, 2016

Firm	Narrative
Parts for PEMBs:	
***	***

Table E-9
Fabricated structural steel: Large U.S. producers' narrative responses to the like product factors for parts used in PEMBs, since January 1, 2016

Firm	Narrative
Parts for PEMBs:	
***	***
***	***
***	***

Table E-9
Fabricated structural steel: Large U.S. producers' narrative responses to the like product factors for parts used in PEMBs, since January 1, 2016

Firm	Narrative
Parts for PEMBs:	
***	***

Table E-9
Fabricated structural steel: Large U.S. producers' narrative responses to the like product factors for parts used in PEMBs, since January 1, 2016

Firm	Narrative
Parts for PEMBs:	
***	***

Table E-9
Fabricated structural steel: Large U.S. producers' narrative responses to the like product factors for parts used in PEMBs, since January 1, 2016

Firm	Narrative
Parts for PEMBs:	
***	***

Table E-9
Fabricated structural steel: Large U.S. producers' narrative responses to the like product factors for parts used in PEMBs, since January 1, 2016

Firm	Narrative
Parts for PEMBs:	
***	***

Table E-9
Fabricated structural steel: Large U.S. producers' narrative responses to the like product factors for parts used in PEMBs, since January 1, 2016

Firm	Narrative
Parts for PEMBs:	
***	***

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

Table E-10

Fabricated structural steel for PEMBs: Data on industry in Mexico, 2016-18, January to September 2018, and January to September 2019 and projection calendar years 2019 and 2020

Item	Actual experience					Projections	
	Calendar year			January to September		Calendar year	
	2016	2017	2018	2018	2019	2019	2020
	Quantity (short tons)						
Capacity	***	***	***	***	***	***	***
Production	***	***	***	***	***	***	***
End-of-period inventories	***	***	***	***	***	***	***
Internal consumption/transfers home market shipments	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to: United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
	Ratios and shares (percent)						
Capacity utilization	***	***	***	***	***	***	***
Inventories/production	***	***	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***	***	***
Internal consumption/transfers home market shipments	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to: United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***

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

Table E-11

Fabricated structural steel for other than PEMBs: Data on industry in Mexico, 2016-18, January to September 2018, and January to September 2019 and projection calendar years 2019 and 2020

Item	Actual experience					Projections	
	Calendar year			January to September		Calendar year	
	2016	2017	2018	2018	2019	2019	2020
	Quantity (short tons)						
Capacity	***	***	***	***	***	***	***
Production	***	***	***	***	***	***	***
End-of-period inventories	***	***	***	***	***	***	***
Internal consumption/transfers home market shipments	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to: United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
	Ratios and shares (percent)						
Capacity utilization	***	***	***	***	***	***	***
Inventories/production	***	***	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***	***	***
Internal consumption/transfers home market shipments	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to: United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***

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

Table E-12

Fabricated structural steel for PEMBs: U.S. imports in the twelve month period preceding the filing of the petition from February 2018 through January 2019

Item	February 2018 to January 2019	
	Quantity (short tons)	Share quantity (percent)
U.S. imports from.--		
Canada subject	***	***
China	***	***
Mexico	***	***
of which, Mexico AD	***	***
of which, Mexico CVD	***	***
All other sources	***	***
All import sources	***	***

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

Table E-13

Fabricated structural steel for other than PEMBs: U.S. imports in the twelve month period preceding the filing of the petition from February 2018 through January 2019

Item	February 2018 to January 2019	
	Quantity (short tons)	Share quantity (percent)
U.S. imports from.-- Canada subject	***	***
China	***	***
Mexico	***	***
of which, Mexico AD	***	***
of which, Mexico CVD	***	***
All other sources	***	***
All import sources	***	***

Source: Compiled from data submitted in response to Commission questionnaire and from *** and official U.S. import statistics using HTS statistical reporting numbers 7308.90.3000, 7308.90.6000, and 7308.90.9590, accessed November 22, 2019.

APPENDIX F

U.S. SHIPMENTS BY APPLICATION AND PRODUCT

Table F-1
Fabricated structural steel: Large U.S. producers' U.S. shipments by application, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
Large U.S. producers' U.S. shipments.--					
High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All end users	***	***	***	***	***
	Value (1,000 dollars)				
Large U.S. producers' U.S. shipments.--					
High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All end users	***	***	***	***	***
	Unit value (dollars per short ton)				
Large U.S. producers' U.S. shipments.--					
High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All end users	***	***	***	***	***

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Table F-1--Continued
Fabricated structural steel: Large U.S. producers' U.S. shipments by application, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Share of quantity (percent)				
Large U.S. producers' U.S. shipments.--					
High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All end users	***	***	***	***	***
	Share of value (percent)				
Large U.S. producers' U.S. shipments.--					
High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All end users	***	***	***	***	***

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

Table F-2
Fabricated structural steel: Large U.S. producers' U.S. shipments by specific product types, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
Large U.S. producers' U.S. shipments.--					
Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
Total	***	***	***	***	***
	Value (1,000 dollars)				
Large U.S. producers' U.S. shipments.--					
Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
Total	***	***	***	***	***
	Unit value (dollars per short ton)				
Large U.S. producers' U.S. shipments.--					
Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
Total	***	***	***	***	***
	Share of quantity (percent)				
Large U.S. producers' U.S. shipments.--					
Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
Total	***	***	***	***	***
	Share of value (percent)				
Large U.S. producers' U.S. shipments.--					
Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
Total	***	***	***	***	***

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

Table F-3
Fabricated structural steel: U.S. importers' U.S. shipments by application, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
U.S. importers' U.S. shipments: Canada subject.-- High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***
	Value (1,000 dollars)				
U.S. importers' U.S. shipments: Canada subject.-- High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***
	Unit value (dollars per short ton)				
U.S. importers' U.S. shipments: Canada subject.-- High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***

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Table F-3--Continued
Fabricated structural steel: U.S. importers' U.S. shipments by application, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Share of quantity (percent)				
U.S. importers' U.S. shipments: Canada subject.-- High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***
	Share of value (percent)				
U.S. importers' U.S. shipments: Canada subject.-- High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***

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Table F-3--Continued

Fabricated structural steel: U.S. importers' U.S. shipments by application, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
U.S. importers' U.S. shipments: China.--					
High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***
	Value (1,000 dollars)				
U.S. importers' U.S. shipments: China.--					
High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***
	Unit value (dollars per short ton)				
U.S. importers' U.S. shipments: China.--					
High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***

Table continued on next page.

Table F-3--Continued

Fabricated structural steel: U.S. importers' U.S. shipments by application, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Share of quantity (percent)				
U.S. importers' U.S. shipments: China.--					
High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***
	Share of value (percent)				
U.S. importers' U.S. shipments: China.--					
High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
Total	***	***	***	***	***

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Table F-3--Continued

Fabricated structural steel: U.S. importers' U.S. shipments by application, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
U.S. importers' U.S. shipments: Mexico.--					
High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***
	Value (1,000 dollars)				
U.S. importers' U.S. shipments: Mexico.--					
High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***
	Unit value (dollars per short ton)				
U.S. importers' U.S. shipments: Mexico.--					
High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***

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Table F-3--Continued

Fabricated structural steel: U.S. importers' U.S. shipments by application, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Share of quantity (percent)				
U.S. importers' U.S. shipments: Mexico.--					
High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***
	Share of value (percent)				
U.S. importers' U.S. shipments: Mexico.--					
High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***

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Table F-3--Continued

Fabricated structural steel: U.S. importers' U.S. shipments by application, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
U.S. importers' U.S. shipments: Subject sources.-- High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***
	Value (1,000 dollars)				
U.S. importers' U.S. shipments: Subject sources.-- High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***
	Unit value (dollars per short ton)				
U.S. importers' U.S. shipments: Subject sources.-- High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***

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Table F-3--Continued

Fabricated structural steel: U.S. importers' U.S. shipments by application, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Share of quantity (percent)				
U.S. importers' U.S. shipments: Subject sources.-- High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***
	Share of value (percent)				
U.S. importers' U.S. shipments: Subject sources.-- High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***

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Table F-3--Continued

Fabricated structural steel: U.S. importers' U.S. shipments by application, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
U.S. importers' U.S. shipments: Canada nonsubject.-- High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***
	Value (1,000 dollars)				
U.S. importers' U.S. shipments: Canada nonsubject.-- High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***
	Unit value (dollars per short ton)				
U.S. importers' U.S. shipments: Canada nonsubject.-- High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***

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Table F-3--Continued

Fabricated structural steel: U.S. importers' U.S. shipments by application, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Share of quantity (percent)				
U.S. importers' U.S. shipments: Canada nonsubject.-- High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***
	Share of value (percent)				
U.S. importers' U.S. shipments: Canada nonsubject.-- High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***

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Table F-3--Continued

Fabricated structural steel: U.S. importers' U.S. shipments by application, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
U.S. importers' U.S. shipments: All other sources.-- High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***
	Value (1,000 dollars)				
U.S. importers' U.S. shipments: All other sources.-- High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***
	Unit value (dollars per short ton)				
U.S. importers' U.S. shipments: All other sources.-- High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***

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Table F-3--Continued

Fabricated structural steel: U.S. importers' U.S. shipments by application, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Share of quantity (percent)				
U.S. importers' U.S. shipments: All other sources.-- High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***
	Share of value (percent)				
U.S. importers' U.S. shipments: All other sources.-- High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***

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Table F-3--Continued

Fabricated structural steel: U.S. importers' U.S. shipments by application, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
U.S. importers' U.S. shipments: Nonsubject sources.-- High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***
	Value (1,000 dollars)				
U.S. importers' U.S. shipments: Nonsubject sources.-- High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***
	Unit value (dollars per short ton)				
U.S. importers' U.S. shipments: Nonsubject sources.-- High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***

Table continued on next page.

Table F-3--Continued

Fabricated structural steel: U.S. importers' U.S. shipments by application, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Share of quantity (percent)				
U.S. importers' U.S. shipments: Nonsubject sources.-- High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***
	Share of value (percent)				
U.S. importers' U.S. shipments: Nonsubject sources.-- High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***

Table continued on next page.

Table F-3--Continued

Fabricated structural steel: U.S. importers' U.S. shipments by application, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
U.S. importers' U.S. shipments: All import sources.-- High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***
	Value (1,000 dollars)				
U.S. importers' U.S. shipments: All import sources.-- High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***
	Unit value (dollars per short ton)				
U.S. importers' U.S. shipments: All import sources.-- High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***

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Table F-3--Continued

Fabricated structural steel: U.S. importers' U.S. shipments by application, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Share of quantity (percent)				
U.S. importers' U.S. shipments: All import sources.-- High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***
	Share of value (percent)				
U.S. importers' U.S. shipments: All import sources.-- High rise	***	***	***	***	***
Residential	***	***	***	***	***
Commercial	***	***	***	***	***
Industrial	***	***	***	***	***
Sports and entertainment	***	***	***	***	***
Other	***	***	***	***	***
All applications	***	***	***	***	***

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.

Table F-4

Fabricated structural steel: U.S. importers' U.S. shipments by specific product, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
U.S. importers' U.S. shipments: Canada subject.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***
	Value (1,000 dollars)				
U.S. importers' U.S. shipments: Canada subject.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***
	Unit value (dollars per short ton)				
U.S. importers' U.S. shipments: Canada subject.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***
	Share of quantity (percent)				
U.S. importers' U.S. shipments: Canada subject.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***
	Share of value (percent)				
U.S. importers' U.S. shipments: Canada subject.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***

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Table F-4--Continued

Fabricated structural steel: U.S. importers' U.S. shipments by specific product, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
U.S. importers' U.S. shipments: China.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***
	Value (1,000 dollars)				
U.S. importers' U.S. shipments: China.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***
	Unit value (dollars per short ton)				
U.S. importers' U.S. shipments: China.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***
	Share of quantity (percent)				
U.S. importers' U.S. shipments: China.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***
	Share of value (percent)				
U.S. importers' U.S. shipments: China.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***

Table continued on next page.

Table F-4--Continued

Fabricated structural steel: U.S. importers' U.S. shipments by specific product, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
U.S. importers' U.S. shipments: Mexico.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***
	Value (1,000 dollars)				
U.S. importers' U.S. shipments: Mexico.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***
	Unit value (dollars per short ton)				
U.S. importers' U.S. shipments: Mexico.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***
	Share of quantity (percent)				
U.S. importers' U.S. shipments: Mexico.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***
	Share of value (percent)				
U.S. importers' U.S. shipments: Mexico.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***

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Table F-4--Continued

Fabricated structural steel: U.S. importers' U.S. shipments by specific product, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
U.S. importers' U.S. shipments: Subject sources.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***
	Value (1,000 dollars)				
U.S. importers' U.S. shipments: Subject sources.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***
	Unit value (dollars per short ton)				
U.S. importers' U.S. shipments: Subject sources.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***
	Share of quantity (percent)				
U.S. importers' U.S. shipments: Subject sources.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***
	Share of value (percent)				
U.S. importers' U.S. shipments: Subject sources.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***

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Table F-4--Continued

Fabricated structural steel: U.S. importers' U.S. shipments by specific product, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
U.S. importers' U.S. shipments: Canada nonsubject.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***
	Value (1,000 dollars)				
U.S. importers' U.S. shipments: Canada nonsubject.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***
	Unit value (dollars per short ton)				
U.S. importers' U.S. shipments: Canada nonsubject.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***
	Share of quantity (percent)				
U.S. importers' U.S. shipments: Canada nonsubject.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***
	Share of value (percent)				
U.S. importers' U.S. shipments: Canada nonsubject.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***

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Table F-4--Continued

Fabricated structural steel: U.S. importers' U.S. shipments by specific product, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
U.S. importers' U.S. shipments: All other sources.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***
	Value (1,000 dollars)				
U.S. importers' U.S. shipments: All other sources.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***
	Unit value (dollars per short ton)				
U.S. importers' U.S. shipments: All other sources.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***
	Share of quantity (percent)				
U.S. importers' U.S. shipments: All other sources.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***
	Share of value (percent)				
U.S. importers' U.S. shipments: All other sources.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***

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Table F-4--Continued

Fabricated structural steel: U.S. importers' U.S. shipments by specific product, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
U.S. importers' U.S. shipments: Nonsubject sources.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***
	Value (1,000 dollars)				
U.S. importers' U.S. shipments: Nonsubject sources.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***
	Unit value (dollars per short ton)				
U.S. importers' U.S. shipments: Nonsubject sources.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***
	Share of quantity (percent)				
U.S. importers' U.S. shipments: Nonsubject sources.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***
	Share of value (percent)				
U.S. importers' U.S. shipments: Nonsubject sources.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***

Table continued on next page.

Table F-4--Continued

Fabricated structural steel: U.S. importers' U.S. shipments by specific product, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (short tons)				
U.S. importers' U.S. shipments: All import sources.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***
	Value (1,000 dollars)				
U.S. importers' U.S. shipments: All import sources.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***
	Unit value (dollars per short ton)				
U.S. importers' U.S. shipments: All import sources.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***
	Share of quantity (percent)				
U.S. importers' U.S. shipments: All import sources.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***
	Share of value (percent)				
U.S. importers' U.S. shipments: All import sources.-- Process plant modules	***	***	***	***	***
Solar beams	***	***	***	***	***
Pre-engineered parts	***	***	***	***	***
Other	***	***	***	***	***
All product types	***	***	***	***	***

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.

APPENDIX G

U.S. PRODUCERS' FINANCIAL RESULTS BY FIRM

Table G-1
Fabricated structural steel: Select results of operations of U.S. producers, by company, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Total net sales (short tons)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
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***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Large producers	***	***	***	***	***
Small producers	***	***	***	***	***
All producers	1,966,355	1,997,097	2,139,556	1,583,672	1,540,206
	Total net sales (1,000 dollars)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Large producers	***	***	***	***	***
Small producers	***	***	***	***	***
All producers	5,252,278	5,554,915	6,619,233	4,824,319	4,895,954
	Cost of goods sold (1,000 dollars)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
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***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Large producers	***	***	***	***	***
Small producers	***	***	***	***	***
All producers	3,950,331	4,219,860	5,136,331	3,752,809	3,769,860

Table continued on next page.

Table G-1—Continued
Fabricated structural steel: Select results of operations of U.S. producers, by company, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Gross profit or (loss) (1,000 dollars)				
***	***	***	***	***	***
***	***	***	***	***	***
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***	***	***	***	***	***
***	***	***	***	***	***
Large producers	***	***	***	***	***
Small producers	***	***	***	***	***
All producers	1,301,947	1,335,055	1,482,902	1,071,510	1,126,094
	SG&A expenses (1,000 dollars)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
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***	***	***	***	***	***
***	***	***	***	***	***
Large producers	***	***	***	***	***
Small producers	***	***	***	***	***
All producers	992,862	1,026,863	1,107,800	810,249	824,073
	Operating income or (loss) (1,000 dollars)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
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***	***	***	***	***	***
***	***	***	***	***	***
Large producers	***	***	***	***	***
Small producers	***	***	***	***	***
All producers	309,085	308,192	375,102	261,261	302,021

Table continued on next page.

Table G-1—Continued
Fabricated structural steel: Select results of operations of U.S. producers, by company, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Net income or (loss) (1,000 dollars)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
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***	***	***	***	***	***
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***	***	***	***	***	***
***	***	***	***	***	***
Large producers	***	***	***	***	***
	COGS to net sales ratio (percent)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
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***	***	***	***	***	***
Large producers	***	***	***	***	***
Small producers	***	***	***	***	***
All producers	75.2	76.0	77.6	77.8	77.0
	Gross profit or (loss) to net sales ratio (percent)				
***	***	***	***	***	***
***	***	***	***	***	***
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***	***	***	***	***	***
Large producers	***	***	***	***	***
Small producers	***	***	***	***	***
All producers	24.8	24.0	22.4	22.2	23.0

Table continued on next page.

Table G-1—Continued
Fabricated structural steel: Select results of operations of U.S. producers, by company, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	SG&A expense to net sales ratio (percent)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
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***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Large producers	***	***	***	***	***
Small producers	***	***	***	***	***
All producers	18.9	18.5	16.7	16.8	16.8
	Operating income or (loss) to net sales ratio (percent)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
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***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Large producers	***	***	***	***	***
Small producers	***	***	***	***	***
All producers	5.9	5.5	5.7	5.4	6.2
	Net income or (loss) to net sales ratio (percent)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Large producers	***	***	***	***	***

Table continued on next page.

Table G-1—Continued
Fabricated structural steel: Select results of operations of U.S. producers, by company, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Unit net sales value (dollars per short ton)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Large producers	***	***	***	***	***
Small producers	***	***	***	***	***
All producers	2,671	2,781	3,094	3,046	3,179
	Unit raw materials (dollars per short ton)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
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***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Large producers	***	***	***	***	***
	Unit direct labor (dollars per short ton)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Large producers	***	***	***	***	***

Table continued on next page.

Table G-1—Continued
Fabricated structural steel: Select results of operations of U.S. producers, by company, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Unit other factory costs (dollars per short ton)				
***	***	***	***	***	***
***	***	***	***	***	***
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***	***	***	***	***	***
Large producers	***	***	***	***	***
	Unit COGS (dollars per short ton)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
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***	***	***	***	***	***
***	***	***	***	***	***
Large producers	***	***	***	***	***
Small producers	***	***	***	***	***
All producers	2,009	2,113	2,401	2,370	2,448
	Unit gross profit or (loss) (dollars per short ton)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Large producers	***	***	***	***	***
Small producers	***	***	***	***	***
All producers	662	668	693	677	731

Table continued on next page.

Table G-1—Continued
Fabricated structural steel: Select results of operations of U.S. producers, by company, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Unit SG&A expenses (dollars per short ton)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
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***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Large producers	***	***	***	***	***
Small producers	***	***	***	***	***
Average unit SG&A expense	505	514	518	512	535
	Unit operating income or (loss) (dollars per short ton)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
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***	***	***	***	***	***
***	***	***	***	***	***
Average unit operating income or (loss)	157	154	175	165	196
	Unit net income or (loss) (dollars per short ton)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
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***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Average unit net income or (loss)	***	***	***	***	***

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

APPENDIX H

U.S. PRODUCERS' RESPONSES ON NEGATIVE EFFECTS OF SUBJECT IMPORTS

Table H-1
Fabricated structural steel: Narratives relating to actual and anticipated negative effects of imports on investment and growth and development, since January 1, 2016

Item / Firm	Narrative
Cancellation, postponement, or rejection of expansion projects:	
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
Denial or rejection of investment proposal:	
***	***
***	***
***	***

Table continued on next page.

Table H-1—Continued
Fabricated structural steel: Narratives relating to actual and anticipated negative effects of imports on investment and growth and development, since January 1, 2016

Item / Firm	Narrative
Reduction in the size of capital investments:	
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
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***	***

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Table H-1—Continued
Fabricated structural steel: Narratives relating to actual and anticipated negative effects of imports on investment and growth and development, since January 1, 2016

Item / Firm	Narrative
Return on specific investments negatively impacted:	
***	***
***	***
***	***
***	***
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***	***
***	***

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Table H-1—Continued
Fabricated structural steel: Narratives relating to actual and anticipated negative effects of imports on investment and growth and development, since January 1, 2016

Item / Firm	Narrative
Other negative effects on investments:	
***	***
***	***
***	***
***	***
***	***
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***	***

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Table H-1—Continued
Fabricated structural steel: Narratives relating to actual and anticipated negative effects of imports on investment and growth and development, since January 1, 2016

Item / Firm	Narrative
***	***
***	***
***	***
***	***
Rejection of bank loans:	
***	***
***	***
Lowering of credit rating:	
***	***
***	***
***	***
Problem related to the issue of stocks or bonds:	
***	***
***	***

Table continued on next page.

Table H-1—Continued
Fabricated structural steel: Narratives relating to actual and anticipated negative effects of imports on investment and growth and development, since January 1, 2016

Item / Firm	Narrative
Ability to service debt:	
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
Other effects on growth and development:	
***	***
***	***
***	***
***	***
***	***
***	***
***	***

Table continued on next page.

Table H-1—Continued
Fabricated structural steel: Narratives relating to actual and anticipated negative effects of imports on investment and growth and development, since January 1, 2016

Item / Firm	Narrative
***	***
***	***
***	***
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***	***
***	***
***	***

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Table H-1—Continued
Fabricated structural steel: Narratives relating to actual and anticipated negative effects of imports on investment and growth and development, since January 1, 2016

Item / Firm	Narrative
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
Anticipated effects of imports:	
***	***
***	***
***	***
***	***
***	***
***	***
***	***

Table continued on next page.

Table H-1—Continued
Fabricated structural steel: Narratives relating to actual and anticipated negative effects of imports on investment and growth and development, since January 1, 2016

Item / Firm	Narrative
***	***
***	***
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Table H-1—Continued
Fabricated structural steel: Narratives relating to actual and anticipated negative effects of imports on investment and growth and development, since January 1, 2016

Item / Firm	Narrative
***	***
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***	***
***	***

Table continued on next page.

Table H-1—Continued
Fabricated structural steel: Narratives relating to actual and anticipated negative effects of imports on investment and growth and development, since January 1, 2016

Item / Firm	Narrative
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***

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

APPENDIX I

BID DATA

Contents

Note: Contents reflect sequence of tables presented in full in the confidential staff report.