Finished Carbon Steel Flanges from India, Italy, and Spain

Investigation Nos. 701-TA-563 and 731-TA-1331-1333 (Preliminary)

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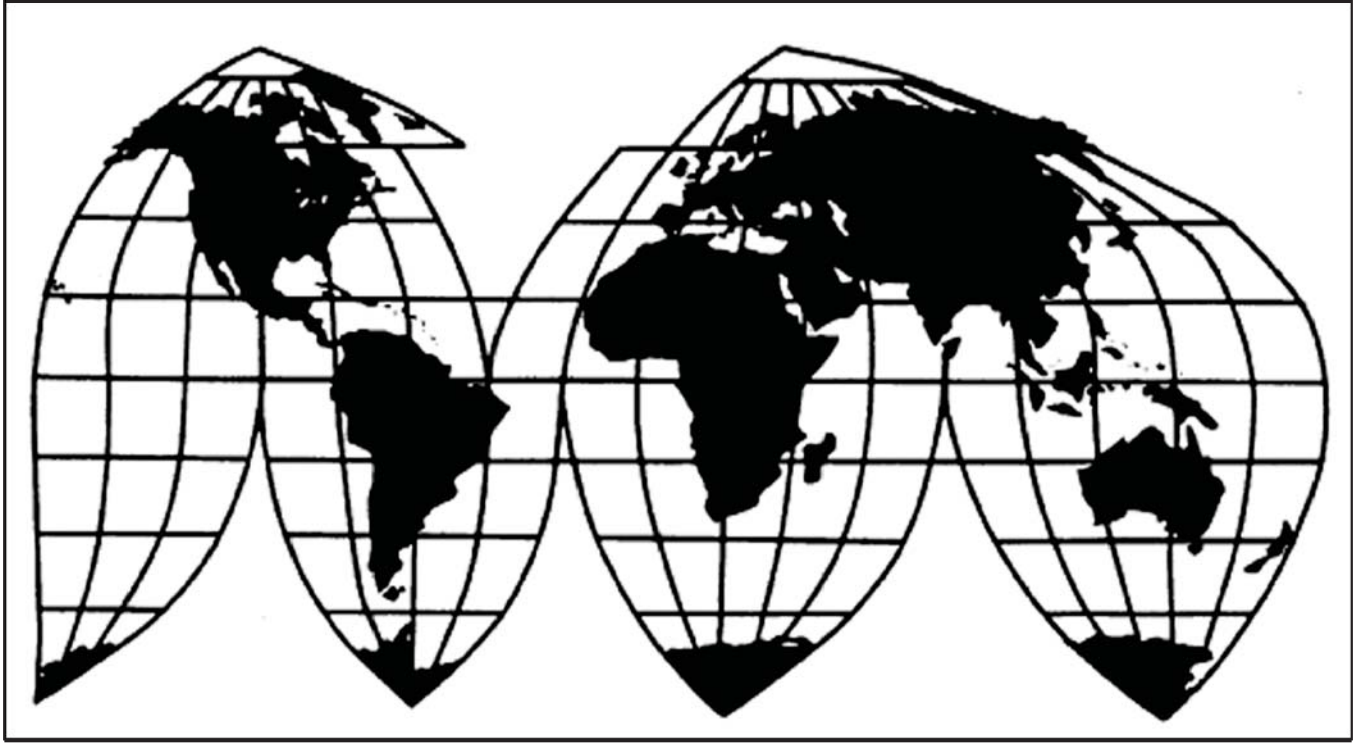
U.S. International Trade Commission



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Note.—Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted.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

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 701-TA-563 and 731-TA-1331-1333 (Preliminary)

Finished Carbon Steel Flanges from India, Italy, and Spain

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 there is a reasonable indication that an industry in the United States is materially injured by reason of imports of finished carbon steel flanges from India, Italy, and Spain provided for in subheading 7307.91.50 of the Harmonized Tariff Schedule of the United States, that are alleged to be sold in the United States at less than fair value ("LTFV") and that are alleged to be subsidized by the government of India.

COMMENCEMENT OF FINAL PHASE INVESTIGATIONS

Pursuant to section 207.18 of the Commission's rules, the Commission also gives notice of the commencement of the final phase of its investigations. The Commission will issue a final phase notice of scheduling, which will be published in the *Federal Register* as provided in section 207.21 of the Commission's rules, upon notice from the Department of Commerce ("Commerce") of affirmative preliminary determinations in the investigations under sections 703(b) or 733(b) of the Act, or, if the preliminary determinations are negative, upon notice of affirmative final determinations in those investigations under sections 705(a) or 735(a) of the Act. Parties that filed entries of appearance in the preliminary phase of the investigations need not enter a separate appearance for the final phase of the investigations. Industrial users, and, if the merchandise under investigation is sold at the retail level, representative consumer organizations have the right to appear as parties in Commission antidumping and countervailing duty investigations. The Secretary will prepare a public service list containing the names and addresses of all persons, or their representatives, who are parties to the investigations.

BACKGROUND

On June 30, 2016, Weldbend Corporation, Argo, Illinois and Boltex Mfg. Co., L.P., Houston, Texas filed petitions with the Commission and Commerce, alleging that an industry in the United States is materially injured or threatened with material injury by reason of LTFV imports of finished carbon steel flanges from India, Italy, and Spain and subsidized imports of finished carbon steel flanges from India. Accordingly, effective June 30, 2016, the

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

Commission, pursuant to sections 703(a) and 733(a) of the Act (19 U.S.C. 1671b(a) and 1673b(a)), instituted countervailing duty investigation No. 701-TA-563 and antidumping duty investigation Nos. 731-TA-1331-1333 (Preliminary).

Notice of the institution of the Commission's investigations and of a public conference to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* of July 7, 2016 (81 FR 44328). The conference was held in Washington, DC, on July 21, 2016, and all persons who requested the opportunity were permitted to appear in person or by counsel.

Views of the Commission

Based on the record in the preliminary phase of these investigations, we find that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of finished carbon steel flanges from India, Italy, and Spain that are allegedly sold in the United States at less than fair value and imports of the subject merchandise from India that are allegedly subsidized by the government of India.

I. The Legal Standard for Preliminary Determinations

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

II. Background

Weldbend Corporation ("Weldbend") and Boltex Mfg. Co. L.P. ("Boltex") (collectively "Petitioners"), domestic producers of finished carbon steel flanges (**"**flanges"), filed the petitions in these investigations on June 30, 2016. Petitioners appeared at the staff conference and submitted a postconference brief.

The following respondents appeared at the staff conference and submitted postconference briefs: Bebitz USA, Inc., an importer of flanges from India, Bebitz Flanges Works PVt. Ltd. ("Bebitz"), Norma (India) Ltd. ("Norma"), R.N. Gupta & Co. Ltd. ("Gupta"), all producers and exporters in India of flanges; the Government of the Republic of India;[3] and Silbo Industries, Inc. ("Silbo"), a U.S. importer of flanges from India and Italy.

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

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

[3] The government of India's threshold argument that the Commission violated the provisions of the WTO Agreement on Subsidies and Countervailing Measures ("SCM Agreement") by improperly initiating the countervailing duty investigation on flanges from India is without merit. The Commission's notice of institution did not purport to initiate the investigations. *See* 81 Fed. Reg. 44328 (July 7, 2016). Instead, U.S. law assigns this function to the U.S. Department of Commerce ("Commerce"). 19 U.S.C. § 1671a. Commerce, in fact, did initiate the countervailing duty investigation of flanges from India and in its (Continued…)

U.S. industry data are based on questionnaire responses provided by producers accounting for the vast majority of U.S. production of flanges in 2015.[4] U.S. import data are based on official Commerce import statistics and from questionnaire responses from 12 U.S. importers, accounting in 2015 for 51.0 percent of total imports, 58.3 percent of subject imports from India, *** percent of subject imports from Italy, and *** percent of subject imports from Spain.[5] The Commission received responses to its questionnaires from 19 foreign producers of subject merchandise: 14 producers in India accounting for approximately 66.8 percent of U.S. imports of flanges from India; four producers in Italy accounting for *** percent of U.S. imports of flanges from Italy; and one producer in Spain accounting for *** of U.S. imports of flanges from Spain.[6]

III. Domestic Like Product

A. In General

In determining whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of imports of the subject merchandise, the Commission first defines the "domestic like product" and the "industry."[7] 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."[8] In turn, the Tariff Act defines "domestic like product" as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation."[9]

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.[10] No single factor is

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(…Continued)
notice of initiation stated that it conducted consultations with the Government of India concerning the petition. 81 Fed. Reg. 49625 (July 28, 2016). The government of India's arguments about the requirements of the SCM Agreement pertaining to initiation disregard that the United States has implemented the agreement by assigning initiation functions to Commerce and that arguments concerning initiation consequently are not properly addressed to the Commission.

[4] Confidential Report, Memorandum INV-OO-067 (Aug. 8, 2016) ("CR") at I-5; *Finished Carbon Steel Flanges from India, Italy and Spain*, Inv. Nos. 701-TA-536 and 731-TA-1331-1333 (Preliminary), USITC Pub. 4631 (Aug. 2016) ("PR") at I-3. See also Memorandum INV-OO-070 (Aug. 10, 2016) providing collective domestic industry data for five of the six responding U.S. producers.

[5] CR at I-5, PR at I-4.

[6] CR at I-5, PR at I-4.

[7] 19 U.S.C. § 1677(4)(A).

[8] 19 U.S.C. § 1677(4)(A).

[9] 19 U.S.C. § 1677(10).

[10] *See*, *e.g.*, *Cleo Inc. v. United States*, 501 F.3d 1291, 1299 (Fed. Cir. 2007); *NEC Corp. v. Department of Commerce*, 36 F. Supp. 2d 380, 383 (Ct. Int'l Trade 1998); *Nippon Steel Corp. v. United States*, 19 CIT (Continued…)

dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.[11] The Commission looks for clear dividing lines among possible like products and disregards minor variations.[12] Although 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,[13] the Commission determines what domestic product is like the imported articles Commerce has identified.[14]

B. Product Description

In its notices of initiation, Commerce defined the imported merchandise within the scope of these investigations as follows:

> The scope of these investigations covers finished carbon steel flanges. Finished carbon steel flanges differ from unfinished carbon steel flanges (also known as carbon steel flange forgings) in that they have undergone further processing after forging, including, but not limited to, beveling, bore threading, center or step boring, face machining, taper boring, machining ends or surfaces, drilling bolt holes, and/or de-burring or shot blasting. Any one of these post-forging processes suffices to render the forging into a finished carbon steel flange for purposes of these investigations. However, mere heat treatment of a carbon steel flange forging (without any other further processing after forging) does not

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(…Continued)
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).

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

[12] *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.").

[13] *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).

[14] *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); *Cleo*, 501 F.3d at 1298 n.1 ("Commerce's {scope} finding does not control the Commission's {like product} determination."); *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).

render the forging into a finished carbon steel flange for purposes of these investigations.

While these finished carbon steel flanges are generally manufactured to specification ASME 816.5 or ASME 816.47 series A or series 8, the scope is not limited to flanges produced under those specifications. All types of finished carbon steel flanges are included in the scope regardless of pipe size (which may or may not be expressed in inches of nominal pipe size), pressure class (usually, but not necessarily, expressed in pounds of pressure, e.g., 150, 300, 400, 600, 900, 1500, 2500, etc.), type of face (e.g., flat face, full face, raised face, etc.), configuration (e.g., weld neck, slip on, socket weld, lap joint, threaded, etc.), wall thickness (usually, but not necessarily, expressed in inches), normalization, or whether or not heat treated. These carbon steel flanges either meet or exceed the requirements of the ASTM A105, ASTM A694, ASTM A181, ASTM A350 and ASTM A707 standards (or comparable foreign specifications). The scope includes any flanges produced to the above-referenced ASTM standards as currently stated or as may be amended. The term "carbon steel" under this scope is steel in which:

(a) Iron predominates, by weight, over each of the other contained elements:

(b) The carbon content is 2 percent or less, by weight; and

(c) none of the elements listed below exceeds the quantity, by weight, as indicated:

(i) 0.87 percent of aluminum;
(ii) 0.0105 percent of boron;
(iii) 10.10 percent of chromium;
(iv) 1.55 percent of columbium;
(v) 3.10 percent of copper;
(vi) 0.38 percent of lead;
(vii) 3.04 percent of manganese;
(viii) 2.05 percent of molybdenum;
(ix) 20.15 percent of nickel;
(x) 1.55 percent of niobium;
(xi) 0.20 percent of nitrogen;
(xii) 0.21 percent of phosphorus;
(xiii) 3.10 percent of silicon;
(xiv) 0.21 percent of sulfur;
(xv) 1.05 percent of titanium;
(xvi) 4.06 percent of tungsten;

(xvii) 0.53 percent of vanadium; or
(xviii) 0.015 percent of zirconium.

Finished carbon steel flanges are currently classified under subheadings 7307.91.5010 and 7307.91.5050 of the Harmonized Tariff Schedule of the United States (HTSUS). They may also be entered under HTSUS subheadings 7307.91.5030 and 7307.91.5070. The HTSUS subheadings are provided for convenience and customs purposes; the written description of the scope is dispositive.[15]

Flanges are used for connecting pipes, valves, pumps, and other equipment to form piping systems. They provide easy access to piping systems for cleaning, inspection, or modification.[16]

C. Arguments and Analysis

Petitioners argue that there is one domestic like product that is coextensive with the scope. They state that finished carbon steel flanges are distinct from flanges made of different materials because the type of flange used is dictated by the material of the pipe system with which it is used. Addressing a statement made by a respondent witness at the staff conference suggesting that flange forgings should be included in the domestic like product, Petitioners argue that there is no basis under the Commission's semifinished product analysis for doing so. Finally, Petitioners argue that "approved" and "unapproved" flanges are not separate domestic like products.[17] Silbo argues that flanges produced in India that are not on Approved Manufacturer's Lists ("AMLs") are a separate like product than flanges produced in the United States, Italy, and Spain that are on AMLs because of differences in customer perceptions and price.[18]

We define a single domestic like product consisting of finished carbon steel flanges, coextensive with the scope of these investigations. The statute, by use of the word "domestic" in the definition, unambiguously indicates that only domestically produced products may be included in a domestic like product and expressly distinguishes the domestic like product from the imported articles subject to investigation.[19] Therefore, Silbo's argument that unapproved flanges produced in India and subject to investigation should be defined as a separate domestic like product contemplates the Commission defining a domestic like product from a product not

[15] *Finished Carbon Steel Flanges from India, Italy, and Spain: Initiation of Less-Than-Fair-Value Investigations*, 81 Fed. Reg. 49619, 49624 (July 28, 2016); *Finished Carbon Steel Flanges from India: Initiation of Countervailing Duty Investigation*, 81 Fed. Reg. 49625, 49628 (July 28, 2016).

[16] CR/PR at I-3.

[17] Petitioners' Postconference Brief at 6-17.

[18] Silbo Postconference Brief at 12-14, Conference Tr. at 136 (Schutzman). The suggestion by a Silbo executive at the conference that upstream forgings be included in the domestic like product was not further raised at the conference or in Silbo's postconference brief, and we do not believe warrants an analysis.

[19] 19 U.S.C. § 1677(10).

produced in the United States and taking action that the statute does not permit. Instead, we analyze below the appropriate treatment of flanges under our domestic like product analysis.

Physical Characteristics and Uses. Flanges are products used for connecting pipes, valves, pumps, and other equipment to form a piping system.[20] Flanges are made with various differentiators, including facings, number of bolt holes, pressure ratings, and type of material.[21] Flanges generally are produced in accordance with American Society of Mechanical Engineers ("ASME") and American Society for Testing and Materials ("ASTM") standards.[22] All finished carbon steel flanges are made of carbon steel. Flanges are typically of the same material as the pipes or other equipment that they are used to connect.[23] Thus, flanges share the same general use of connecting carbon steel components of piping systems.

Manufacturing Facilities, Production Processes and Employees. Most responding domestic producers of flanges reported that they do not produce any other products on the same equipment as flanges.[24] A representative of Boltex testified that the production process used to make carbon steel flanges is different from that used to make flanges from other materials.[25]

Channels of Distribution. Almost all domestically produced flanges are sold in the same channel of distribution, namely through distributors. During the January 2013-March 2016 period of investigation ("POI"), only about 3-4 percent of U.S. producers' U.S. commercial shipments were to end users; the rest were to distributors.[26]

Interchangeability. Subject flanges generally are not interchangeable with flanges made of other materials because flanges are typically made of the same material as the pipes or other components that they are used to connect.[27]

Producer and Customer Perceptions. There is nothing in the record to contradict Petitioners' assertion that customers and producers perceive subject flanges to be distinct from flanges made of other materials.[28]

Price. There is nothing in the record to contradict Petitioners' assertion that the prices for carbon steel flanges are different from those for flanges made of other materials because each has its own supply and demand dynamics.[29]

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[20] CR at I-12, PR at I-8.

[21] CR at I-13-14, PR at I-10. There is a wide variety of types of flanges, including weld neck, slip-on, socket-weld, threaded, lap-joint, and blind. *Id.*

[22] Conference Tr. at 75 (Bernobich).

[23] CR at I-12, PR at I-8.

[24] CR at II-5, PR at II-4.

[25] Conference Tr. at 32 (Bernobich).

[26] CR at II-2, PR at II-2, and CR/PR at Table II-1.

[27] CR at I-12, PR at I-8-9.

[28] Petitioners' Postconference Brief at 9.

[29] Petitioners' Postconference Brief at 10.

Conclusion. All flanges share the same basic physical characteristics, in that they are made of carbon steel and are produced to the same ASME and ASTM specifications. All flanges share the same general end use, which is to connect piping or other components of piping systems that are also made of carbon steel. Flanges are generally made using distinct manufacturing facilities, production processes and employees. Almost all domestically produced flanges are sold in the same channel of distribution, through distributors. Carbon steel flanges generally are not interchangeable with flanges made of other materials. Producers and customers appear to perceive subject flanges to be a distinctive product, separate from flanges made of other materials. There is no specific information in the record regarding the pricing of flanges relative to flanges made of other materials, but there is nothing in the record to contradict Petitioners' assertion that the pricing for flanges is governed by distinctive supply and demand dynamics. All of these factors support treating flanges as a single domestic like product. The record provides no basis for finding a clear dividing line between any particular group of domestically produced flanges, such as those produced by manufacturers on an AML and those that are produced by "unapproved" producers. Indeed because all U.S. producers are on multiple AMLs,[30] there was no reported production of non-AML flanges or flanges by "unapproved" U.S. producers. We consequently define a single domestic like product coextensive with the scope of these investigations.

IV. Domestic Industry

The domestic industry is defined as the domestic "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."[31] In defining the domestic industry, the Commission's general practice has been to include in the industry producers of all domestic production of the like product, whether toll-produced, captively consumed, or sold in the domestic merchant market.

We must determine whether any producer of the domestic like product should be excluded from the domestic industry pursuant to Section 771(4)(B) of the Tariff Act. This provision allows the Commission, if appropriate circumstances exist, to exclude from the domestic industry producers that are related to an exporter or importer of subject merchandise or which are themselves importers.[32] Exclusion of such a producer is within the Commission's discretion based upon the facts presented in each investigation.[33] No party advocated the exclusion of any domestic producer as a related party.

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[30] *See* CR/PR at Appendix D.

[31] 19 U.S.C. § 1677(4)(A).

[32] *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).

[33] The primary factors the Commission has examined in deciding whether appropriate circumstances exist to exclude a related party include the following:
(Continued…)

One domestic producer, ***, meets the statutory definitions of a related party, because it ***.[34] *** was the *** largest of the six domestic producers that provided usable information in response to the Commission's questionnaire in 2015, accounting for *** percent of the total domestic production of those six producers.[35] *** the petitions.[36] It imported the following quantities of subject merchandise *** during the POI: ***.[37] *** explained that it imported subject merchandise ***.[38] Its operating income ratio was ***.[39] [40]

We find that appropriate circumstances exist to exclude *** from the domestic industry as a related party.[41] In 2015, and especially in interim 2016, the ***. *** appears to

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(…Continued)

(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.

[34] CR/PR at Table III-9. The record indicates that two other domestic producers may be related parties by virtue of their affiliations with exporters and importers of the subject merchandise. *** is affiliated with ***, an exporter of the subject merchandise in Italy. *** is affiliated with ***, an exporter of the subject merchandise in Italy and a U.S. importer. CR/PR at Table III-2. The record does not show whether the requisite control relationship exists to qualify these U.S. producers as related parties. Assuming *arguendo* that the requisite control relationships exist, we find that appropriate circumstances do not exist to exclude these producers from the domestic industry because these producers' principal interest is in domestic production. For each company, the levels of the *** by the affiliated export/importer were small relative to domestic production.

In the case of *** total exports of subject merchandise to the United States during 2013-15 were *** pounds. Staff Worksheet, EDIS Doc. No. 587661. This is a *** of the *** pounds of flanges that *** produced during 2013-15. *See* CR/PR at Table III-4.

In the case of *** of subject merchandise to the United States during 2013-15 were *** pounds, and its *** pounds. Staff Worksheet, EDIS Doc. No. 587661. These amounts are also *** of the *** million pounds that *** produced in 2013-15. CR/PR at Table III-4

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

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

[37] CR/PR at Table III-9.

[38] CR at III-9, PR at III-6, *** Importer Questionnaire Response at p. 8.

[39] *See* CR/PR at Table VI-3.

[40] Commissioner Pinkert does not rely upon a firm's financial performance in these investigations as a factor in determining whether there are appropriate circumstances to exclude it from the domestic industry.

[41] Vice Chairman Johanson and Commissioner Schmidtlein do not find for purposes of these preliminary determinations that appropriate circumstances exist to exclude ***. They note that no (Continued…)

acknowledge that, to some extent, it ***. *** production capacity ***.[42] By interim 2016, its capacity utilization was *** percent.[43] Its operating income ratio in January-March 2016, *** percent, was *** than that of the domestic industry as a whole, which was *** percent.[44] We acknowledge that the firm *** and no party has argued that it be excluded from the definition of the domestic industry. Nevertheless, we find on balance that appropriate circumstances exist to exclude *** from the domestic industry as a related party.

We consequently define one domestic industry consisting of all domestic producers of flanges, except ***, which we exclude as a related party.[45]

V. Negligible Imports

Pursuant to Section 771(24) of the Tariff Act, imports from a subject country of merchandise corresponding to a domestic like product that account for less than 3 percent of all such merchandise imported into the United States during the most recent 12 months for which data are available preceding the filing of the petition shall be deemed negligible.[46]

Subject imports from India accounted for 54.5 percent of the total quantity of imports of flanges in the twelve months preceding the filing of the petitions (June 2015 through May 2016), subject imports from Italy accounted for 13.9 percent, and subject imports from Spain accounted for 11.3 percent.[47] We consequently find that imports from each subject country are not negligible.

VI. Cumulation

For purposes of evaluating the volume and effects for a determination of reasonable indication 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:

(…Continued)
party argued for *** exclusion and *** *** in these investigations. Further, despite *** listed as a reason for its *** primary interest lies in domestic production. *See generally supra* n.33.

[42] CR/PR at Table III-4.

[43] CR/PR at Table III-4. The aggregate capacity utilization of the six reporting domestic producers in interim 2016 was 33.0 percent. *Id.*

[44] CR/PR at Table VI-3. Of the six reporting producers, *** operating margin was ***. *Id.*

[45] Vice Chairman Johanson and Commissioner Schmidtlein define the domestic industry as consisting of all domestic producers of finished carbon steel flanges.

[46] 19 U.S.C. §§ 1671b(a), 1673b(a), 1677(24)(A)(i), 1677(24)(B); *see also* 15 C.F.R. § 2013.1 (developing countries for purposes of 19 U.S.C. § 1677(36)).

[47] CR at IV-6, PR at IV-5.

(1) the degree of fungibility between subject imports from different countries and between subject imports and the domestic like product, including consideration of specific customer requirements and other quality related questions;

(2) the presence of sales or offers to sell in the same 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.[48]

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.[49] Only a "reasonable overlap" of competition is required.[50]

Petitioners argue that subject imports should be cumulated because there is a reasonable overlap in competition among imports from all subject countries and the domestic like product. They contend that subject imports from India, Italy, and Spain and the domestic like product are highly interchangeable because they are standardized in terms of ASTM and ASME standards, size, type, pressure ratings, and materials. According to Petitioners, subject imports from all three subject countries and the domestic like product are sold in all geographic markets in the United States, and are sold in the same channels of distribution, primarily to distributors.[51]

The government of India, Norma, and Gupta argue that subject imports from India should not be cumulated with subject imports from Italy and Spain because they are not fungible with the other subject imports or with the domestic like product. They maintain that flanges from India are sold largely in the "generic" market, whereas flanges from the other sources are largely sold in the "approved" market. Norma and Gupta argue that all participants in the flange market observe the distinction between "approved" and "generic" flanges. They

[48] *See Certain Cast-Iron Pipe Fittings from Brazil, the Republic of Korea, and Taiwan*, Inv. Nos. 731-TA-278-80 (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).

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

[50] 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*, 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.").

[51] Petitioners' Postconference Brief at 28-30.

maintain that distributors typically ask whether flanges are needed for an approved use when a customer places an order, and that distributors maintain separate inventories for "approved" and "generic" flanges. Furthermore, customers' purchasing decisions are not determined by price alone; the end-use application is a determining factor in the type of flange purchased. Norma and Gupta contend that customers buy "approved" flanges when an approved application is contemplated.[52]

The threshold requirement for cumulation is satisfied because Petitioners filed the antidumping duty and countervailing duty petitions with respect to India, Italy, and Spain on the same day, June 30, 2016. In addition, none of the statutory exceptions to cumulation applies. As discussed below, we find a reasonable overlap of competition between subject imports from India, Italy, and Spain and between subject imports from these countries and the domestic like product.

Fungibility. Flanges, regardless of source, are generally produced to the same specifications.[53] All responding domestic producers and a majority of importers reported that subject imports from the subject countries are "always" or "frequently" used interchangeably with each other and with the domestic like product.[54]

When asked whether differences other than price are ever significant in their sales in choosing between flanges from different sources, most domestic producers responded "sometimes" or "never."[55] Importers were more divided on this question. In comparing the U.S. product with that from India, a majority responded "always" or "frequently."[56] In comparing U.S. product with that from Italy and from Spain, importers were more evenly divided, with about half responding "sometimes" or "never," and the other half responding "always" or "frequently."[57]

Fungibility may be somewhat limited by the use of AMLs by some end users and distributors. There is conflicting evidence on the record as to the prevalence of AMLs. On the one hand, Petitioners contend that the use of AMLs is "very limited,"[58] and that the use of such lists has been declining, especially with the collapse in oil and gas prices.[59] Petitioners also stress that "{e}very list works differently."[60] On the other hand, a representative from Silbo testified that "{o}il and gas is 90-plus percent approved."[61]

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[52] Norma/Gupta Postconference Brief at 5-8; Government of India Postconference Submission at 11 to 13.

[53] Conference Tr. at 26 (Coulas), 36 (Bernobich), 92 (McConkey), 134 (Levinson), and 154 (Gupta).

[54] CR/PR at Table II-4.

[55] CR/PR at Table II-5.

[56] CR/PR at Table II-5.

[57] CR/PR at Table II-5.

[58] Conference Tr. at 50 and 69 (Bernobich).

[59] Conference Tr. at 76 (Bernobich).

[60] Conference Tr. at 63 (Bernobich)

[61] Conference Tr. at 123 (Shalom). Silbo maintains that the oil and gas industry is the largest market for subject flanges. Silbo Postconference Brief at 6.

The parties disagree as to the extent to which Indian producers participate in the approved part of the market. The assertion by Norma and Gupta that only one producer in India (Bebitz) is on some AMLs does not appear to be borne out by the record. Petitioners provided evidence that several other Indian flange producers are listed on a number of AMLs.[62]

The current record contains conflicting testimony concerning the extent to which domestic producers participate in the generic part of the market, and the nature of the product they sell in that part of the market. A representative from Weldbend testified that his company has traditionally been supplying "commercial type flanges" and is "not heavily involved in the approved list."[63] However, a representative from Silbo testified that "Weldbend never sells a nonapproved product," and that "Weldbend and Boltex are always promoting their product as approved."[64] On the other hand, Norma and Gupta's counsel testified that, as demand in the approved segment of the market has declined, with the collapse in oil prices, Petitioners have sought to transition their sales efforts towards the generic segment of the market.[65]

A representative from Norma conceded that there are no differences in the physical and chemical characteristics of flanges sold in the approved and non-approved parts of the market. He attributed the unwillingness of U.S. oil companies to put Indian producers on their AMLs to an inaccurate perception of inadequate quality procedures in India.[66]

On balance, we do not find that any distinction between products available in the approved and generic parts of the flange market is clear; Indian producers have at least limited participation in the approved part of the market, and domestic producers compete with the Indian product in the generic part of the market to some degree. Indeed, five of the seven purchasers that responded to the lost sales/lost revenue survey reported purchasing both the domestic like product and subject imports from India in 2015.[67] We will examine in any final phase of these investigations the extent to which AML qualification affects the fungibility between the domestic like product and subject imports, especially those from India, and we invite the parties, in their comments on the questionnaires to be issued in any final phase of these investigations, to suggest how this issue can best be examined.

Channels of Distribution. Domestic producers and importers of the subject merchandise from each of the subject countries sold flanges mainly to distributors. The channels of distribution for subject imports from India were somewhat different in that (*** of those imports were sold to end users during most of the POI.[68]

[62] Petitioners' Postconference Brief at 23 and Exh. 8, and CR/PR at Appendix D.
[63] Conference Tr. at 50-51 (Coulas).
[64] Conference Tr. at 135 (Jakob).
[65] Conference Tr. at 21 (Levinson).
[66] Conference Tr. at 155 (Khandelwar).
[67] CR/PR at Table V-10.
[68] CR/PR at Table II-1.

Geographic Overlap. U.S. producers and importers of the subject merchandise reported selling flanges in all regions of the contiguous United States.[69]

Simultaneous Presence in Market. Subject imports from each subject country were present in every month of the POI.[70]

Conclusion. As discussed, we do not believe that the current record supports respondents' contentions that subject imports from India are not fungible with the domestic like product or subject imports from Italy or Spain; subject imports from India serve the same market segments and at least some of the same customers as flanges from domestic and other subject sources. The relevant antidumping duty and countervailing duty petitions were filed on the same day. We find that for purposes of the preliminary phase of these investigations that there is a reasonable overlap of competition between and among subject imports and the domestic like product. Consequently, we analyze subject imports from India, Italy, and Spain on a cumulated basis for our analysis of whether there is a reasonable indication of material injury by reason of subject imports.

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

A. Legal Standard

In the preliminary phase of antidumping and countervailing duty investigations, the Commission determines whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of the imports under investigation.[71] In making this determination, the Commission must consider the volume of subject imports, their effect on prices for the domestic like product, and their impact on domestic producers of the domestic like product, but only in the context of U.S. production operations.[72] The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant."[73] In assessing whether there is a reasonable indication that the domestic industry is materially injured by reason of subject imports, we consider all relevant economic factors that bear on the state of the industry in the United States.[74] No single factor

[69] CR at II-3, PR at II-2, and CR/PR at Table II-2. *See also* CR/PR at Table IV-3 (the Houston-Galveston Customs district was the largest port of entry for flanges from each of the three subject countries).

[70] CR/PR at Table IV-4.

[71] 19 U.S.C. §§ 1671b(a), 1673b(a). The Trade Preferences Extension Act of 2015, Pub. L. 114-27, amended the provisions of the Tariff Act pertaining to Commission determinations of reasonable indication of material injury and threat of material injury by reason of subject imports in certain respects. We have applied these amendments here.

[72] 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 ... {a}nd explain in full its relevance to the determination." 19 U.S.C. § 1677(7)(B).

[73] 19 U.S.C. § 1677(7)(A).

[74] 19 U.S.C. § 1677(7)(C)(iii).

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."[75]

Although the statute requires the Commission to determine whether there is a reasonable indication that the domestic industry is "materially injured by reason of" unfairly traded imports,[76] 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.[77] 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.[78]

In many investigations, there are other economic factors at work, some or all of which may also be having adverse effects on the domestic industry. Such economic factors might include nonsubject imports; changes in technology, demand, or consumer tastes; competition among domestic producers; or management decisions by domestic producers. The legislative history explains that the Commission must examine factors other than subject imports to ensure that it is not attributing injury from other factors to the subject imports, thereby inflating an otherwise tangential cause of injury into one that satisfies the statutory material injury threshold.[79] In performing its examination, however, the Commission need not isolate

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[75] 19 U.S.C. § 1677(7)(C)(iii).

[76] 19 U.S.C. §§ 1671b(a), 1673b(a).

[77] *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).

[78] The Federal Circuit, in addressing the causation standard of the statute, has 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 re-affirmed in *Mittal Steel Point Lisas Ltd. v. United States*, 542 F.3d 867, 873 (Fed. Cir. 2008), in which 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).

[79] SAA, H.R. Rep. 103-316, Vol. I at 851-52 (1994) ("{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, (Continued…)

the injury caused by other factors from injury caused by unfairly traded imports.[80] 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.[81] It is clear that the existence of injury caused by other factors does not compel a negative determination.[82]

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" and the Commission "ensure{s} that it is not attributing injury from other sources to the subject imports."[83] [84] Indeed, the Federal Circuit has examined and affirmed various Commission methodologies and has disavowed "rigid adherence to a specific formula."[85]

(…Continued)
developments in technology and the export performance and productivity of the domestic industry"); *accord Mittal Steel*, 542 F.3d at 877.

[80] 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.").

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

[82] *See Nippon*, 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.").

[83] *Mittal Steel*, 542 F.3d at 877-78; *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*, 792 F.3d 1355 (Fed. Cir. 2015), the Federal Circuit affirmed the Commission's causation analysis as comporting with the Court's guidance in *Mittal*.

[84] Commissioners Pinkert and Kieff do not join this paragraph or the following three paragraphs. They point out that the Federal Circuit, in *Bratsk*, 444 F.3d 1369, and *Mittal Steel*, held that the Commission is *required*, in certain circumstances when analyzing present material injury, to consider a (Continued…)

The Federal Circuit's decisions in *Gerald Metals*, *Bratsk,* and *Mittal Steel* all involved cases in which the relevant "other factor" was the presence in the market of significant volumes of price-competitive nonsubject imports. The Commission interpreted the Federal Circuit's guidance in *Bratsk* as requiring it to apply a particular additional methodology following its finding of material injury in cases involving commodity products and a significant market presence of price-competitive nonsubject imports.[86] The additional "replacement/benefit" test looked at whether nonsubject imports might have replaced subject imports without any benefit to the U.S. industry. The Commission applied that specific additional test in subsequent cases, including the *Carbon and Certain Alloy Steel Wire Rod from Trinidad and Tobago* determination that underlies the *Mittal Steel* litigation.

Mittal Steel clarifies that the Commission's interpretation of *Bratsk* was too rigid and makes clear that the Federal Circuit does not require the Commission to apply an additional test nor any one specific methodology; instead, the court requires the Commission to have "evidence in the record 'to show that the harm occurred 'by reason of' the LTFV imports,'" and requires that the Commission not attribute injury from nonsubject imports or other factors to subject imports.[87] Accordingly, we do not consider ourselves required to apply the replacement/benefit test that was included in Commission opinions subsequent to *Bratsk*.

The progression of *Gerald Metals*, *Bratsk*, and *Mittal Steel* clarifies that, in cases involving commodity products where price-competitive nonsubject imports are a significant

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(…Continued)
particular issue with respect to the role of nonsubject imports, without reliance upon presumptions or rigid formulas. The Court has not prescribed a specific method of exposition for this consideration. *Mittal Steel* explains as follows:

> What *Bratsk* held is that "where commodity products are at issue and fairly traded, price competitive, non-subject imports are in the market," the Commission would not fulfill its obligation to consider an important aspect of the problem if it failed to consider whether non-subject or non-LTFV imports would have replaced LTFV subject imports during the period of investigation without a continuing benefit to the domestic industry. 444 F.3d at 1369. Under those circumstances, *Bratsk* requires the Commission to consider whether replacement of the LTFV subject imports might have occurred during the period of investigation, and it requires the Commission to provide an explanation of its conclusion with respect to that factor.

542 F.3d at 878.

[85] *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.").

[86] *Mittal Steel*, 542 F.3d at 875-79.

[87] *Mittal Steel*, 542 F.3d at 873 (quoting from *Gerald Metals*, 132 F.3d at 722), 875-79 & n.2 (recognizing the Commission's alternative interpretation of *Bratsk* as a reminder to conduct a non-attribution analysis).

factor in the U.S. market, the Court will require the Commission to give full consideration, with adequate explanation, to non-attribution issues when it performs its causation analysis.[88]

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.[89] Congress has delegated this factual finding to the Commission because of the agency's institutional expertise in resolving injury issues.[90]

B. Conditions of Competition and the Business Cycle

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

1. Demand Conditions

Finished carbon steel flanges are used by firms in oil and gas, chemical, and construction applications.[91] The oil and gas industry consumes a substantial share of the production of flanges.[92] Declining activity in the oil and gas industry beginning in late 2014 led to falling demand for flanges.[93] Apparent U.S. consumption of flanges declined from 380.9 million pounds in 2013 to 371.6 million pounds in 2014 and to 353.5 million pounds in 2015.[94]

2. Supply Conditions

The three sources of supply of flanges in the U.S. market are domestic production, imports of subject merchandise, and imports from nonsubject countries. The six domestic producers that responded to the Commission's U.S. producers' questionnaire are believed to

[88] To that end, after the Federal Circuit issued its decision in *Bratsk*, the Commission began to present published information or send out information requests in the final phase of investigations to producers in nonsubject countries that accounted for substantial shares of U.S. imports of subject merchandise (if, in fact, there were large nonsubject import suppliers). In order to provide a more complete record for the Commission's causation analysis, these requests typically seek information on capacity, production, and shipments of the product under investigation in the major source countries that export to the United States. The Commission plans to continue utilizing published or requested information in the final phase of investigations in which there are substantial levels of nonsubject imports.

[89] We provide in our respective discussions of volume, price effects, and impact a full analysis of other factors alleged to have caused any material injury experienced by the domestic industry.

[90] *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.").

[91] CR/PR at II-1.

[92] CR/PR at II-1, Petition at 11.

[93] CR at II-13/PR at II-9, and CR/PR at Figures II-1 and II-2.

[94] CR/PR at Table IV-5. Apparent U.S. consumption was 103.9 million pounds in interim 2015 and 61.8 million pounds in interim 2016. *Id.*

account for the vast majority of flanges produced in the United States in 2015.[95] The domestic industry is comprised of both integrated and non-integrated producers. Boltex, for example, produces its own flange forgings, which it processes into finished flanges. Four other domestic producers purchase flange forgings (***) and process them into flanges.[96] The domestic industry's market share (by quantity) rose from *** percent in 2013 to *** percent in 2014 and then declined substantially to *** percent in 2015, a level below that of 2013.[97]

Subject imports held the largest share of apparent U.S. consumption throughout the POI. The market share (by quantity) of cumulated subject imports was 46.4 percent in 2013, 44.2 percent in 2014, and 58.3 percent in 2015.[98] Imports from nonsubject countries were present in the U.S. market throughout the POI.[99] The main sources of nonsubject imports were China, Korea, and Germany.[100] The market share of nonsubject imports was 13.8 percent in 2013, 14.6 percent in 2014, and 13.4 percent in 2015.[101]

3. Substitutability and Other Conditions

Flanges sold in the United States must be produced to ASTM material and ASME design standards. These flanges are typically sold in standard sizes, pressure classes, and facings.[102]

As discussed above, all responding domestic producers and a majority of importers reported that subject imports from the subject countries are "always" or "frequently" used interchangeably with each other and with the domestic like product.[103] Domestic producers and importers were more divided on whether differences other than price are ever significant in their sales in choosing between flanges from different sources.[104]

We find that domestically produced flanges and flanges imported from subject sources are highly substitutable when sold based on AML requirements, and also highly substitutable when AML designation is not required. The substitutability of flanges produced by AML-listed

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[95] CR at I-5, PR at I-3. As noted above, we have excluded one of these producers, ***, from the domestic industry, as a related party. ***. Vice Chairman Johanson and Commissioner Schmidtlein define the domestic industry as consisting of all domestic producers of finished carbon steel flanges.

[96] CR at III-3, PR at III-2.

[97] CR/PR at Supplemental Table 1. The domestic industry's market share was *** percent in interim 2015 and higher, at *** percent, in interim 2016. *Id.* The market share of all domestic producers, including ***, was 39.8 percent in 2013, 41.2 percent in 2014, 28.3 percent in 2015, 30.2 percent in interim 2015, and 32.2 percent in interim 2016. CR/PR at Table IV-5.

[98] CR/PR at Table IV-5. The market share of cumulated subject imports was 57.1 percent in interim 2015 and 54.3 percent in interim 2016. *Id.*

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

[100] CR at IV-3, PR at IV-2.

[101] CR/PR at Table IV-5. The market share of nonsubject imports was 12.7 percent in interim 2015 and 13.6 percent in interim 2016. *Id.*

[102] CR/PR at II-1.

[103] CR/PR at Table II-4.

[104] CR/PR at Table II-5.

suppliers and those produced by non-AML listed suppliers is less clear.[105] The parties disagree on the importance of AMLs.[106] Data showing that average unit values of flanges from India are considerably below those of flanges from other subject sources[107] may corroborate the conference testimony of the Norma witness that purchasers perceive imports from India to be of lower quality. We will examine in any final phase of these investigations the extent to which AML qualification affects the substitutability between the domestic like product and subject imports, especially those from India, and we invite the parties, in their comments on the questionnaires to be issued in any final phase of these investigations, to suggest how this issue can best be examined.

The main raw material used to produce flanges is carbon steel, either in the form of billets or as a forging. The cost of raw materials, as a share of the cost of goods sold declined from 74.1 percent in 2013 to 70.5 percent in 2015, and was 66.2 percent in interim 2016.[108]

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."[109]

Cumulated subject imports held a substantial presence in the U.S. market throughout the POI. Cumulated subject imports declined from 176.7 million pounds in 2013 to 164.1 million pounds in 2014, and then increased to 206.1 million pounds in 2015.[110] As explained above, apparent U.S. consumption declined from 380.9 million pounds in 2013, to 371.6 million pounds in 2014, and to 353.5 million pounds in 2015.[111]

The market share (by quantity) of cumulated subject imports increased from 46.4 percent in 2013 to 58.3 percent in 2015, or by 11.9 percentage points. The bulk of this gain came at the expense of the domestic industry. From 2013 to 2015, the domestic industry's market share declined by *** percentage points and that of nonsubject imports fell by 0.4 percentage points.[112] [113]

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[105] *See* CR at II-15, PR at II-11.

[106] *E.g.*, Petitioners' Postconference Brief at 20-27 and Norma/Gupta Postconference Brief at 3-5.

[107] CR/PR at Table IV-2.

[108] CR/PR at V-1.

[109] 19 U.S.C. § 1677(7)(C)(i).

[110] CR/PR at Table IV-5. Cumulated subject imports were 59.3 million pounds in interim 2014 and 33.5 million pounds in interim 2016.

[111] CR/PR at Table IV-5. Apparent U.S. consumption was 103.9 million pounds in interim 2014 and 61.8 million pounds in interim 2016. *Id.*

[112] *See* CR/PR at Supplemental Table 1. The market share of subject imports was 2.8 percentage points lower in interim 2016, as compared with interim 2015; the domestic industry's and nonsubject imports' market shares were *** percentage points and 0.9 percentage points, respectively, higher in interim 2016 than in interim 2015. *Id.*

Cumulated subject imports were also at substantial levels relative to domestic production, which declined from 2013 to 2015. The ratio of cumulated subject imports to domestic production increased from *** percent in 2013 to *** percent in 2014 and to *** percent in 2015.[114] [115]

For purposes of these preliminary determinations, we find that the cumulated volume of subject imports, and the increase in that volume, is significant both in absolute terms and relative to consumption and production in the United States.

D. Price Effects of the Subject Imports

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

> (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.[116]

The record in the preliminary phase of these investigations indicates that domestically produced flanges and flanges imported from subject sources are highly substitutable when sold based on AML requirements, and also highly substitutable when AML designation is not required. The substitutability of flanges produced by AML-listed suppliers and those produced by non-AML listed suppliers is less clear.[117] The record also shows that price is often an important factor in purchasing decisions, but that other factors are important as well.[118]

The Commission collected quarterly pricing data on six flange products.[119] Five U.S. producers and nine importers provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products and all quarters.[120]

(…Continued)

[113] The market share of the domestic industry as Vice Chairman Johanson and Commissioner Schmidtlein define it declined by 11.5 percentage points from 2013 to 2015. Its market share was 2 percentage points higher in interim 2016 than in interim 2015. *See* CR/PR at Table IV-5.

[114] Derived from Supplemental Table 1. The ratio was *** percent in interim 2015 and was lower, at *** percent, in interim 2016. *Id.*

[115] For the domestic industry as Vice Chairman Johanson and Commissioner Schmidtlein define it, the ratio of cumulated subject imports to domestic production increased from 113.0 percent in 2013 to 113.4 percent in 2014 and to 203.4 percent in 2015. The ratio was 177.9 percent in interim 2015 and 167.9 percent in interim 2016. CR/PR at Table IV-2.

[116] 19 U.S.C. § 1677(7)(C)(ii).

[117] CR/PR at Table II-4, *see* CR at II-15, PR at II-11.

[118] CR at II-16-17, PR at II-12, CR/PR at Table II-5.

[119] The pricing products were: Product 1.--3 inch, 150 class, Raised Face, Weld neck standard flange (3 150 RF WN STD); Product 2.-- 4 inch, 150 class, Raised Face, Weld neck standard flange (4 150 RF WN (Continued…)

The pricing data show that the subject imports undersold the domestic like product in 220 of 232 quarterly comparisons.[121] There were 2.83 million pieces of subject imports in underselling observations, and 57,214 pieces in overselling observations.[122] The margins of underselling ranged from *** percent to *** percent, and the average margin of underselling was *** percent.[123] Given the high frequency and substantial margins of underselling[124] and the fact that price is an important consideration in purchasing decisions, we find the underselling to be significant. This underselling allowed subject imports to increase their market share at the expense of the domestic industry from 2014 to 2015.[125]

Prices decreased during January 2013-March 2016 for all six products from the United States and all three subject countries except for product 1 from India, which increased by 3.8 percent. Price declines for the domestically produced products ranged from *** to *** percent while price declines ranged from 8.3 to 31.1 percent for subject imports from India, *** to *** percent for subject imports from Italy, and *** to *** percent for subject imports from Spain.

(…Continued)
STD); Product 3.-- 6 inch, 150 class, Raised Face, Weld neck standard flange (6 150 RF WN STD); Product 4.--16 inch, 150 class, Raised Face, Weld neck standard flange (16 150 RF WN STD); Product 5.--6 inch, 150 class, Raised Face, Slip on standard flange (6 150 RF Slip on); and Product 6.--2 inch, 150 class, Raised Face, Threaded standard flange (2 150 RF THD). CR at V-4, PR at V-4.

[120] CR at V-5, PR at V-4. Reported pricing products represented 6.4 percent of U.S. shipments of by the domestic industry, 13.4 percent of U.S. commercial shipments of imported product from India, 6.6 percent of U.S. commercial shipments of imported product from Italy, and 7.1 percent of U.S. commercial shipments of imported product from Spain. *Id.* (domestic industry data derived from CR at V-5, PR at V-4 and *** U.S. Producer Questionnaire Response).

For the domestic industry as Vice Chairman Johanson and Commissioner Schmidtlein define it, reported pricing products represented approximately 7.0 percent of U.S. shipments of by the domestic industry. CR at V-5, PR at V-4.

[121] CR/PR at Supplemental Table 3.

[122] Derived from CR/PR at Tables V-3 –V-8 and *** Domestic Producer Questionnaire Response.

[123] CR/PR at Supplemental Table 3.

[124] Vice Chairman Johanson and Commissioner Schmidtlein note that the pricing data are similar in defining the domestic industry to include ***. *See* CR/PR at Table V-10 (quarterly comparisons and margins); CR at V-21, PR at V-4 (corresponding quantities).

[125] As noted above, from 2014 to 2015, the market share of subject imports rose from 44.2 percent to 58.3 percent, while the domestic industry's market share fell from *** percent to *** percent. CR/PR at Supplemental Table 1.

Information on the lost sales and lost revenue experienced by the domestic industry confirms our findings concerning significant underselling. Petitioners made lost sales and lost revenue allegations involving 40 purchasers. The Commission contacted 33 purchasers and received responses from seven. CR at V-22-23, PR at V-15. Of these seven purchasers, four reported that they had shifted purchases of flanges from U.S. producers to subject imports from India, two reported that they had shifted purchases to subject imports from Italy, and two reported that they had shifted purchases to subject imports from Spain since 2013. Two of the purchasers that shifted to imports from India reported that price was a primary reason for the shift, and one each of the purchasers that reported shifting to imports from Italy and Spain reported that price was a primary reason. CR at V-24, PR at V-15, and CR/PR at Table V-11.

The majority of the U.S. price declines across all pricing products occurred primarily in the first quarter of 2016. In this quarter, prices fell by between 9.2 percent (product 6) and 16.4 percent (product 4). Prior to this quarter, typical changes in U.S. prices for were very small, averaging 1.6 percent per quarter.[126]

There is evidence in the record that the domestic industry reduced its prices in interim 2016, in order to avoid losing more market share to subject imports.[127] In light of this and the significant volume of low-priced subject imports with an increasing presence in the U.S. market, we find that subject imports had significant price depressing effects.[128] While we recognize that the majority of the U.S. price declines occurred in interim 2016, when there was also a sharp decline in demand,[129] in light of the pervasive underselling by subject imports and the domestic industry's recapture of some lost market share as it cut prices in interim 2016, we find that the decline in the prices for the domestically produced product was due, in significant part, to the subject imports. We intend in any final phase of these investigations to explore further the role that declining demand played in these price declines.

We have also examined whether subject imports prevented price increases, which would otherwise have occurred, to a significant degree during the POI. The domestic industry's unit net sales values declined by *** percent from 2013 to 2015, while the unit cost of goods sold ("COGS") increased by *** percent.[130] The domestic industry's ratio of COGS to net sales increased from *** percent in 2013 to *** percent in 2014 and to *** percent in 2015.[131] Consequently, we find that the domestic industry was unable to raise prices to cover increasing costs at a time when the volume of subject imports was increasing at a significant rate. Subject imports were predominantly underselling the domestic like product, and the domestic industry was losing market share to subject imports. While we acknowledge that declining demand during the period from 2013 to 2015 would have served to restrain price increases, a matter which we intend to explore further in any final phase of these investigations, we cannot find for purposes of these preliminary determinations that the domestic industry's inability to pass on its increased costs from 2013 to 2015 was not due to the subject imports.

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[126] CR at V-18, PR at V-11-12.

[127] Conference Tr. at 35 (Bernobich), CR at V-25-26, PR at V-16. These efforts appear to have been somewhat successful, seeing that the domestic industry's market share was *** percent in interim 2016, as compared with *** percent in interim 2015. CR/PR at Supplemental Table 1.

[128] Chairman Williamson and Commissioner Broadbent note the significant decrease in apparent consumption between the interim periods that likely contributed to much, if not most, of the decrease in domestic prices. Accordingly, they do not find that subject imports had significant price depressing effects.

[129] Apparent U.S. consumption of flanges was 103.9 million pounds in interim 2015 and 61.8 million pounds in interim 2016. CR/PR at Table IV-5.

[130] CR/PR at Supplemental Table 1. Unit net sales values were *** percent lower in interim 2016 than in interim 2015, while unit COGS were *** percent higher. *Id.*

[131] CR/PR at Supplemental Table 1. The domestic industry's COGS-to-net-sales ratio was *** percent in interim 2015 and higher, at *** percent, in interim 2016. *Id.*

Accordingly, based on the current record, we find that underselling by the subject imports was significant and that this underselling allowed the subject imports to gain market share from the domestic industry. The record also supports a finding that the subject imports caused significant price depression later in the POI. Moreover, from 2013 to 2015, the domestic industry was unable to increase prices to cover higher costs while there was a growing volume of low-priced cumulated subject imports.

E. Impact of the Subject Imports[132]

Section 771(7)(C)(iii) of the Tariff Act provides that the Commission, in examining the impact of the subject imports on the domestic industry, "shall evaluate all relevant economic factors which have a bearing on the state of the industry." These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, gross profits, net profits, operating profits, cash flow, return on investment, return on capital, ability to raise capital, ability to service debt, research and development, and factors affecting domestic prices. No single factor is dispositive and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[133]

There was an erosion in most of the domestic industry's performance indicators throughout the POI.[134] The domestic industry's production capacity rose from *** pounds in 2013 to *** pounds in 2014 and *** pounds in 2015.[135] By contrast, its production declined from *** pounds in 2013 to *** pounds in 2014 and to *** pounds in 2015.[136] Capacity utilization declined from *** percent in 2013 to *** percent in 2014 and to *** percent in 2015.[137] The domestic industry's U.S. shipments declined from *** pounds in 2013 to *** pounds in 2014 and to *** pounds in 2015.[138] Ending inventory quantities declined from ***

[132] In its notice initiating the antidumping duty investigations Commerce reported estimated dumping margins ranging from 17.80 to 37.84 percent for imports from India, 15.76 to 204.53 percent for imports from Italy, and 13.19 to 24.43 percent for imports from Spain. *Finished Carbon Steel Flanges from India, Italy, and Spain: Initiation of Less-Than-Fair-Value Investigations*, 81 Fed. Reg. 49619 (July 28, 2016).

[133] 19 U.S.C. § 1677(7)(C)(iii). This provision was amended by the Trade Preferences Extension Act of 2015, Pub. L. 114-27.

[134] Vice Chairman Johanson and Commissioner Schmidtlein have examined the pertinent performance data for the domestic industry as they define it (including ***) and find that the trends in those data are similar to those in the data discussed in this section of these views. *See, e.g.,* CR/PR at Table C-1.

[135] CR/PR at Supplemental Table 1. Capacity was *** pounds in interim 2015 and higher, at *** pounds, in interim 2016. *Id.*

[136] CR/PR at Supplemental Table 1. Production was *** pounds in interim 2015 and lower, at *** pounds, in interim 2016. *Id.*

[137] CR/PR at Supplemental Table 1. Capacity utilization was *** percent in interim 2015 and lower, at *** percent, in interim 2016. *Id.*

[138] CR/PR at Supplemental Table 1. The industry's U.S. shipments were *** pounds in interim 2015 and lower, at *** pounds, in interim 2016. *Id.*

pounds in 2013, to *** pounds in 2014, and then rose to *** pounds in 2015, a figure above that in 2013.[139]

The number of production workers in the domestic industry declined from *** in 2013 to *** in 2014 and *** in 2015.[140] Hours worked declined from *** in 2013 to *** in 2014 and *** in 2015.[141] Wages paid rose from $*** in 2013 to $*** in 2014 and then declined to $*** in 2015, a figure below that of 2013.[142] Productivity declined throughout the POI.[143]

There were substantial declines in the domestic industry's financial performance during the POI, particularly in 2015 and interim 2016. Total net sales revenues declined from $*** in 2013 to $*** in 2014 and to $*** in 2015.[144] Similarly, the domestic industry's unit net sales value *** each year and over the interim periods.[145] The domestic producers' ratio of COGS to net sales increased from *** percent in 2013 to *** percent in 2014 and to *** percent in 2015.[146] Operating income declined from $*** in 2013 to $*** in 2014 and to $*** in 2015.[147] Operating income margins declined from *** percent in 2013, to *** percent in 2014, and then to *** percent in 2015.[148] The industry's gross profit[149] and net income[150] followed similar trends. The industry's capital expenditures *** in the 2013-2015 period *** in interim 2016 than in interim 2015.[151]

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[139] CR/PR at Supplemental Table 1. Ending inventories were *** pounds in interim 2015 and lower, at *** pounds, in interim 2016. *Id.*

[140] CR/PR at Supplemental Table 1. There were *** production workers in interim 2015 and a lower number, ***, in interim 2016. *Id.*

[141] CR/PR at Supplemental Table 1. Hours worked were *** in interim 2015 and lower, at ***, in interim 2016. *Id.*

[142] CR/PR at Supplemental Table 1. Wages paid were $*** in interim 2015 and lower, at $***, in interim 2016.

[143] Productivity (in pounds per hour) was *** in 2013, *** in 2014, *** in 2015, *** in interim 2015, and *** in interim 2016. CR/PR at Supplemental Table 1.

[144] CR/PR at Supplemental Table 1. The domestic industry's total net sales were $*** in interim 2015 and lower, at $***, in interim 2016. *Id.*

[145] The domestic industry's average unit net sales value declined from *** in 2013 to *** in 2014, and *** in 2015. The unit net sales value was $*** in interim 2015 and lower, at $***, in interim 2016. CR/PR at Supplemental Table 1.

[146]CR/PR at Supplemental Table 1. The ratio of COGS to net sales was *** percent in interim 2015 and higher, at *** percent, in interim 2016.

[147] CR/PR at Supplemental Table 1. Operating income was $*** in interim 2015 and lower, at $***, in interim 2016. *Id*

[148] CR/PR at Supplemental Table 1. The operating margin was *** percent in interim 2015 and lower, at *** percent, in interim 2016. *Id.*

[149] Gross profit declined from $*** in 2013 to $*** in 2014, and $*** in 2015. Gross profit was in $*** in interim 2015 and lower, at $***, in interim 2016. CR/PR at Supplemental Table 1.

[150] Net income declined from $*** in 2013 to $*** in 2014, and $*** in 2015. Net income was in $*** in interim 2015 and lower, at $***, in interim 2016. CR/PR at Supplemental Table 1.

[151] Capital expenditures were $*** in 2013, $*** in 2014, $*** in 2015, $*** in interim 2015, and $*** in interim 2016. CR/PR at Supplemental Table 1.

As discussed above, we have found the volume of cumulated subject imports and the increase in the volume and market share of those imports to have been significant over the POI, that these imports undersold the domestic like product to a significant degree, that prices declined in interim 2016 due to the subject imports, and that the domestic industry could not pass on raw material price increases while there was an increasing volume of low-priced subject imports. Most of the domestic industry's performance indicators declined, especially in 2015 and interim 2016. Consequently, we find, for purposes of the preliminary phase of these investigations, that the large and increasing volume of subject imports, at prices that consistently undersold the domestic like product, had a significant impact on the domestic industry by reducing its shipments, revenues, and financial performance.

In conducting our impact analysis, we have also considered the role of nonsubject imports so as not to attribute injury from them to subject imports. Nonsubject imports occupied a significantly smaller share of the market than subject imports throughout the POI.[152] For the most part, the volume and market share of nonsubject imports fluctuated within a relatively narrow range over the POI.[153] By contrast, the volume and market share of subject imports increased sharply from 2014 to 2015, as discussed above.[154] In light of these considerations, we find that the adverse effects of the subject imports are distinct from any attributable to the nonsubject imports.[155]

We have also considered the role of declining demand throughout the POI. As noted above, apparent U.S. consumption of flanges declined from 380.9 million pounds in 2013 to 371.6 million pounds in 2014 and to 353.5 million pounds in 2015, and was 103.9 million pounds in interim 2015 and 61.8 million pounds in interim 2016.[156] The decline in demand, however, cannot account for the adverse impact attributable to the domestic industry's loss of

[152] *See* CR/PR at Table IV-5.

[153] The volume of nonsubject imports was 52.7 million pounds in 2013, 54.4 million pounds in 2014, and 47.3 million pounds in 2015. The volume of nonsubject imports was 13.2 million pounds in interim 2015 and 8.4 million pounds in interim 2016. Their market share was 13.8 percent in 2013, 14.6 percent in 2014, 13.4 percent in 2015, 12.7 percent in interim 2015, and 13.6 percent in interim 2016. CR/PR at Table IV-5.

[154] Limited quarterly pricing data were obtained for nonsubject imports from China. The prices for these imports were lower than the prices for the domestic like product in all 26 possible comparisons, and were lower than prices for imports from subject countries in 56 of 78 comparisons. CR/PR at E-3 and Table E-1 through E-6. On the other hand, the AUVs of nonsubject imports as a whole were significantly higher than those of subject imports for all periods of the POI. CR/PR at Table IV-2. (We recognize that comparisons based on AUVs must be made with caution because differences in AUVs may reflect differences in product mix rather than differences in price.)

[155] With respect to *Bratsk/Mittal*, Commissioners Pinkert and Kieff note that, although nonsubject imports represented a significant share of the U.S. market during the POI, no party has addressed whether nonsubject imports would have replaced the subject imports without benefit to the domestic industry had the nonsubject imports exited the market. They invite the parties to do so in any final phase of these investigations.

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

market share to the subject imports from 2014 to 2015.[157] Moreover, the pervasive underselling by subject imports also cannot be explained by declining demand. We will further examine the role of declining demand in any final phase of these investigations.

VIII. Conclusion

For the reasons stated above, we determine that there is a reasonable indication that an industry in the United States is materially injured by reason of subject imports of finished carbon steel flanges from India, Italy, and Spain that are allegedly sold in the United States at less than fair value, and by subject imports from India that are allegedly subsidized.

[157] The market share of subject imports rose from 44.2 percent in 2014 to 58.3 percent in 2015, while that of the domestic industry declined from *** percent to *** percent over the same period. CR/PR at Supplemental Table 1.

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 Weldbend Corporation ("Weldbend"), Argo, Illinois and Boltex Mfg. Co., L.P. ("Boltex"), Houston, Texas on June 30, 2016, alleging that an industry in the United States is materially injured and threatened with material injury by reason of subsidized imports of finished carbon steel flanges ("flanges")[1] from India and less-than-fair-value ("LTFV") imports of flanges from India, Italy, and Spain. The following tabulation provides information relating to the background of these investigations.[2] [3]

Effective date	Action
June 30, 2016	Petitions filed with Commerce and the Commission; institution of Commission investigations (81 FR 44328, July 7, 2016)
July 20, 2016	Commerce's notices of initiation (81 FR 49619 and 49625, July 28, 2016)
July 21, 2016	Commission's conference
August 12, 2016	Commission's vote
August 15, 2016	Commission's determinations
August 22, 2016	Commission's views

STATUTORY CRITERIA AND ORGANIZATION OF THE REPORT

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*

[1] See the section entitled "The Subject Merchandise" in *Part I* of this report for a complete description of the merchandise subject to these investigations.

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

[3] A list of witnesses appearing at the conference is presented in appendix B of this report.

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—[4]

> *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—[5]

> *(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.*

[4] Amended by PL 114-27 (as signed, June 29, 2015), Trade Preferences Extension Act of 2015.
[5] 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, alleged subsidy and dumping margins, and the 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

Flanges generally are used for connecting pipes, valves, pumps and other equipment to form a piping system, providing easy access for cleaning, inspection, or modification. The leading U.S. producers of flanges are Weldbend and Boltex, while leading producers of flanges outside the United States include *** in India, *** in Italy, and ***[6] in Spain. The leading U.S. importers of flanges from India are ***; leading importers from Italy are ***; leading importers from Spain are ***. Leading importers of flanges from nonsubject countries (primarily China and Germany) include ***. U.S. purchasers of flanges are firms that distribute flanges to oil, gas, construction, and other markets. Leading purchasers include ***.

Apparent U.S. consumption of flanges totaled approximately 353.5 million pounds ($380.6 million) in 2015. According to petitioners, 14 firms are believed to produce flanges in the United States. Responding U.S. producers' U.S. shipments of flanges totaled 100.1 million pounds ($157.2 million) in 2015, and accounted for 28.3 percent of apparent U.S. consumption by quantity and 41.3 percent by value. U.S. imports from subject sources totaled 206.1 million pounds ($162.3 million) in 2015 and accounted for 58.3 percent of apparent U.S. consumption by quantity and 42.6 percent by value. U.S. imports from nonsubject sources totaled 47.3 million pounds ($61.2 million) in 2015 and accounted for 13.4 percent of apparent U.S. consumption by quantity and 16.1 percent by value.

SUMMARY DATA AND DATA SOURCES

A summary of data collected in these investigations is presented in appendix C, table C-1. Except as noted, U.S. industry data are based on questionnaire responses of six firms that accounted for the vast majority of U.S. production of flanges during 2015.[7] U.S. imports are

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[6] ***.

[7] The following methodology for U.S. production coverage was proposed by the petitioners (*See* Petition, pp. 3-4 and Exhibit I-15): "Because all finished flanges come from flange forgings, and because all flange forgings are used to make finished flanges, total U.S. production plus total U.S. imports of

(*continued*...)

based on official Commerce statistics for HTS statistical reporting numbers 7307.91.5010 and 7307.91.5050. Twelve usable U.S. importer responses were received; representing 58.3 percent of U.S. imports of flanges from India, *** percent of U.S. imports from Italy, *** percent of U.S. imports from Spain, *** percent of U.S. imports from all other sources, and 51.0 percent of total U.S. imports in 2015.[8]

Foreign industry data are based on questionnaire responses from 14 Indian firms, four Italian firms, and one Spanish firm. These firms' exports to the United States accounted for approximately 66.8 percent of U.S. imports of flanges from India; *** percent of U.S. imports of flanges from Italy; and *** percent of U.S. imports of flanges from Spain in 2015.[9]

PREVIOUS AND RELATED INVESTIGATIONS

Subject flanges have not been subject to previous antidumping and/or countervailing duty investigations in the United States. However, the Commission has conducted one safeguard investigation under section 201 of the Trade Act of 1974 concerning certain steel products, which included carbon and alloy steel flanges.[10] The Commission instituted that investigation following receipt of a request from the Office of the United States Trade Representative ("USTR") on June 22, 2001.[11] On July 26, 2001, the Commission received a resolution adopted by the Committee on Finance of the United States Senate requesting that the Commission investigate certain steel imports under section 201 of the Trade Act of 1974. Consistent with the Senate Finance Committee's resolution, the Commission consolidated the investigation requested by the Committee with the Commission's previously instituted investigation No. TA-201-73.[12] On December 20, 2001, the Commission issued its determinations and remedy recommendations. It reached an affirmative determination with respect to certain steel products, including flanges. It recommended an additional 13 percent *ad valorem* duty on flanges in the first year of relief, to be reduced to a 10 percent *ad valorem* duty in the second year of relief, 7 percent *ad valorem* duty in the third year of relief, and 4 percent *ad valorem* duty in the fourth year of relief. [13] Presidential Proclamation 7529

(…*continued*)
flange forgings is a reasonable substitute for finished carbon steel flanges." Boltex produced *** pounds of flange forgings, Ameriforge produced *** pounds of flange forgings, and U.S. imports of flange forgings imported under HTSUS subheading 7307.91.1000 were 36,316,652 pounds in 2015. The responding U.S. producers' reported quantity of production in 2015 was *** pounds, versus total flange forging consumption (an approximate proxy for flange production) in 2015 of *** pounds.

[8] Coverage was derived from the responding U.S. importers' reported quantity of imports in 2015 (86.7 million pounds from India, *** pounds from Italy, *** pounds from Spain, and *** pounds from all other sources), versus official import statistics (*see* table IV-2).

[9] Coverage was derived from the responding foreign producers' quantity of exports in the United States in 2015 (*see* tables VII-3, VII-8, and VII-9), versus official import statistics (*see* table IV-2).

[10] *Steel, Investigation No. TA-201-73, Volume 1*, USITC Publication 3479 (December 2001).

[11] *Steel,* 66 FR 35267, July 3, 2001.

[12] *Steel,* 66 FR 44158, August 22, 2001, and *Steel; Correction,* 66 FR 45324, August 28, 2001.

[13] *Steel; Import Investigations*, 66 FR 67304, December 28, 2001.

implemented the safeguard measures, principally in the form of tariffs and tariff-rate quotas, effective March 20, 2002, which were originally intended to last for a period of three years and one day.[14] On December 4, 2003, President Bush terminated the increased tariffs under the safeguard measure.[15]

In addition to the section 201 proceeding, the Commission has conducted antidumping and/or countervailing duty investigations regarding other flange and fitting products. In February 1994, the Commission determined that an industry in the United States was threatened with material injury by reason of imports of stainless steel flanges from India and Taiwan that Commerce had determined to be sold in the United States at less than fair value. In February 1994, Commerce issued antidumping duty orders on stainless steel flanges from India and Taiwan. In both the Commission's first and second expedited reviews (July 2000 and December 2005), it determined that revocation of the antidumping duty orders on forged stainless steel flanges from India and Taiwan would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[16] Commerce and the Commission initiated a third sunset review of the orders in November 2010. However, since Commerce did not receive a notice of intent to participate from domestic interested parties, it subsequently revoked the orders, effective January 23, 2011.[17]

There are currently orders in place against various other pipe fitting products, including carbon steel butt-weld pipe fittings from Brazil, China, Japan, Taiwan, and Thailand. However, the petitioners note that pipe fittings are different products with different uses from flanges.[18]

NATURE AND EXTENT OF ALLEGED SUBSIDIES AND SALES AT LTFV

Alleged subsidies

On July 28, 2016, Commerce published a notice in the *Federal Register* of the initiation of its countervailing duty investigation on flanges from India.[19] Commerce initiated its investigation on the following 15 alleged programs in India:

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[14] *To Facilitate Positive Adjustment to Competition From Imports of Certain Steel Products, Proclamation 7529 of March 5, 2002*, 67 FR 10553, March 7, 2002.

[15] *Presidential Proclamation 7741 of December 4, 2003, To Provide for the Termination of Action Taken With Regard to Imports of Certain Steel Products,* 68 FR 68483, 68484 (December 8, 2003).

[16] *Forged Stainless Steel Flanges From India and Taiwan, Investigation Nos. 731-TA-639 and 640 (Second Review)*, USITC Publication 3827, December 2005.

[17] *Forged Stainless Steel Flanges From India and Taiwan: Final Results of Sunset Reviews and Revocation of Antidumping Duty Orders*, 76 FR 5331, January 31, 2011.

[18] Petition, p. 6.

[19] *Finished Carbon Steel Flanges From India: Initiation of Countervailing Duty Investigation*, 81 FR 49625, July 28, 2016.

Government of India Subsidy Programs

A. Duty Exemption/Remission Schemes
   1. Advance License Program (ALP)
   2. Advance Authorization Program (AAP)
   3. Duty Free Import Authorization Scheme (DFIA Scheme)
   4. Duty Drawback Program (DDB)
B. Export Promotion of Capital Goods Scheme (EPCGS)
C. Pre-Shipment and Post-Shipment Export Financing
D. Market Development Assistance Scheme (MDA Scheme)
E. Market Access Initiative
F. Focus Product Scheme
G. Government of India Loan Guarantees
H. Status Certificate Program
I. Steel Development Fund Loans (SDF)
J. Incremental Exports Incentivisation Scheme (IEIS)

State Government Subsidy Programs

A. State Government of Maharashtra (SGOM) Subsidy Programs
   1. Infrastructure Assistance for Mega Projects Under the Maharashtra Industrial Policy of 2013 And Other SGOM Industrial Promotion Policies To Support Mega Projects
   2. Subsidies for Mega Projects under the Package Scheme of Incentives

Alleged sales at LTFV

On July 28, 2016, Commerce published a notice in the *Federal Register* of the initiation of its antidumping duty investigations on flanges from India, Italy, and Spain.[20] Commerce has initiated antidumping duty investigations based on estimated dumping margins between 17.80 and 37.84 percent for product from India, 15.76 to 204.53 percent for product from Italy, and 13.19 to 24.43 percent for product from Spain.

THE SUBJECT MERCHANDISE

Commerce's scope

Commerce has defined the scope of this investigation as follows:[21]

> *The scope of these investigations covers finished carbon steel flanges. Finished carbon steel flanges differ from unfinished carbon steel flanges*

[20] *Finished Carbon Steel Flanges from India, Italy, and Spain: Initiation of Less-Than-Fair-Value Investigations*, 81 FR 49619, July 28, 2016.

[21] Ibid.

(also known as carbon steel flange forgings) in that they have undergone further processing after forging, including, but not limited to, beveling, bore threading, center or step boring, face machining, taper boring, machining ends or surfaces, drilling bolt holes, and/or de-burring or shot blasting. Any one of these post-forging processes suffices to render the forging into a finished carbon steel flange for purposes of these investigations. However, mere heat treatment of a carbon steel flange forging (without any other further processing after forging) does not render the forging into a finished carbon steel flange for purposes of these investigations.

While these finished carbon steel flanges are generally manufactured to specification ASME 816.5 or ASME 816.47 series A or series 8, the scope is not limited to flanges produced under those specifications. All types of finished carbon steel flanges are included in the scope regardless of pipe size (which may or may not be expressed in inches of nominal pipe size), pressure class (usually, but not necessarily, expressed in pounds of pressure, e.g., 150, 300, 400, 600, 900, 1500, 2500, etc.), type of face (e.g., flat face, full face, raised face, etc.), configuration (e.g., weld neck, slip on, socket weld, lap joint, threaded, etc.), wall thickness (usually, but not necessarily, expressed in inches), normalization, or whether or not heat treated. These carbon steel flanges either meet or exceed the requirements of the ASTM A105, ASTM A694, ASTM A181, ASTM A350 and ASTM A707 standards (or comparable foreign specifications). The scope includes any flanges produced to the above-referenced ASTM standards as currently stated or as may be amended. The term "carbon steel" under this scope is steel in which:

(a) Iron predominates, by weight, over each of the other contained elements:

(b) The carbon content is 2 percent or less, by weight; and

(c) none of the elements listed below exceeds the quantity, by weight, as indicated:

(i) 0.87 percent of aluminum;
(ii) 0.0105 percent of boron;
(iii) 10.10 percent of chromium;
(iv) 1.55 percent of columbium;
(v) 3.10 percent of copper;
(vi) 0.38 percent of lead;
(vii) 3.04 percent of manganese;
(viii) 2.05 percent of molybdenum;

(ix) 20.15 percent of nickel;
(x) 1.55 percent of niobium;
(xi) 0.20 percent of nitrogen;
(xii) 0.21 percent of phosphorus;
(xiii) 3.10 percent of silicon;
(xiv) 0.21 percent of sulfur;
(xv) 1.05 percent of titanium;
(xvi) 4.06 percent of tungsten;
(xvii) 0.53 percent of vanadium; or
(xviii) 0.015 percent of zirconium.

Finished carbon steel flanges are currently classified under subheadings 7307.91.5010 and 7307.91.5050 of the Harmonized Tariff Schedule of the United States (HTSUS). They may also be entered under HTSUS subheadings 7307.91.5030 and 7307.91.5070. The HTSUS subheadings are provided for convenience and customs purposes; the written description of the scope is dispositive.

Tariff treatment[22]

Based upon the scope set forth by the Department of Commerce, information available to the Commission indicates that the merchandise subject to these investigations are imported under statistical reporting numbers 7307.91.5010 and 7307.91.5050 of the Harmonized Tariff Schedule of the United States ("HTS"). The 2016 general rate of duty for subheading 7307.91.50 is 5.5 percent *ad valorem.*

THE PRODUCT

Description and applications[23]

A flange is a product for connecting pipes, valves, pumps and other equipment to form a piping system. It also provides easy access for cleaning, inspection or modification. Flanges are usually welded or screwed to the pipes or other equipment requiring a connection. Flanged joints are made by bolting together two flanges with a gasket between them to provide a seal. The material of a flange is generally determined by the choice of the pipe, as in most cases a flange is of the same material as the pipe. Although the word "flange" generally refers to the actual raised rim or lip of a fitting, many flanged fittings are themselves known as 'flanges.' Flanges are also distinct from 'fittings' because flanges are used for pipe system connections

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

[23] Unless otherwise indicated, information in this section was taken from the Petition, pp. 7-11.

whereas fittings are used when a change of direction or flow is required. Therefore, the two are not interchangeable.[24] The basic types of flanges are described below.[25]

- Weld neck flanges are circumferentially butt weld[26] at the neck to the pipe. The bores[227] of both pipe and flange match, which reduces turbulence and erosion inside the pipeline. The weld neck is therefore durable in demanding and critical applications, such as high pressure or extreme temperature. The neck, or hub, transmits stresses from the base of the hub to the wall thickness of the pipe at the butt weld, providing important reinforcement of the flange.

- Slip-on flanges are fitted over the pipe. The flange is slipped over the pipe and then fillet welded[28] both inside and outside to provide sufficient strength and prevent leakage.

- A socket-weld flange is similar to a slip-on flange, but the bore is counter-bored to accept pipe. The diameter of the remaining bore is the same as the inside diameter of the pipe. This allows the pipe to slip into the flange but prevents the flange from continuing down the length of the pipe. The flange is attached to the pipe by a fillet weld around the hub of the flange.

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[24] Conference transcript, p. 33 (Bernobich).

[25] Illustrations found at: JSC Valve website at http://jscvalve.com/up_files/weldneck.jpg, retrieved July 21, 2016; Anyang Steel website at http://www.anyangsteel.com/pic/big/89_0.jpg, retrieved July 21, 2016; Triround website at http://triround.com/product-flange%2003.html retrieved July 19, 2016; Deelat website at http://www.deelat.com/blog/wp-content/uploads/2015/03/threaded-flange.jpg, retrieved July 21, 2016; Ikesteelpipe website at http://www.lksteelpipe.com/Content/File_Img/S_Product/small/2015-11-25/20151125165409498317O.png, retrieved July 21, 2016.

[26] A butt weld is when two parallel lengths of the same size (whether beveled or unbeveled) are welded together. The two pieces do not overlap. See http://www.weldguru.com/weldtypesandpositions.html for an illustration of various butt joints.

[27] A flange bore is the center hole through which the gas or liquid flows.

[28] A fillet weld is the most common type of weld. Fillet welds occur when two perpendicular or overlapping lengths are welded together. See http://www.weldguru.com/weldtypesandpositions.html for an illustration of various fillet welds.

- Threaded, or screwed, flanges are used to connect other threaded components in low pressure, non-critical applications. This is similar to a slip-on flange, but the bore is threaded, thus enabling assembly without welding.

- A lap-joint is similar to a slip-on flange, but whereas the slip-on flange has a raised radius on both sides of the bore, a lap-joint has a flat radius on at least one side to accommodate a stub end[29] (in the illustration, the lap-joint is the bottom ring and the stub end is the top insert). The face on the stub end forms the gasket face on the flange. Because the flange itself is not welded, it can be easily rotated for alignment and is typically used in applications where sections of piping systems need to be dismantled quickly and easily for inspection or replacement.

- Blind flanges are used to blank off pipe lines, valves or pumps. Blind, or "blanking," flanges also permit easy access to vessels or piping systems for inspection purposes. Blind flanges can be supplied with or without center hubs.

Weld-neck and slip-ons are the most common types of flanges. There are also other types of specialty flanges, however the sales volumes of these specialty flanges are very small relative to the other flanges described above.

Flanges are made with various differentiators including facings, number of bolt holes, pressure ratings, and type of material. Flange facings include flat, raised, tongue and groove, or ring joint[30] for creating various connections with pipes. Flanges also typically come with 4 -, 8-, 12- or 16-bolt holes. Additionally, flange pressure classes range from 150 to 2,500, with 150 and 300 being the most common. Lastly, flanges are manufactured in many different types of

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[29] Forged Flanges and Fittings website at http://www.forgedflangesandfittings.com/carbon-steel-forged-flanges/lap-joint-flanges.html, retrieved July 19, 2016.

[30] Ring type joint flanges are used to ensure a leak-proof flange connection at high pressures. A metal ring is compressed into a hexagonal groove on the face of the flange to make a metal on metal seal. All of the described flanges could be modified to be "ring type" with the addition of a groove. Piping Designer website, http://www.piping-designer.com/index.php/disciplines/mechanical/83-stationary-equipment/pipe-flanges/2012-ring-type-joint-flange, retrieved July 21, 2016.

materials, such as alloy steel, stainless steel, cast iron, aluminum, brass, bronze, plastic, and others in order to match the pipes for connection. Flanges are typically the same material as the system they are connecting. The most common material is carbon steel, produced in accordance with ASTM A105, because of its relatively low cost.[31] Flanges are generally produced in accordance with ASME B 16.5 in a number of standard dimensions. Only carbon steel flanges are subject to these investigations.

A substantial share of flange production is consumed in the oil and gas industry as connection components for pipes, valves, and pumps. This, along with the chemical industry, mostly requires critical applications of flanges.[32] Commercial applications, also referred to as generic applications, are generally building and construction according to the respondent and mostly use non-critical flange connections.[33]

Manufacturing processes[34]

Finished carbon-steel flanges are produced from steel billet or hot-rolled bar by a series of major steps:

1. Production of an unfinished forged flange by a closed-die forging process
2. Heat treating of the unfinished forging (not required for all flanges)
3. Finish machining of the flange.
4. Marking, coating, and final inspection.

Only finished flanges are subject to these investigations. Unfinished forged flanges, including heat-treated forged flanges, are nonsubject. An integrated producer of finished flanges follows all four steps, whereas a flange finisher begins at step three.

Flanges are made from steel billet, which must be carefully sorted by heat lot number.[35] The steel billet is heated to forging temperature using inductive ovens, after which it is cut in a shearing press. The cut billet piece is then pushed into the forging press where it is located on the blocking station, the proper grain orientation is checked, and the piece is blocked into its pre-forging shape. This blocking operation improves the mechanical properties of the material being forged. The blocked piece is then moved to the next set of forging dies where it is shaped to its approximate final appearance. It is then conveyed to the trim press where it receives its final shaping and all excess material is trimmed off the part. Once these parts are completely

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[31] Conference transcript, p. 58 (Bernobich) and p. 59 (McConkey).

[32] A situation is considered critical if the area is subject to movement, either from mechanical vibrations or through temperature or pressure expansions and contractions. Butt-welding is mostly used for flanges in critical applications whereas fillet welding or screw connections may be used for non-critical flange connections. Explore the World of Piping website, http://www.wermac.org/flanges/flanges_welding-neck_socket-weld_lap-joint_screwed_blind.html, retrieved July 28, 2016.

[33] Conference transcript, p. 109 (Khandelwar) and p. 134 (Levinson).

[34] Unless otherwise indicated, information in this section was taken from Petition Exhibit I-4.

[35] Heat lot numbers are recorded and verified throughout the entire process to ensure material traceability from steel producer to the final end user.

forged, the parts are loaded into steel containers for controlled still-air cooling and are then sent to post-forging heat treatment.

Post-forging heat treatment is required for certain flanges that must achieve specified mechanical properties or grain orientation. First, the forgings are stacked on pallets and placed in ovens where they are heated to temperature. Next, the forgings are either still-air cooled or quenched in a controlled temperature water tank. After cooling to ambient temperature, they are reloaded into ovens for tempering to assure optimal mechanical properties and achieve material hardness. Once cooled, these parts are completed forgings.

At this point in the production process, the completed forgings are ready to be transformed into finished carbon steel flanges. The finishing process requires setting up tooling, which includes carbide milling inserts, drilling bits, etc. and is controlled by computer program. This program instructs the machining center to move the tooling and the forging so that the part may be consistently machined. It also warns the operator if the part is out of the dimensions and tolerances set up by the programmer. Each flange goes through a four stage machining process. The face and internal diameter is machined first, then the back face and outer diameter, followed by drilling/deburring, and lastly stamping for identification and traceability.

Once the flange is completely machined it is sent to the paint department for coating to prevent rusting during its shelf life. This paint is strictly a rust preventative and is usually removed after welding.[36] Upon completion of the painting operation, it is ready for final inspection.

DOMESTIC LIKE PRODUCT ISSUES

The petitioners propose that the domestic like product be defined as co-extensive with the scope definition.[37] Respondent Silbo argues that the Commission should find two domestic like products, namely 1) "unapproved" flanges produced in India, and 2) "approved" flanges produced in the United States, Italy, and Spain.[38] [39] Staff recognizes that only articles that are produced domestically may be included in a domestic like product; however, additional information regarding "approved" and "unapproved" flanges can be found in Parts II, IV, and appendix D of this report.[40]

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[36] Conference transcript, p. 59 (Coulas).

[37] Petition, p. 19, and Petitioners' postconference brief, p. 6.

[38] Silbo's postconference brief, p. 14, and Conference transcript, pp. 105 and 136 (Schutzman).

[39] At the staff conference, Alan Shalom, Executive Vice President of Silbo, an importer of Indian flanges, suggested that the domestic like product should be expanded to include flange forgings, an out-of-scope product. Conference transcript, p. 138 (Shalom). Silbo's postconference brief did not address this argument, but rather only addressed the sole domestic like product issue as discussed in above. Furthermore, Petitioners note that there are no U.S. producers making only flange forgings. All U.S. producers of flange forgings, namely Boltex and Ameriforge, also manufacture finished flanges. Petitioners' postconference brief, p. 13.

[40] All responding U.S. producers were identified on multiple approved manufacturer lists ("AMLs").

PART II: CONDITIONS OF COMPETITION IN THE U.S. MARKET

U.S. MARKET CHARACTERISTICS

Flanges are connection components for pipes, valves, and pumps, used to form a piping system. The material used to produce the flange matches the material of the pipe that it connects.[1] Flanges sold in the United States must be produced to ASTM material and ASME design standards. Flanges are typically sold in standard sizes (0.5 inches to 24 inches or 26 inches to 60 inches), pressure classes (e.g., 150, 300, 400, 600, etc.), and facings (slip-on, weld neck, and blind).[2] A substantial share of flange production is consumed in the oil and gas industry.[3] Flanges are also used in the construction and petrochemical industries.

Respondents argue that there are two distinct markets for flanges: the "approved" market, consisting of U.S. refineries, oil exploration, chemical companies, and other end users that reportedly purchase flanges only from manufacturers listed on the end user's or distributor's AML, and the "generic" or "non-approved" market.[4] [5] Petitioners argue that there is no such bright line distinction.[6] Petitioners state that the flanges are a commodity-like product that is highly price sensitive.[7]

Apparent U.S. consumption of flanges decreased during 2013-15 and was lower in January-March 2016 than in January-March 2015. Overall, apparent U.S. consumption in 2015 was 7.2 percent lower than in 2013. The flanges market is supplied by domestically produced flanges and imports. As a share of apparent consumption, U.S. producers represented 28.3 percent, subject imports represented 58.3 percent, and nonsubject imports represented 13.4 percent in 2015. As a share of total U.S. imports, subject imports from India represented 58.7 percent, subject imports from Italy represented 12.3 percent, and subject imports from Spain represented 10.4 percent in 2015.

CHANNELS OF DISTRIBUTION

U.S. producers and importers sold mainly to distributors, as shown in table II-1. Nearly all shipments from U.S. producers and subject imports from Italy and Spain were to distributors. The majority of shipments of imports from India and nonsubject countries also went to distributors, but larger shares of these imports went to end users than did domestic product or subject imports from Italy and Spain. According to Respondent Silbo, distributors

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[1] Petitioners' postconference brief, pp. 17-18.

[2] Petitioners' postconference brief, p. 18.

[3] Petition, p. 11.

[4] Conference transcript, p. 134 (Levinson), Respondents Norma's and RN Gupta's postconference brief, pp. 2-3. See also Respondent Bebitz's postconference brief, p. 1.

[5] Further data regarding AMLs is presented in appendix D.

[6] Petitioners' postconference brief, pp. 14, 21, 23.

maintain separate inventories of “approved” and “unapproved” product and the products are never comingled.[8]

Table II-1
Flanges: U.S. producers’ and importers’ U.S. commercial shipments, by sources and channels of distribution, 2013-15, January-March 2015, and January-March 2016

Item	Period				
	Calendar year			January-March	
	2013	2014	2015	2015	2016
	Share of reported shipments (*percent*)				
U.S. producers’ U.S. commercial shipments of flanges:					
Distributors	96.7	96.7	96.7	97.3	96.4
End users	3.3	3.3	3.3	2.7	3.6
U.S. importers’ U.S. commercial shipments of flanges from India:					
Distributors	***	***	***	***	***
End users	***	***	***	***	***
U.S. importers’ U.S. commercial shipments of flanges from Italy:					
Distributors	***	***	***	***	***
End users	***	***	***	***	***
U.S. importers’ U.S. commercial shipments of flanges from Spain:					
Distributors	***	***	***	***	***
End users	***	***	***	***	***
U.S. importers’ U.S. commercial shipments of flanges from all other countries:					
Distributors	***	***	***	***	***
End users	***	***	***	***	***

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

GEOGRAPHIC DISTRIBUTION

U.S. producers and importers reported selling flanges to all regions in the contiguous United States (table II-2). U.S. producers reported that 39.1 percent of their sales were within 100 miles of their production facility, 38.5 percent were between 101 and 1,000 miles, and 22.3 percent were over 1,000 miles. Importers of flanges from India sold 60.1 percent within 100 miles of their U.S. point of shipment, 31.9 percent between 101 and 1,000 miles, and 8.0 percent over 1,000 miles. Importers of flanges from Italy sold *** percent within 100 miles of their U.S. point of shipment, ***percent between 101 and 1,000 miles, and ***percent over 1,000 miles. Importers of flanges from Spain sold ***percent within 100 miles of their U.S. point of shipment, *** percent between 101 and 1,000 miles, and *** percent over 1,000 miles.

[8] Conference transcript, p. 118 (Shalom).

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

Region	U.S. producers	Importers		
		India	Italy	Spain
Northeast	6	8	2	2
Midwest	6	9	2	2
Southeast	6	9	3	2
Central Southwest	6	9	4	2
Mountain	6	8	2	2
Pacific Coast	6	9	4	2
Other[1]	4	5	2	2
All regions (except Other)	6	8	2	2
Reporting firms	6	9	4	2

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

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

SUPPLY AND DEMAND CONSIDERATIONS

U.S. supply

Domestic production

Based on available information, U.S. producers of flanges have the ability to respond to changes in demand with large changes in the quantity of shipments of U.S.-produced flanges to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity and very large inventories.

Industry capacity

Domestic capacity utilization decreased from 71.3 percent in 2013 to 43.9 percent in 2015 as a result of both increased capacity and decreased production. Capacity utilization was 58.0 percent in January-March 2015 and 33.0 percent in January-March 2016. This low level of capacity utilization suggests that U.S. producers may have a substantial ability to increase production of flanges in response to an increase in prices.

Alternative markets

U.S. producers' exports, as a percentage of total shipments, declined slightly from 1.3 percent in 2013 to 1.1 percent in 2015 and was 1.0 percent in January-March 2016, indicating that U.S. producers may have a limited ability to shift shipments between the U.S. market and

other markets in response to price changes. *** as its export markets.[9] U.S. producers stated that the United States is the largest market for flanges and is an attractive market for that reason.[10]

Inventory levels

U.S. producers' inventories, relative to total shipments, increased from 39.4 percent in 2013 to 50.0 percent in 2015. Inventories were 41.2 percent of total shipments in January-March 2015 and 62.9 percent in January-March 2016. These inventory levels suggest that U.S. producers may have ample ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

All six responding U.S. producers stated that they could not switch production from flanges to other products and they do not produce any other products on the same equipment as flanges.[11]

Supply constraints

All six responding U.S. producers stated that they did not experience any constraints in their ability to supply flanges since January 1, 2013.

Subject imports from India[12]

Based on available information, producers of flanges from India have the ability to respond to changes in demand with moderate-to-large changes in the quantity of shipments of flanges 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 switch from producing alternate products.

Industry capacity

Indian production capacity increased steadily while production fluctuated from 2013 to 2015. Capacity utilization fluctuated, increasing from 65.2 percent in 2013 to 76.0 percent in 2014 before declining to 65.5 percent in 2015. Capacity utilization was 45.5 percent in January-

[9] *** reported exports ***.

[10] Conference transcript, p. 28 (Coulas).

[11] ***.

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

March 2016. This relatively low level of capacity utilization suggests that Indian producers may have a substantial ability to increase production of flanges in response to an increase in prices.

Alternative markets

Indian producers' home market shipments, as a share of their total shipments, increased from 4.4 percent in 2013 to 5.3 percent in 2015, and were 3.9 percent in January-March 2016. Indian producers' exports to non-U.S. markets, as a percentage of total shipments, increased irregularly from 7.3 percent in 2013 to 7.8 percent in 2015, and were 14.0 percent in January-March 2016, indicating that Indian producers may have some ability to shift shipments between the U.S. market and other markets in response to price changes. Indian producers reported regional exports to Europe, Asia, South East Asia, Latin America, and the Middle East, and specifically to ***.

Inventory levels

Indian producers' inventories, relative to total shipments, fluctuated from 4.1 percent in 2013 to 3.7 percent in 2014 to 4.7 percent in 2015. Inventories were 3.1 percent of total shipments in January-March 2015 and were 6.8 percent in January-March 2016. These inventory levels suggest that Indian producers may have a limited ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

Nine of 14 responding Indian producers stated that they could switch production from flanges to other products. Other products that Indian producers reportedly can produce on the same equipment as flanges include automotive gears and parts, rolled rings, machinery parts, stainless steel, alloy steel and other than carbon steel flanges, railway and tractor parts, and stainless steel pipe fittings.

Supply constraints

No importers of flanges from India reported that they experienced supply constraints since January 1, 2013.

Subject imports from Italy[13]

Based on available information, producers of flanges from Italy have the ability to respond to changes in demand with large changes in the quantity of shipments of flanges to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the

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

substantial availability of unused capacity and inventories, and the prevalence of alternate markets.

Industry capacity

Italian production capacity nearly tripled while production fluctuated, leading capacity utilization to decline substantially from *** percent in 2013 to *** percent in 2015. Capacity utilization was *** percent in January-March 2016. This *** level of capacity utilization suggests that Italian producers may have a *** ability to increase production of flanges in response to an increase in prices.

Alternative markets

Most Italian-produced flanges are destined for third-country markets. Italian producers' export shipments to non-U.S. markets, as a percentage of their total shipments, rose from *** percent in 2013 to *** percent in 2015, and were *** percent in January-March 2016, indicating that Italian producers may have a *** ability to shift shipments between the U.S. market and other markets in response to price changes. Italian producers stated that they export to ***, and specifically ***.

Inventory levels

Italian producers' inventories, relative to total shipments, increased from *** percent in 2013 to *** percent in 2015. Inventories were *** percent in January-March 2015 and were *** percent in January-March 2016. These inventory levels suggest that Italian producers may have *** ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

Half (two of four) responding Italian producers stated that they could switch production from flanges to other products. These producers reportedly can produce open-die forgings; rolled rings; stainless, duplex, low alloy and any other material flanges; and customized products on the same equipment as flanges.

Supply constraints

No importers of flanges from Italy reported that they experienced supply constraints since January 1, 2013.

Subject imports from Spain[14]

Based on available information from one Spanish producer, Aleaciones de Metales Sinterizados, S.A., it ***.

Industry capacity

Aleaciones de Metales Sinterizados, S.A.'s capacity utilization was *** percent from January 2013 to March 2016. This *** level of capacity utilization suggests that the Spanish producer ***.

Alternative markets

Aleaciones de Metales Sinterizados, S.A. ***.

Inventory levels

Aleaciones de Metales Sinterizados, S.A.'s inventories, relative to total shipments, *** from *** in 2013 to *** percent in 2014 and *** to *** in 2015 and January-March 2016. These inventory levels suggest that the Spanish producer ***.

Production alternatives

Aleaciones de Metales Sinterizados, S.A. stated that ***.

Supply constraints

No importers of flanges from Spain reported that they experienced supply constraints since January 1, 2013.

Nonsubject imports

The largest sources of nonsubject imports during 2013-15 were China, Germany, and Korea. Combined, these countries accounted for *** percent of nonsubject imports and *** percent of total imports in 2015.[15]

[14] For data on the share of U.S. imports from Spain from this foreign producer, please refer to Part I, "Summary Data and Data Sources."

[15] Based on proprietary Customs data using HTS statistical reporting numbers 7307.91.5010 and 7307.91.5050, accessed on July 5, 2016.

U.S. demand

Based on available information, the overall demand for flanges is likely to experience small-to-moderate changes in response to changes in price. The main contributing factors are the lack of substitute products and the small cost share of flanges in most of its end-use products, and the domestic industry's dependence on the oil and gas and construction markets.

End uses and cost share

U.S. demand for flanges depends on the demand for piping systems, including pipelines, waterlines, commercial and residential plumbing systems, piping systems for petrochemical or bulk material processing plants, and industrial pressure piping systems. Flanges account for a small-to-moderate share of the cost of these piping systems, generally ranging from 10 to 30 percent.

Business cycles

Two of five responding U.S. producers and four of 12 responding importers indicated that the market was subject to business cycles or other distinct conditions of competition. Specifically, two U.S. producers (***) and one importer (***), stated that the market was subject to business cycles that follow the oil and gas industry. One U.S. producer (***) and four importers (***) stated that the market is subject to distinct conditions of competition. *** stated that there are two distinct markets for flanges in the United States: (1) general commercial applications and (2) oil and gas applications. It stated that flanges sold for oil and gas applications carry a price premium because the products have been "approved" for specific oil and gas applications and that "approved" flanges are manufactured to tighter specifications due to the more demanding uses in the oil and gas sector, and are regarded as higher quality products. *** stated that the decline in the price of oil leading to reduced activity in the oil and gas sector has shrunk demand for flanges and that more users are going to cheaper sources of material, especially "non-approved" flanges from India, China and South Korea. *** also reported a distinct competitive difference between approved and unapproved flanges.

Demand trends

Most firms reported a decrease in U.S. demand for flanges since January 1, 2013 (table II-3).

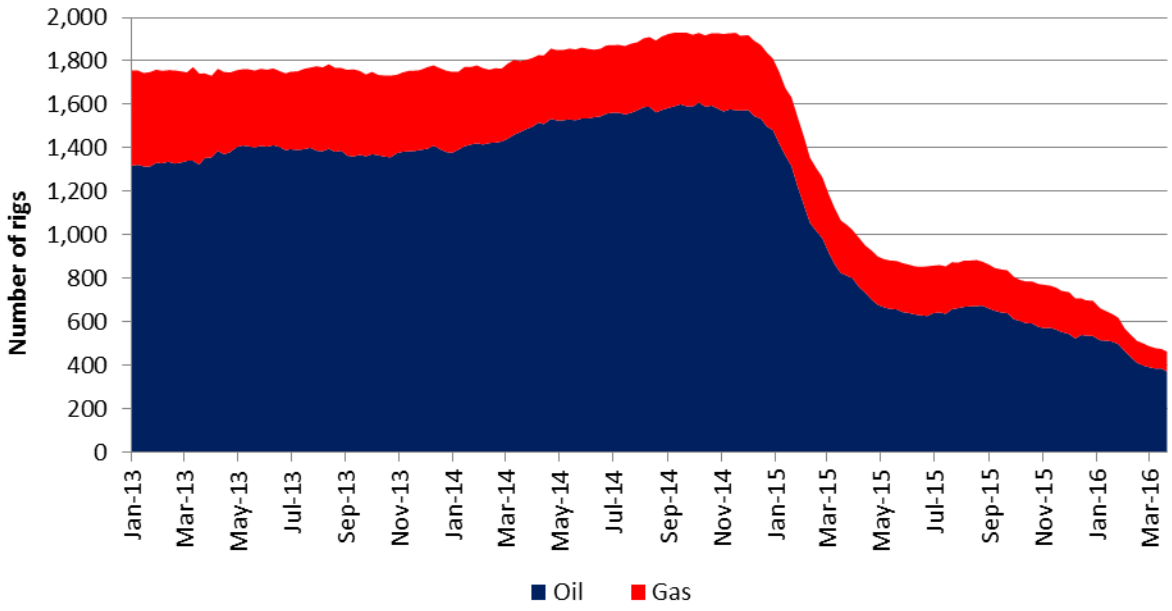
Table II-3
Flanges: Firms' responses regarding U.S. demand and demand outside the United States

Item	Increase	No change	Decrease	Fluctuate
Demand in the United States				
U.S. producers	0	0	5	1
Importers	2	3	4	2
Demand outside the United States				
U.S. producers	0	0	4	1
Importers	1	1	4	1

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

According to parties, the decline in demand for flanges that began in 2014 has followed the decline in the oil and gas industry.[16] As can be seen in figures II-1 and II-2, the oil rig count and oil and gas prices declined precipitously during the first and second quarters of 2015 and continued to decline into the first quarter of 2016; the rig count declined by nearly 74 percent and crude oil prices have fallen by 60 percent since January 2013. Petitioners expect demand in the oil and gas industry to continue to decline.[17] Respondents contend that the domestic flange industry suffered due to the historic collapse of the oil and gas industry.[18]

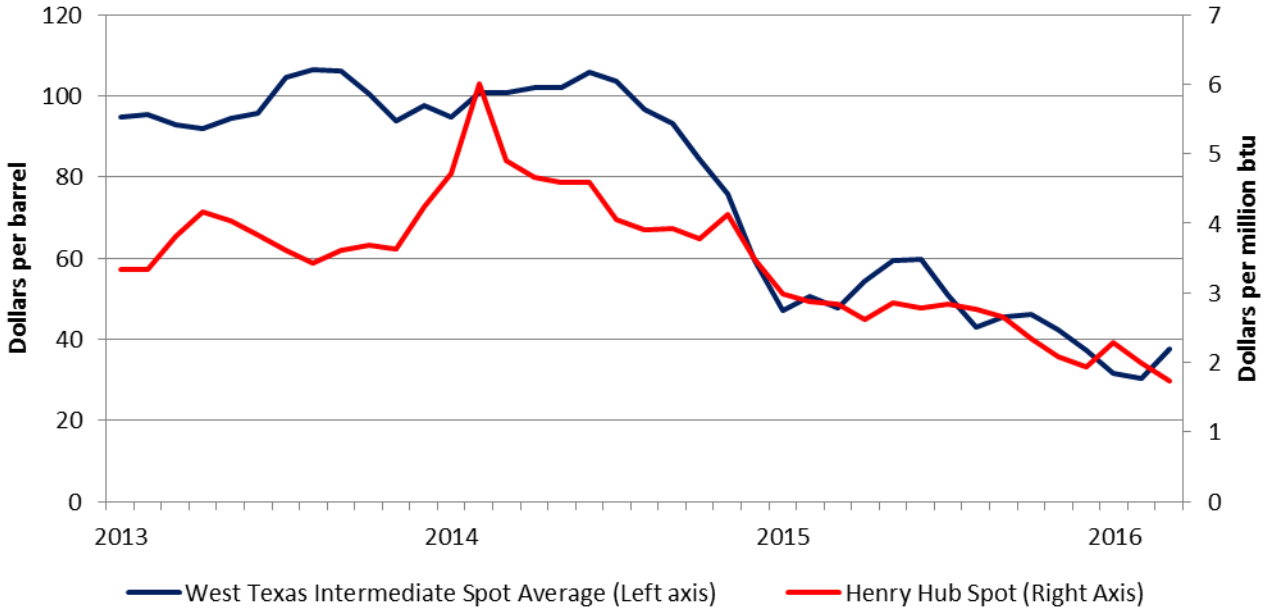
Figure II-1
Baker-Hughes United States oil and gas rig count, weekly, January 2013-March 2016



Source: Baker Hughes North America Rotary Rig Count, July 15, 2016.

[16] Conference transcript, pp. 27-28 (Coulas).
[17] Petitioners' postconference brief, exh. 6, at no. 5.
[18] Respondents Norma and RN Gupta's postconference brief, p. 8, and Bebitz's postconference brief, p. 7.

Figure II-2
Crude oil (WTI) and natural gas (Henry Hub spot) prices, monthly, January 2013-March 2016

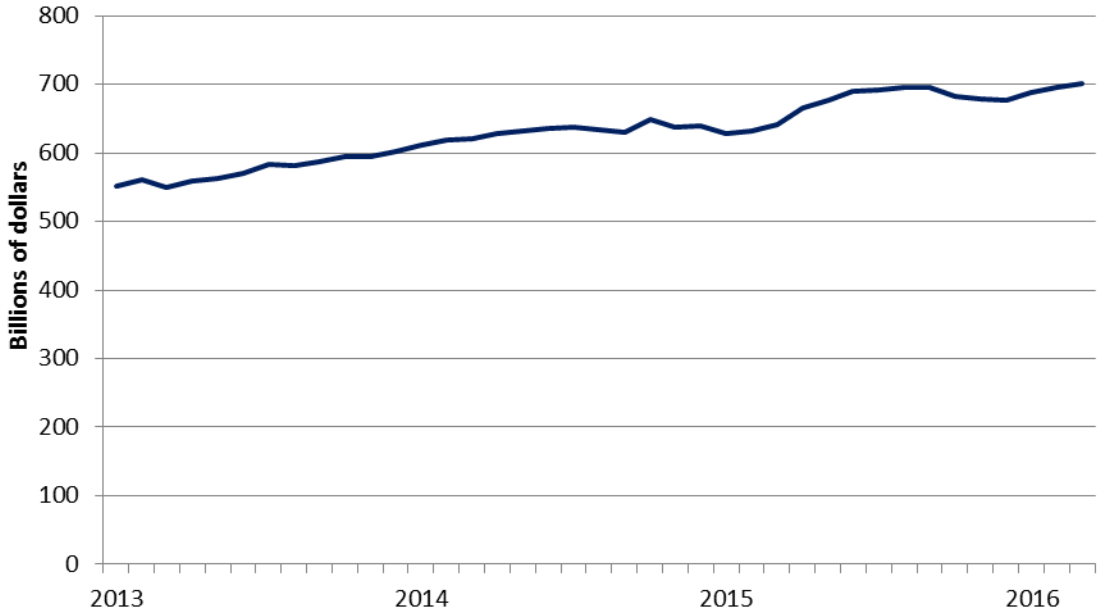


Source: U.S. Energy Information Administration, http://www.eia.gov/beta/steo/#/?v=8&f=M&s=0&start=201301&end=201512&maptype=0&ctype=linechart&linechart=WTIPUUS, accessed July 19, 2016.

The construction industry is also an end-use market. As can be seen in figure II-3, nonresidential construction grew from January 2013 to June 2015, and then leveled off, on a seasonally adjusted basis.[19] Overall, construction increased by 27 percent from January 2013 to March 2016.

[19] Non-seasonally adjusted data indicate peaks in construction in the summer months and troughs in the winter months during the period of investigation.

Figure II-3
Nonresidential construction: Seasonally adjusted annual value of construction put in place, January 2013-March 2016



Source: https://www.census.gov/construction/c30/historical_data.html retrieved July 13, 2016.

Substitute products

All responding U.S. producers (6) and importers (11) reported that there were no substitutes for flanges.

SUBSTITUTABILITY ISSUES

The degree of substitution between domestic and imported flanges depends upon such factors as relative prices, quality (e.g., grade standards, reliability of supply, defect rates, etc.), and conditions of sale (e.g., price discounts/rebates, lead times between order and delivery dates, payment terms, product services, etc.). Based on available data, staff believes that domestically produced flanges and flanges imported from subject sources are highly substitutable when sold based on the AML requirements and highly substitutable when AML designation is not required. However, the substitutability of flanges produced by AML-listed suppliers (domestic or foreign) and those produced by non-AML listed suppliers is variable. Due to this, staff believes substitutability between domestically produced flanges and flanges imported from subject sources is variable.

Lead times

Flanges are both produced-to-order and sold from inventory. U.S. producers reported that in 2015, 56.5 percent of their sales were from inventory, with lead times averaging 3 days, and that the remaining 43.5 percent were produced-to-order, with lead times averaging 72

days. Importers of flanges from India reported that 43.4 percent of their sales were produced-to-order, with lead times averaging 104 days; 47.4 percent were from U.S. inventories, with an average lead time of 5 days; 9.2 percent were from foreign inventories, with an average lead time of 113 days. Importers of flanges from Italy reported that *** percent of their sales were produced-to-order, with lead times averaging *** days. Another *** percent came from U.S. inventories and *** percent came from foreign inventories, with lead times averaging 4 days and *** days, respectively. Importers of flanges from Spain reported that *** percent of their sales were produced-to-order, with lead times averaging *** days, and *** percent came from U.S. inventories, with lead times averaging *** days.

Factors affecting purchasing decisions

Purchasers responding to lost sales and/or lost revenue allegations[20] were asked to identify the main purchasing factors their firm considered in their purchasing decisions for flanges. The major purchasing factors identified by firms include quality, customer demand, customer acceptance or approvals, price, availability, delivery, vendor rebate, country of origin, vendor customer service, responsiveness, payment terms, and supplier relationships.

Comparison of U.S.-produced and imported flanges

In order to determine whether U.S.-produced flanges can generally be used in the same applications as imports from India, Italy, and Spain, U.S. producers and importers were asked whether the products can “always,” “frequently,” “sometimes,” or “never” be used interchangeably. As shown in table II-4, all U.S. producers and most importers reported that flanges are either “always” or “frequently” interchangeable.

[20] This information is compiled from responses by purchasers identified by Petitioners to the lost sales and/or lost revenue allegations. See Part V for additional information.

Table II-4
Flanges: Interchangeability between flanges produced in the United States and in other countries, by country pair

Country pair	Number of U.S. producers reporting				Number of U.S. importers reporting			
	A	F	S	N	A	F	S	N
U.S. vs. subject countries:								
U.S. vs. India	4	2	0	0	6	2	2	1
U.S. vs. Italy	5	1	0	0	4	5	0	0
U.S. vs. Spain	5	1	0	0	4	4	0	0
Subject countries comparisons:								
India vs. Italy	2	2	0	0	4	1	1	3
India vs. Spain	2	2	0	0	4	1	1	2
Italy vs. Spain	3	1	0	0	5	4	0	0
Nonsubject countries comparisons:								
U.S. vs. China	4	2	0	0	4	3	0	1
U.S. vs. other nonsubject	4	2	0	0	3	2	1	1
India vs. China	2	2	0	0	3	3	0	1
India vs. other nonsubject	2	2	0	0	3	2	1	1
Italy vs. China	2	2	0	0	3	2	0	2
Italy vs. other nonsubject	2	2	0	0	3	2	1	1
Spain vs. China	2	2	0	0	3	2	0	1
Spain vs. other nonsubject	2	2	0	0	3	2	1	1
China vs. other nonsubject	2	2	0	0	3	2	0	1

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

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

In explaining factors that limit or preclude interchangeability, *** stated that Italian flanges were not interchangeable with those from India and China based on oil company approvals and their acceptance of the manufacturer. In addition, it stated that manufacturers in India, China, and South Korea are generally not on major U.S. oil companies' "approved" list of suppliers, and that flanges from these sources are lower quality. Finally, it stated that flanges from Italy are approved by the major oil companies because of their quality. *** stated that flanges produced in the United States, Italy, and Spain are typically sold as "approved" flanges to customers in the oil and gas sectors. It further explained that "approved" products are regarded as being of higher quality, suitable for the rigorous environments in oil and gas applications, that customers in the oil and gas sector limit purchases to "approved" flanges, and often these customers are unwilling to purchase non-approved flanges such as those from India. Lastly, *** stated that flanges from the United States, Italy, and Spain are regarded as interchangeable whereas flanges produced in India have limited interchangeability.

Petitioners argue that domestically produced flanges compete vigorously against Indian-produced flanges for customers in the United States in all segments of the market (including oil and gas, petrochemical, pipelines, and commercial).[21] They also argue that there is no bright line between approved and unapproved flanges. They state that some end users have AMLs while other end users do not, and that domestic producers may or may not be on a particular AML. They state that the lack of any industry-wide AML renders the adoption and implementation of AMLs both highly variable and highly subjective.[22] Respondent Silbo argues that flanges sourced from India are not sold in significant quantities in the oil and gas market because Indian vendors are not listed on AMLs maintained by companies constructing pipelines in the United States, while domestically produced flanges and flanges produced in Italy and Spain are.[23] Silbo further contends that the approval process is restrictive, time consuming, expensive, and by its nature highly subjective. Lastly, Silbo states that the existence of AMLs creates a clear dividing line between companies which have been approved and those which have not.[24] Respondents Norma and RN Gupta contend that there is little head-to-head competition between imports from India and domestically produced flanges due to two distinct markets. They also argue that flanges from India are not fungible or substitutable with domestically produced flanges or flanges imported from Italy and Spain.[25]

In addition, producers and importers were asked to assess how often differences other than price were significant in sales of flanges from the United States, subject, or nonsubject countries. As seen in table II-5, most U.S. producers reported that there are sometimes or never differences other than price between flanges across all country pairs. However, the majority of importers reported that flanges from India and China "always" or "frequently" had differences other than price. When explaining the significance of differences other than price, quality and approved status were most frequently mentioned by importers.

[21] Petitioners' postconference brief, p. 5.
[22] Petitioners' postconference brief, p. 15. See also, pp. 20-25.
[23] Respondent Silbo Industries' postconference brief, p. 8.
[24] Respondent Silbo Industries' postconference brief, p. 9.
[25] Respondents Norma's and RN Gupta's postconference brief, p. 2.

Table II-5
Flanges: Significance of differences other than price between flanges produced in the United States and in other countries, by country pair

Country pair	Number of U.S. producers reporting				Number of U.S. importers reporting			
	A	F	S	N	A	F	S	N
U.S. vs. subject countries:								
U.S. vs. India	0	1	3	2	5	2	4	0
U.S. vs. Italy	0	1	1	4	2	2	4	1
U.S. vs. Spain	0	1	1	4	2	2	3	1
Subject countries comparisons:								
India vs. Italy	0	0	2	2	3	2	2	2
India vs. Spain	0	0	2	2	2	1	3	2
Italy vs. Spain	0	0	1	3	1	1	6	1
Nonsubject countries comparisons:								
U.S. vs. China	1	0	5	0	4	1	3	0
U.S. vs. other nonsubject	0	0	3	2	2	1	4	0
India vs. China	0	0	4	0	3	1	3	0
India vs. other nonsubject	0	0	3	1	2	1	4	0
Italy vs. China	0	0	4	0	4	1	2	0
Italy vs. other nonsubject	0	0	3	1	2	1	4	0
Spain vs. China	0	0	4	0	3	1	2	0
Spain vs. other nonsubject	0	0	3	1	2	1	4	0
China vs. other nonsubject	0	0	3	1	2	1	3	0

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

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

Importer *** stated that some quality differences may exist if one is to compare, for example, an approved product from Spain against a "sub-par manufacturer" from India. However all reputable manufacturers from India are at the same quality levels as any approved and domestic manufacturer. Importer *** stated that the quality of the flanges is measured by major U.S. oil company approvals; if a manufacturer is on a major U.S. oil company approval list, its flanges are deemed the same quality regardless of where they were produced. It continued that one can compare among approved manufacturers (domestic or foreign) but one cannot compare a domestic non-approved manufacturer to a foreign approved manufacturer. It reiterated that "approved" is defined as quality certified by U.S. oil companies, refiners, fabricators, and industrial users of flanges. It added that these companies have performed industry audits and determined that the quality of "approved" products are superior to products manufactured by companies that are non-approved by major U.S. oil companies. Importer *** stated that, in its experience, "approved" status is the non-price factor that most readily influences how flanges are sold in the U.S. market. It stated that it sells flanges predominantly for commercial applications other than oil and gas and its customer base does not typically demand "approved" flanges or express a country of origin preference, so it is able to sell Indian-origin flanges for general commercial applications.

Respondent Silbo argues that the flanges which Weldbend and other domestic producers sell in the construction market are, "by definition, approved products, since they bear the Weldbend (or other approved) name, and as such command a price in the market that is dramatically different from prices at which Indian flanges are sold."[26] Respondents Norma and RN Gupta argue that there exists perceived qualitative differentiation in the flange market between the "generic" product from India and the "approved" product manufactured domestically, and in Italy and Spain.[27]

[26] Respondent Silbo Industries' postconference brief, p. 10.
[27] Respondents Norma's and RN Gupta's postconference brief, p. 3.

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 alleged 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 six firms that accounted for the vast majority of U.S. production of flanges during 2015.

U.S. PRODUCERS

The Commission issued a U.S. producer questionnaire to 14 firms based on information contained in the petitions. Six firms provided useable data on their productive operations.[1] As discussed in Part I, staff believes that these responses represent the vast majority of U.S. production of flanges. Table III-1 lists U.S. producers of flanges, their production locations, positions on the petitions, and shares of total production.

Table III-1
Flanges: U.S. producers of flanges, their positions on the petitions, production locations, and share of reported production, 2015

Firm	Position on petition	Production location(s)	Share of production (percent)
Ameriforge	***	Houston, TX	***
Boltex	Petitioner	Houston, TX (2 plants)	***
Federal Flange	***	Houston, TX	***
Galperti	***	Houston, TX	***
Piping Products	***	Houston, TX	***
Weldbend	Petitioner	Bedford Park, IL	***
Total			100.0

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

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

[1] The Commission did not receive a response from ***. *** submitted a questionnaire response with data that was not useable. The firm indicated that it *** with regard to the petitions. It ***.

Table III-2
Flanges: U.S. producers' ownership, related and/or affiliated firms, since January 2013

* * * * * * *

The U.S. flange industry is comprised of both integrated and non-integrated producers. Boltex and Ameriforge produce their own flange forgings, which they process into finished flanges, or sell to other companies that process flanges forgings into finished flanges. The remaining domestic producers purchase flange forgings and process them into finished flanges.[2] *** U.S. producers stated that they purchase flange forgings from ***. As discussed in greater detail below, Ameriforge directly imports flanges.

Producers were asked to report any changes in operations since January 2013. There was one reported expansion and four reported production shutdowns or curtailments. In addition, Westbrook Manufacturing purchased Federal Flange in July 2015.[3] Table III-3 presents producer responses.

Table III-3
Flanges: U.S. producers' reported changes in operations, since January 1, 2013

* * * * * * *

U.S. PRODUCTION, CAPACITY, AND CAPACITY UTILIZATION

Table III-4 and figure III-1 present U.S. producers' production, capacity, and capacity utilization.

[2] Petition, p. 2.

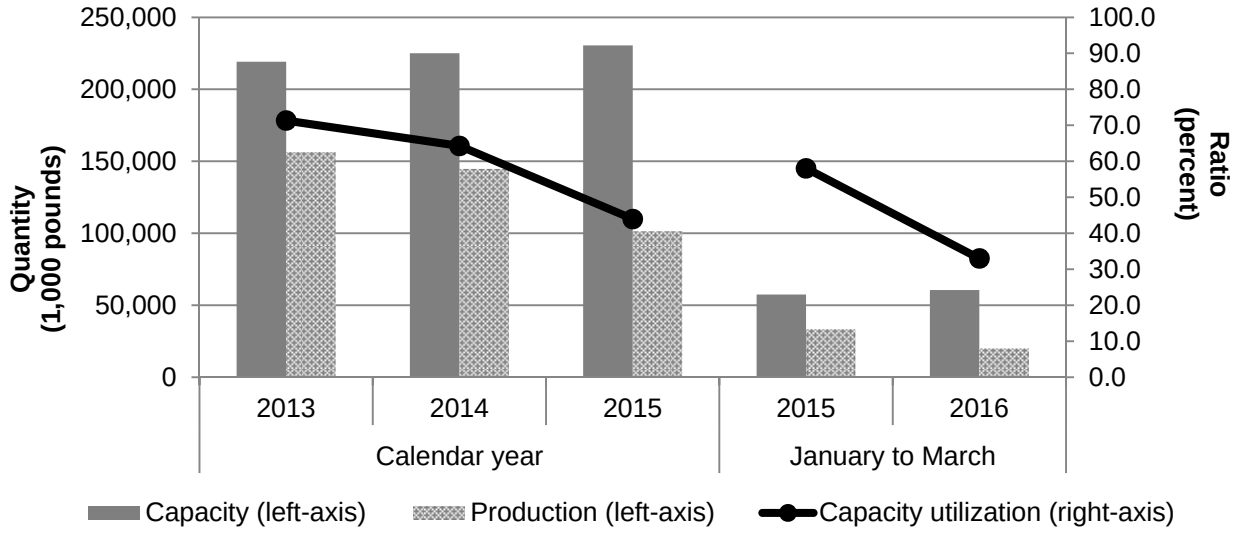
[3] "Market Acquisitions," MRC Global InSight Magazine, October 2015, found at: http://www.mrcglobal.com/Media/Insight-2015-October/Market-Acquisitions, accessed July 25, 2016.

Table III-4
Flanges: U.S. producers' production, capacity, and capacity utilization, by firm, 2013-15, January to March 2015, and January to March 2016

Item	Calendar year			January to March	
	2013	2014	2015	2015	2016
	Capacity (1,000 pounds)				
Ameriforge	***	***	***	***	***
Boltex	***	***	***	***	***
Federal Flange	***	***	***	***	***
Galperti	***	***	***	***	***
Piping Products	***	***	***	***	***
Weldbend	***	***	***	***	***
Total capacity	219,197	225,103	230,519	57,457	60,528
	Production (1,000 pounds)				
Ameriforge	***	***	***	***	***
Boltex	***	***	***	***	***
Federal Flange	***	***	***	***	***
Galperti	***	***	***	***	***
Piping Products	***	***	***	***	***
Weldbend	***	***	***	***	***
Total production	156,331	144,691	101,295	33,349	19,967
	Capacity utilization (percent)				
Ameriforge	***	***	***	***	***
Boltex	***	***	***	***	***
Federal Flange	***	***	***	***	***
Galperti	***	***	***	***	***
Piping Products	***	***	***	***	***
Weldbend	***	***	***	***	***
Average capacity utilization	71.3	64.3	43.9	58.0	33.0
	Share of total production (percent)				
Ameriforge	***	***	***	***	***
Boltex	***	***	***	***	***
Federal Flange	***	***	***	***	***
Galperti	***	***	***	***	***
Piping Products	***	***	***	***	***
Weldbend	***	***	***	***	***
Total production	100.0	100.0	100.0	100.0	100.0

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

Figure III-1
Flanges: U.S. producers' production, capacity, and capacity utilization, 2013-15, January to March 2015, and January to March 2016



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

Firms reported operating between 50 and 52 weeks per year; however hours worked per week vary from 40 hours to 140 hours. Producers calculated their production capacities based on prior or estimated production levels. Galperti noted that it ***. Boltex reported ***. In addition, Federal Flange stated that it ***.

The Commission asked the domestic producers to report constraints on their capacity to produce flanges. Most firms indicated current machinery and plant size to be the only constraints on capacity. *** also mentioned that its production capacity would be constrained by customer demand based on product mix.

Total U.S. producers' capacity increased by 5.2 percent from 2013 to 2015, and was 5.3 percent higher in interim 2016 than in interim 2015. This was primarily due to a capacity increase ***. ***. Reported production decreased by 35.2 percent over the period and was 40.1 percent lower in interim 2016 than in interim 2015.

Table III-5 presents data on U.S. producers' capacity and production of other products using the same equipment and machinery as subject flanges. *** is the only U.S. producer that reported production of other tube and pipe fittings on the same equipment. All U.S. producers indicated that they are not able to switch capacity between flanges and other products using the same equipment and/or labor. The machinery is used solely for the production of flanges, ***.

Table III-5

Flanges: U.S. producers' overall capacity and production on the same equipment as subject production, 2013-15, January to March 2015, and January to March 2016

* * * * * * *

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

Table III-6 presents U.S. producers' U.S. shipments, export shipments, and total shipments. The quantity of U.S. producers' U.S. shipments decreased from 2013 to 2015 by 33.9 percent, and was 36.8 percent lower in interim 2016 than in interim 2015. The value of U.S. producers' U.S. shipments likewise decreased by 33.3 percent from 2013 to 2015, and was 39.4 percent lower in interim 2016 than in interim 2015.

Table III-6

Flanges: U.S. producers' U.S. shipments, exports shipments, and total shipments, 2013-15, January to March 2015, and January to March 2016

Item	Calendar year			January to March	
	2013	2014	2015	2015	2016
	Quantity (1,000 pounds)				
U.S. shipments	151,537	153,091	100,145	31,423	19,863
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***
	Value (1,000 dollars)				
U.S. shipments	242,227	241,179	160,612	48,816	29,393
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***
	Unit value (dollars per 1,000 pounds)				
U.S. shipments	1,554	1,535	1,569	1,523	1,460
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***
	Share of quantity (percent)				
U.S. shipments	***	***	***	***	***
Export shipments	***	***	***	***	***
Total shipments	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)				
U.S. shipments	***	***	***	***	***
Export shipments	***	***	***	***	***
Total shipments	100.0	100.0	100.0	100.0	100.0

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

*** reported exporting flanges to markets including ***. The quantity of export shipments decreased by *** percent from 2013 to 2015 and was *** percent lower in interim 2016 than in interim 2015.

U.S. producers were asked to report their firm's U.S. commercial shipments of flanges with an inside diameter of 360 mm or more in 2015. Four firms reported such shipments, while

***. Table III-7 presents the quantity and share of U.S. producers' U.S. commercial shipments of large diameter flanges in 2015.

Table III-7
Flanges: U.S. producers' U.S. commercial shipments, by size, 2015

Firm	U.S. producers' commercial U.S. shipments in 2015					
	Large diameter	Small diameter	Total	Large diameter	Small diameter	Total
	Quantity (1,000 pounds)			Share of total (percent)		
Ameriforge	***	***	***	***	***	***
Boltex	***	***	***	***	***	***
Federal Flange	***	***	***	***	***	***
Galperti	***	***	***	***	***	***
Piping Products	***	***	***	***	***	***
Weldbend	***	***	***	***	***	***
Total U.S. producers' commercial U.S. shipments	17,612	82,181	99,793	17.6	82.4	100.0

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

U.S. PRODUCERS' INVENTORIES

Table III-8 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**.** U.S. producers' inventories of flanges decreased by 16.2 percent from 2013 to 2015. U.S. producers held 3.2 percent less product in inventory in March 2016 than it did in March 2015. Ratio of inventories relative to U.S. production, U.S. shipments, and total shipments all increased from 2013 to 2015, each by over 10 percentage points. In addition, the annualized ratios were higher in interim 2016 than in interim 2015 by more than 20 percentage points.

Table III-8
Flanges: U.S. producers' inventories, 2013-15, January to March 2015, and January to March 2016

Item	Calendar year			January to March	
	2013	2014	2015	2015	2016
	Quantity (1,000 pounds)				
U.S. producers' end-of-period inventories	60,451	50,542	50,628	52,189	50,528
	Ratio (percent)				
Ratio of inventories to.--					
U.S. production	38.7	34.9	50.0	39.1	63.3
U.S. shipments	39.9	33.0	50.6	41.5	63.6
Total shipments	***	***	***	***	***

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

U.S. PRODUCERS' IMPORTS AND PURCHASES

U.S. producers' direct imports and purchases of flanges are presented in table III-9. *** reported direct imports of flanges ***.

Table III-9
Flanges: U.S. producers' U.S. production, imports and purchases, 2013-15, January to March 2015, and January to March 2016

* * * * * * *

U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

Table III-10 shows U.S. producers' employment-related data. The level of production and related workers (PRWs) decreased by 11.8 percent from 2013 to 2015 and was 24.4 percent lower during the 2016 interim period than during the 2016 interim period. Hours worked per PRW likewise decreased from 2013 to 2015 by 4.8 percent, but was 2.5 percent higher in interim 2016 than in interim 2015.

Table III-10
Flanges: U.S. producers' employment-related data, 2013-15, January to March 2015, and January to March 2016

Item	Calendar year			January to March	
	2013	2014	2015	2015	2016
Production and related workers (PRWs) (number)	414	414	365	401	303
Total hours worked (1,000 hours)	1,063	1,043	892	240	186
Hours worked per PRW (hours)	2,568	2,519	2,444	599	614
Wages paid ($1,000)	20,148	21,190	18,129	4,690	3,735
Hourly wages (dollars per hour)	$18.95	$20.32	$20.32	$19.54	$20.08
Productivity (1,000 pounds per hour)	147.1	138.7	113.6	139.0	107.3
Unit labor costs (dollars per 1,000 pounds)	$129	$146	$179	$141	$187

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 96 firms believed to be importers of subject flanges, as well as to all U.S. producers of flanges.[1] As discussed in Part I, usable questionnaire responses were received from 12 companies, representing 51.0 percent of total flange imports in 2015.[2] Table IV-1 lists all responding U.S. importers of flanges from India, Italy, Spain, and other sources, their headquarters, and their shares of U.S. imports, in 2015.

Table IV-1
Flanges: U.S. importers, their headquarters, and share of total imports by source, 2015

Firm	Headquarters	Share of imports by source (percent)					
		India	Italy	Spain	Subject	AOS	Total Imports
Ameriforge[1]	Houston, TX	***	***	***	***	***	***
API International	Tualatin, OR	***	***	***	***	***	***
Bebitz USA[2]	Garden City, NY	***	***	***	***	***	***
Ferguson[3]	Newport News, VA	***	***	***	***	***	***
Global Stainless Supply[4]	Houston, TX	***	***	***	***	***	***
ITEX Piping Products[5]	Houston, TX	***	***	***	***	***	***
Midland Manufacturing[6]	Skokie, IL	***	***	***	***	***	***
Norca Industrial	Lake Success, NY	***	***	***	***	***	***
Regal Beloit America	Liberty, SC	***	***	***	***	***	***
Silbo Industries	Montvale, NJ	***	***	***	***	***	***
Texas Pipe and Supply[7]	Houston, TX	***	***	***	***	***	***
WeldFit	Houston, TX	***	***	***	***	***	***
Total		100.0	100.0	100.0	100.0	100.0	100.0

[1] Ameriforge is ***.
[2] Bebitz USA is ***.
[3] Ferguson is ***.
[4] Global Stainless Supply is ***. Global Stainless Supply, together with Forgings, Flanges, and Fittings, LLC, and Global Valve Products, is part of The Global Group.
[5] ITEX Piping Products is ***.
[6] Midland Manufacturing in ***.
[7] U.S. importer ***.

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

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[1] The Commission issued questionnaires to those firms identified in the petition, along with firms that, based on a review of data provided by ***, may have accounted for more than one percent of total imports under HTS subheadings 7307.91.5010 and 7307.91.5050 in 2015.

[2] *** submitted a questionnaire response with data that were not useable. The Commission did not receive an importer questionnaire from ***.

U.S. IMPORTS

Table IV-2 and figure IV-1 present data for U.S. imports of flanges from India, Italy, Spain, and all other sources. U.S. import data is compiled from official import data, HTS statistical reporting numbers 7307.91.5010 and 7307.91.5050. The quantity of imports from India decreased from 2013 to 2014 by 8.9 percent, and then increased the following year by 21.5 percent, increasing by 10.7 percent overall from 2013 to 2015. At the same time, the value of imports from India decreased by 3.1 percent from 2013 to 2015. The quantity of imports was higher in interim 2015 than in interim 2016 by 52.0 percent, while the value was higher by 61.3 percent.

The quantity of imports from Italy increased in each year from 2013 to 2015, rising by 48.7 percent overall. At the same time, the value of imports from Italy increased by 24.9 percent from 2013 to 2015. The quantity of imports was higher in interim 2015 than in interim 2016 by 7.9 percent, while the value was higher by 22.8 percent.

The quantity of imports from Spain decreased from 2013 to 2014 by 28.6 percent, and then increased the following year by 70.8 percent, increasing by 22.0 percent overall from 2013 to 2015. At the same time, the value of imports from Spain decreased by 1.3 percent from 2013 to 2015. The quantity of imports was higher in interim 2015 than in interim 2016 by 30.7 percent, while the value was higher by 40.6 percent.

The top nonsubject sources of U.S. imports in 2015 were the China, Korea, and Germany, which in total accounted for 93.5 percent of all imports from nonsubject sources in that year.

Table IV-2
Flanges: U.S. imports, by source, 2013-15, January to March 2015, and January to March 2016

Item	Calendar year			January to March	
	2013	2014	2015	2015	2016
	Quantity (1,000 pounds)				
U.S. imports from.--					
India	134,263	122,355	148,692	44,442	21,334
Italy	20,909	26,333	31,101	8,211	7,561
Spain	21,530	15,377	26,270	6,682	4,628
Subject	176,702	164,064	206,063	59,335	33,522
All other sources	52,683	54,422	47,304	13,166	8,392
Total U.S. imports	229,385	218,486	253,367	72,501	41,914
	Value (1,000 dollars)				
U.S. imports from.--					
India	101,400	83,090	98,213	31,278	12,111
Italy	28,222	34,060	35,259	9,681	7,473
Spain	29,175	21,280	28,788	7,346	4,360
Subject	158,796	138,430	162,259	48,305	23,944
All other sources	77,044	79,669	61,202	18,437	9,942
Total U.S. imports	235,840	218,099	223,461	66,741	33,887
	Unit value (dollars per 1,000 pounds)				
U.S. imports from.--					
India	755	679	661	704	568
Italy	1,350	1,293	1,134	1,179	988
Spain	1,355	1,384	1,096	1,099	942
Subject	899	844	787	814	714
All other sources	1,462	1,464	1,294	1,400	1,185
Total U.S. imports	1,028	998	882	921	808
	Share of quantity (percent)				
U.S. imports from.--					
India	58.5	56.0	58.7	61.3	50.9
Italy	9.1	12.1	12.3	11.3	18.0
Spain	9.4	7.0	10.4	9.2	11.0
Subject	77.0	75.1	81.3	81.8	80.0
All other sources	23.0	24.9	18.7	18.2	20.0
Total U.S. imports	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)				
U.S. imports from.--					
India	43.0	38.1	44.0	46.9	35.7
Italy	12.0	15.6	15.8	14.5	22.1
Spain	12.4	9.8	12.9	11.0	12.9
Subject	67.3	63.5	72.6	72.4	70.7
All other sources	32.7	36.5	27.4	27.6	29.3
Total U.S. imports	100.0	100.0	100.0	100.0	100.0

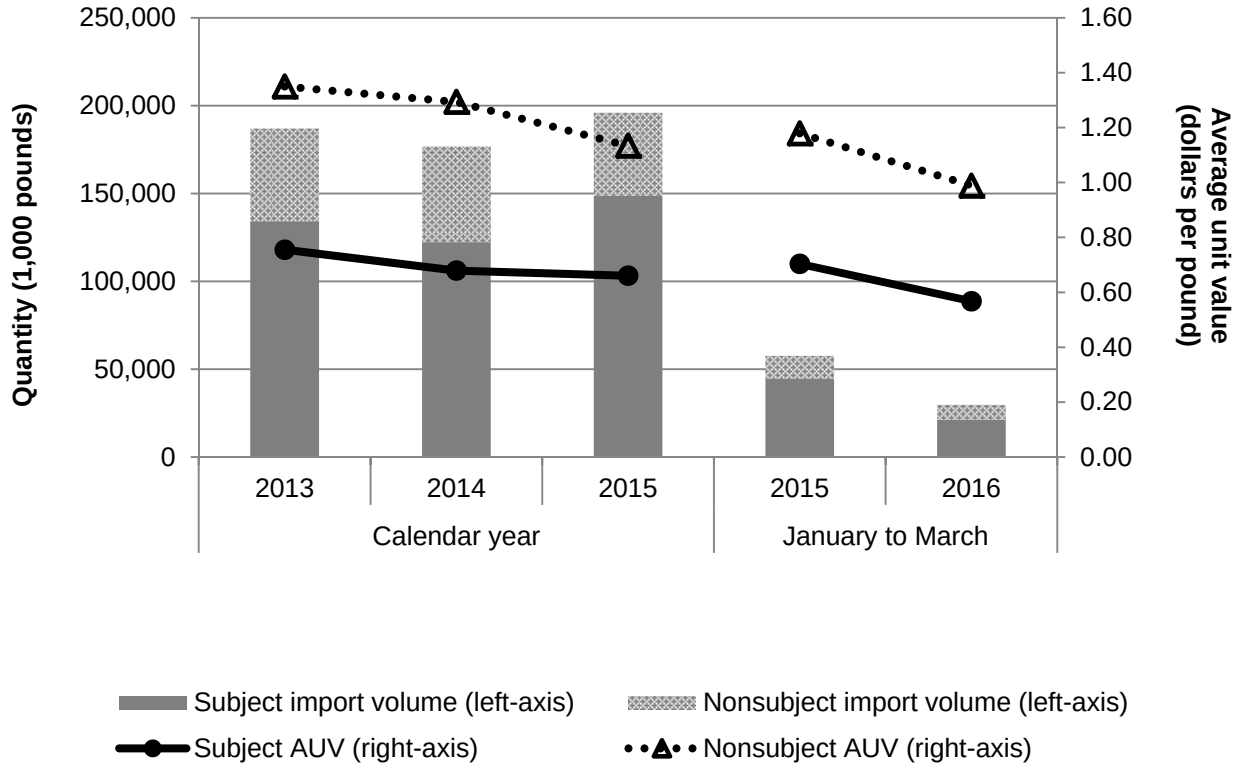
Table continued on next page.

Table IV-2--Continued
Flanges: U.S. imports, by source, 2013-15, January to March 2015, and January to March 2016

Item	Calendar year			January to March	
	2013	2014	2015	2015	2016
	Ratio to U.S. production (percent)				
U.S. imports from.--					
India	85.9	84.6	146.8	133.3	106.8
Italy	13.4	18.2	30.7	24.6	37.9
Spain	13.8	10.6	25.9	20.0	23.2
Subject	113.0	113.4	203.4	177.9	167.9
All other sources	33.7	37.6	46.7	39.5	42.0
Total U.S. imports	146.7	151.0	250.1	217.4	209.9

Source: Official U.S. import statistics using HTS statistical reporting numbers 7307.91.5010 and 7307.91.5050, accessed July 23, 2016 and compiled from production data submitted in response to Commission questionnaires.

Figure IV-1
Flanges: U.S. import volumes and prices, 2013-15, January to March 2015, and January to March 2016



Source: Table IV-2.

NEGLIGIBILITY

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.[3] Negligible imports are generally defined in the Tariff Act of 1930, 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 petition or the initiation of the investigation. However, if there are imports of such merchandise from a number of countries subject to investigations initiated on the same day that individually account for less than 3 percent of the total volume of the subject merchandise, and if the imports from those countries collectively account for more than 7 percent of the volume of all such merchandise imported into the United States during the applicable 12-month period, then imports from such countries are deemed not to be negligible.[4] Imports from India accounted for 54.5 percent of the total quantity of imports of flanges during June 2015 through May 2016; imports from Italy accounted for 13.9 percent; and imports from Spain accounted for 11.3 percent.

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 concerning fungibility and channels of distribution are discussed in Part II of this report. Additional information concerning fungibility, geographical markets and simultaneous presence in the market is presented below.

Fungibility

Respondents argue that there is a clear distinction between Indian flanges and those flanges produced in the United States, Italy, and Spain with respect to customer perceptions and price.[5] They contend that U.S., Italian, and Spanish flanges are distinctly different from Indian flanges based on perceived qualitative differentiation in the flange market between the "generic" product from India and the "approved" product manufactured domestically, and in Italy and Spain.[6] They state that the existence of AMLs creates a clear dividing line between

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

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

[5] Silbo's postconference brief, p. 14.

[6] Indian producers' postconference brief, p. 3.

flanges from companies which have been approved as suppliers and those which have not.[7] [8] They argue that flanges sold in the generic market are not interchangeable or fungible with flanges sold in the approved market.[9] In addition, respondent Silbo states that distributors of flanges distinguish within their own inventory between approved and generic product.[10]

Respondents also claim that domestic firms, as well as Italian and Spanish producers, are listed as approved vendors on AMLs, and thus can command a higher price.[11] End-users perceive a difference in quality of the generic Indian flanges and approved flanges such that they are willing to pay a premium for approved products.[12] Respondents further explain that the reason for the price differential is that the U.S. industry is divided into two segments: 1) oil companies and refineries which purchase flanges from approved vendors; and 2) construction and other commercial uses, which uses generic flanges.[13] The average unit value for flanges imported from India ranged from $0.57 to $0.76 per pound, while the average unit value ranged from $0.99 to $1.35 for product imported from Italy, and from $0.94 to $1.38 for product imported from Spain. The average unit value of U.S. producers' U.S. commercial shipments ranged from $1.46 to $1.57.

Geographical markets

As discussed in Part II, both U.S. producers and U.S. importers reported shipping flanges throughout the United States. Table IV-3 presents import statistics for flanges by Customs district of entry in 2015.

[7] Silbo's postconference brief, p. 9.

[8] Further information regarding AMLs is discussed in Part II and in appendix D. All responding U.S. producers were identified on multiple AMLs.

[9] Conference transcript, p. 109 (Khandelwal).

[10] Conference transcript, pp. 129-130 (Jakob).

[11] Silbo's postconference brief, p. 10.

[12] Indian producers' postconference brief, p. 5.

[13] Bebitz's postconference brief, p. 1.

Table IV-3

Flanges: Subject U.S. imports by Customs districts of entry, 2015

Item	Calendar year 2015	
	Quantity (1,000 pounds)	Share of quantity (percent)
U.S. imports from India.--		
Houston-Galveston, TX	64,742	43.5
Savannah, GA	19,822	13.3
Cleveland, OH	14,226	9.6
Los Angeles, CA	11,377	7.7
New York, NY	7,849	5.3
All other districts[1]	30,676	20.6
Total U.S. imports from India	148,692	100.0
U.S. imports from Italy.--		
Houston-Galveston, TX	28,050	90.2
Los Angeles, CA	1,433	4.6
Savannah, GA	362	1.2
New Orleans, LA	336	1.1
Philadelphia, PA	318	1.0
All other districts[1]	602	1.9
Total U.S. imports from Italy	31,101	100.0
U.S. imports from Spain.--		
Houston-Galveston, TX	23,359	88.9
Los Angeles, CA	1,493	5.7
Savannah, GA	706	2.7
Cleveland, OH	643	2.4
Pembina, ND	49	0.2
All other districts[1]	20	0.1
Total U.S. imports from Spain	26,270	100.0

[1] Including Anchorage, AK; Baltimore, MD; Boston, MA; Buffalo, NY; Charleston, SC; Charlotte, NC; Chicago, IL; Cleveland, OH; Columbia-Snake, OR; Dallas-Fort Worth, TX; Detroit, MI; Great Falls, MT; Laredo, TX; Miami, FL; Minneapolis, MN; New Orleans, LA; New York, NY; Norfolk, VA; Ogdensburg, NY; Pembina, ND; San Francisco, CA; San Juan, PR; Seattle, WA; St. Louis, MO; and Tampa, FL.

Source: Official U.S. import statistics using statistical reporting numbers 7307.91.5010 and 7307.91.5050 accessed July 23, 2016.

Presence in the market

Table IV-4 and figure IV-2 present monthly import statistics for flanges during January 2013 through March 2016.

Table IV-4

Flanges: Monthly U.S. imports by source, 2013-15, January to March 2015, and January to March 2016

Item	Source					
	India	Italy	Spain	Subject sources	Nonsubject sources	All sources
	Quantity (1,000 pounds)					
2013.--						
January	16,363	2,133	1,402	19,898	6,418	26,316
February	12,500	1,691	823	15,014	4,099	19,112
March	12,035	1,755	1,684	15,474	3,889	19,363
April	10,510	1,893	1,692	14,095	4,434	18,528
May	17,478	1,684	1,862	21,024	6,049	27,074
June	12,330	1,888	1,312	15,530	4,333	19,862
July	7,976	1,439	2,328	11,743	2,895	14,638
August	8,452	2,105	2,266	12,823	3,981	16,804
September	8,646	1,123	507	10,276	2,770	13,046
October	10,524	1,713	3,134	15,371	4,891	20,262
November	10,480	1,869	2,268	14,617	4,518	19,136
December	6,970	1,615	2,253	10,838	4,407	15,244
2014.--						
January	9,356	1,118	2,247	12,721	4,154	16,875
February	8,107	1,625	1,341	11,073	2,777	13,851
March	8,459	2,384	1,101	11,944	3,475	15,419
April	10,793	2,124	902	13,819	4,165	17,984
May	10,925	1,404	2,024	14,353	4,102	18,455
June	9,222	1,927	1,153	12,302	4,606	16,908
July	9,924	2,346	1,324	13,594	5,160	18,755
August	9,437	1,467	1,174	12,078	4,864	16,941
September	10,223	1,983	899	13,105	7,090	20,195
October	10,801	3,804	1,041	15,646	4,382	20,029
November	14,019	2,939	1,273	18,231	4,166	22,397
December	11,087	3,211	898	15,196	5,482	20,678

Table continued on next page.

Table IV-4--Continued

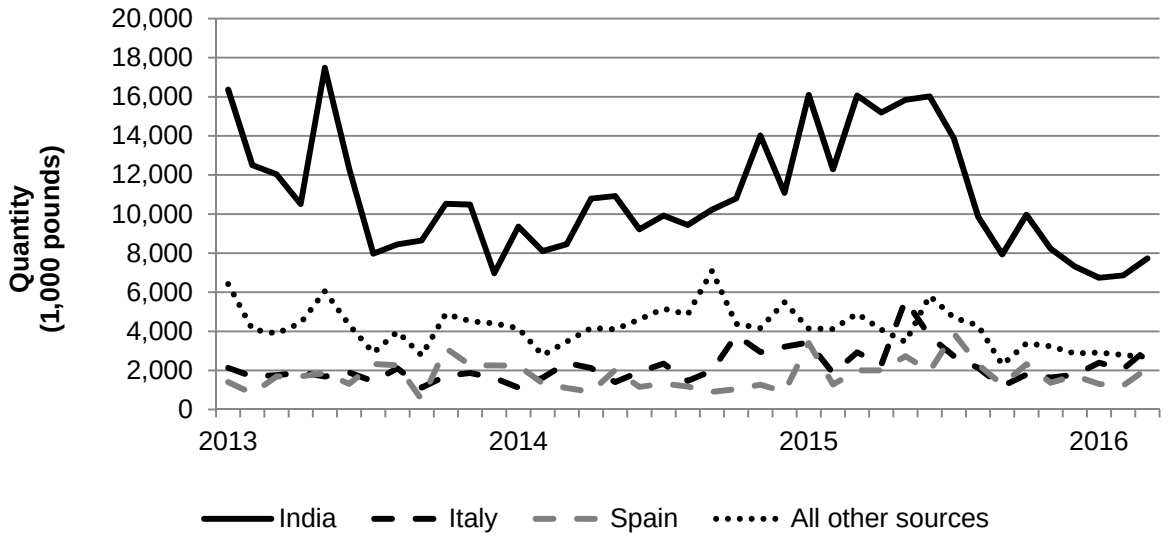
Flanges: Monthly U.S. imports by sources, 2013-15, January to March 2015, and January to March 2016

Item	Source					
	India	Italy	Spain	Subject sources	Nonsubject sources	All sources
	Quantity (1,000 pounds)					
2015.--						
January	16,093	3,432	3,402	22,927	4,147	27,075
February	12,288	1,857	1,278	15,423	4,117	19,541
March	16,060	2,921	2,002	20,983	4,902	25,885
April	15,196	2,291	2,005	19,492	4,090	23,581
May	15,841	5,610	2,731	24,182	3,457	27,639
June	16,025	3,746	1,961	21,732	5,816	27,549
July	13,875	2,736	3,901	20,512	4,703	25,214
August	9,862	2,126	2,304	14,292	4,302	18,594
September	7,937	1,187	1,271	10,395	2,287	12,682
October	9,964	1,783	2,317	14,064	3,384	17,449
November	8,227	1,640	1,372	11,239	3,233	14,472
December	7,323	1,770	1,727	10,820	2,867	13,687
2016.--						
January	6,737	2,388	1,300	10,425	2,913	13,338
February	6,864	2,072	1,224	10,160	2,785	12,944
March	7,733	3,100	2,104	12,937	2,694	15,632

Source: Official U.S. import statistics using statistical reporting numbers 7307.91.5010 and 7307.91.5050, accessed July 23, 2016.

Figure IV-2

Flanges: Monthly U.S. imports by sources, January 2013 through March 2016



Source: Table IV-3.

APPARENT U.S. CONSUMPTION AND MARKET SHARES

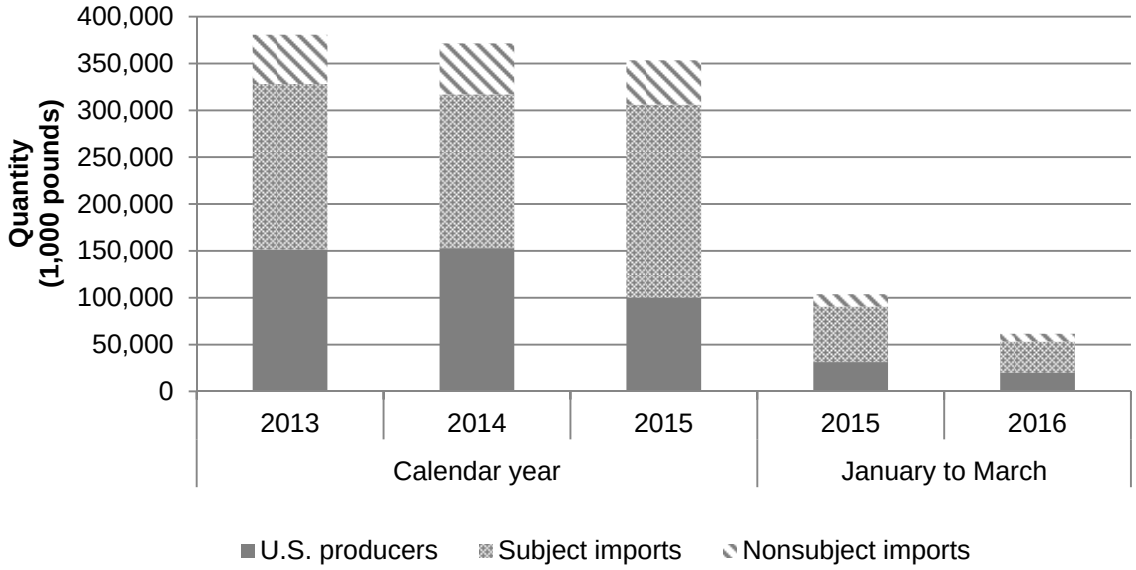
Table IV-5 and figure IV-3 present data on apparent U.S. consumption and U.S. market shares for flanges. Apparent U.S. consumption, based on quantity, decreased by 7.2 percent from 2013 to 2015, and was 40.6 percent lower in interim 2016 than in interim 2015. Apparent U.S. consumption, based on value, decreased by 19.7 percent, and was 8.2 percent lower in interim 2016 than in interim 2015. U.S. producers' share of U.S. consumption, based on quantity, decreased from 2013 to 2015 by 11.5 percentage points. The market share of imports of flanges from India increased by 6.8 percentage points from 2013 to 2015, the market share from Italy increased by 3.3 percentage points, and the market share from Spain increased by 1.8 percentage points. The market share of imports from nonsubject sources decreased by 0.4 percent.

Table IV-5
Flanges: Apparent U.S. consumption, 2013-15, January to March 2015, and January to March 2016

Item	Calendar year			January to March	
	2013	2014	2015	2015	2016
	Quantity (1,000 pounds)				
U.S. producers' U.S. shipments	151,537	153,091	100,145	31,423	19,863
U.S. imports from.--					
India	134,263	122,355	148,692	44,442	21,334
Italy	20,909	26,333	31,101	8,211	7,561
Spain	21,530	15,377	26,270	6,682	4,628
Subject	176,702	164,064	206,063	59,335	33,522
All other sources	52,683	54,422	47,304	13,166	8,392
Total U.S. imports	229,385	218,486	253,367	72,501	41,914
Apparent U.S. consumption	380,922	371,577	353,512	103,924	61,777
	Value (1,000 dollars)				
U.S. producers' U.S. shipments	235,516	234,983	157,175	47,845	29,005
U.S. imports from.--					
India	101,400	83,090	98,213	31,278	12,111
Italy	28,222	34,060	35,259	9,681	7,473
Spain	29,175	21,280	28,788	7,346	4,360
Subject	158,796	138,430	162,259	48,305	23,944
All other sources	77,044	79,669	61,202	18,437	9,942
Total U.S. imports	235,840	218,099	223,461	66,741	33,887
Apparent U.S. consumption	471,356	453,082	380,636	114,586	62,892
	Share of quantity (percent)				
U.S. producers' U.S. shipments	39.8	41.2	28.3	30.2	32.2
U.S. imports from.--					
India	35.2	32.9	42.1	42.8	34.5
Italy	5.5	7.1	8.8	7.9	12.2
Spain	5.7	4.1	7.4	6.4	7.5
Subject	46.4	44.2	58.3	57.1	54.3
All other sources	13.8	14.6	13.4	12.7	13.6
Total U.S. imports	60.2	58.8	71.7	69.8	67.8
	Share of value (percent)				
U.S. producers' U.S. shipments	50.7	52.5	41.8	42.2	46.4
U.S. imports from.--					
India	21.2	18.1	25.6	27.1	19.1
Italy	5.9	7.4	9.2	8.4	11.8
Spain	6.1	4.6	7.5	6.4	6.9
Subject	33.2	30.1	42.2	41.8	37.8
All other sources	16.1	17.3	15.9	16.0	15.7
Total U.S. imports	49.3	47.5	58.2	57.8	53.6

Source: Compiled from data submitted in response to Commission questionnaires and official U.S. import statistics using statistical reporting numbers 7307.91.5010 and 7307.91.5050, accessed July 23, 2016.

Figure IV-3
Flanges: Apparent U.S. consumption, 2013-15, January to March 2015, and January to March 2016



Source: Table IV-5.

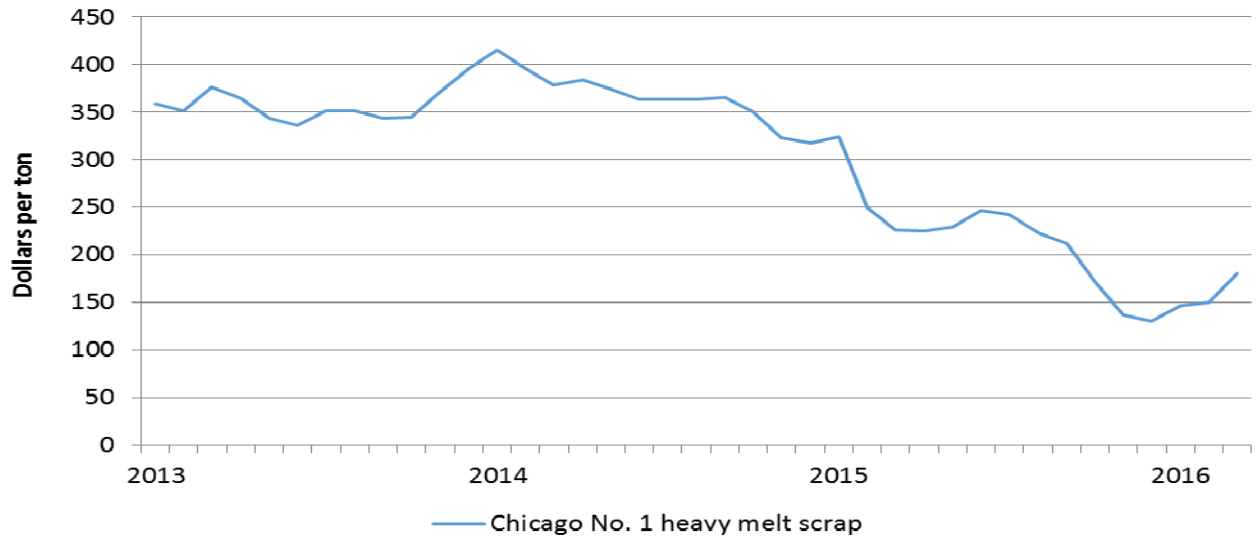
PART V: PRICING DATA

FACTORS AFFECTING PRICES

Raw material costs

The main raw material used to produce flanges is carbon steel, either in billet form or as a forging.[1] Four of the six responding U.S. producers are not integrated, so their main raw material is a steel forging, i.e., an unfinished flange. The two integrated U.S. producers cast their own forgings from purchased steel billets. Figure V-1 presents the average price of scrap metal, which in March 2016 was approximately half the price level in January 2013. Raw materials, as a share of the cost of goods sold decreased from 74.1 percent in 2013 to 70.5 percent in 2015, and was 66.2 percent in the first three months of 2016.

Figure V-1
Steel scrap metal: Prices and quantities of Chicago No. 1 heavy melt scrap, monthly, January 2013-March 2016



Source: American Metal Market, presented with permission.

[1] Conference transcript, p. 87 (Bernobich).

Transportation costs to the U.S. market

Transportation costs for flanges shipped from India, Italy, and Spain to the United States averaged 8.0, 6.2, and 2.1 percent, respectively, in 2015. These estimates were derived from official import data and represent transportation and other charges on imports.[2]

U.S. inland transportation costs

Four of six U.S. producers and eight of 12 importers reported that they typically arrange transportation to their customers. Eight importers ship from a U.S. storage facility whereas three ship from the point of importation. Five U.S. producers reported that their U.S. inland transportation costs ranged from 3 to 15 percent, averaging 6 percent, while importers reported costs of 2 to 8 percent, averaging 4 percent.[3]

PRICING PRACTICES

Pricing methods

U.S. producers Boltex and Weldbend sell using price lists and discount prices off of those price lists, although Boltex is currently only "partially" using its price list.[4] *** uses both a price list and transaction-by-transaction negotiations. The three remaining producers reported selling only via transaction-by-transaction negotiations. The majority of importers also sell via transaction-by-transaction negotiations (table V-1).

[2] The estimated transportation costs were obtained by subtracting the customs value from the c.i.f. value of the imports for 2015 and then dividing by the customs value based on the HTS statistical reporting numbers 7307.91.5010 and 7307.91.5050.

[3] These data do not include ***.

[4] Conference transcript, pp. 85 (Bernobich) and 131 (Jakob). Mr. Shalom of respondent Silbo stated that Boltex and Weldbend have been selling off the same price list since at least 2009. On Boltex's website, the link to its prices is listed under a weblink called "Price Schedule 07-08" yet shows that it has suspended its price list as of February 12, 2016. http://www.boltex.com/about-boltex-flanges.html , retrieved August 5, 2016.

Table V-1
Flanges: U.S. producers and importers reported price setting methods, by number of responding firms[1]

Method	U.S. producers	Importers
Transaction-by-transaction	4	10
Contract	0	1
Set price list	3	2
Other	0	1

[1] 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.

Nearly all U.S.-produced and subject imported flanges are sold on the spot market (table V-2). According to Boltex and Weldbend representatives, they "produce for the day" based on daily orders, and do not have order backlogs or pre-orders for the next day, week, month, or year.[5] Importers sell flanges primarily (India) or *** (Italy and Spain) on the spot market, while selling the balance through short-term contracts.

Table V-2
Flanges: U.S. producers' and importers' shares of U.S. commercial shipments by type of sale, 2015

Type of sale	U.S. producers	Importers		
		India	Italy	Spain
Long-term contracts	0.0	***	***	***
Annual contracts	0.0	***	***	***
Short-term contracts	1.7	***	***	***
Spot sales	98.3	***	***	***
Total	100.0	100.0	100.0	100.0

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

SALES TERMS AND DISCOUNTS

Four of six U.S. producers and eight of 12 responding importers typically quote prices on an f.o.b. basis. One producer and one importer reported quoting prices on both an f.o.b. and a delivered basis. Four of six producers offer quantity discounts, three offer total volume discounts, one offers a volume discount rebate, and one has no discount policy. In contrast, seven of responding `12 importers do not have a discount policy, four offer quantity discounts, two offer total volume discounts, and one offers rebates to some customers. The majority of producers and importers reported sales terms of net 30 days.

[5] Conference transcript, p. 86 (Bernobich and Coulas).

PRICE DATA

The Commission requested U.S. producers and importers to provide quarterly data for the total quantity and f.o.b. value of the following flange products shipped to unrelated U.S. customers during January 2013-March 2016.

Product 1.--3 inch, 150 class, Raised Face, Weld neck standard flange (3 150 RF WN STD)

Product 2.-- 4 inch, 150 class, Raised Face, Weld neck standard flange (4 150 RF WN STD)

Product 3.-- 6 inch, 150 class, Raised Face, Weld neck standard flange (6 150 RF WN STD)

Product 4.--16 inch, 150 class, Raised Face, Weld neck standard flange (16 150 RF WN STD)

Product 5.--6 inch, 150 class, Raised Face, Slip on standard flange (6 150 RF Slip on)

Product 6.--2 inch, 150 class, Raised Face, Threaded standard flange (2 150 RF THD)

Five U.S. producers and nine importers provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.[6] Pricing data reported by these firms accounted for approximately 7.0 percent of U.S. producers' shipments of flanges, 13.4 percent of U.S. commercial shipments of subject imports from India, 6.6 percent of U.S. commercial shipments of subject imports from Italy, and 7.1 percent of U.S. commercial shipments of subject imports from Spain in 2015.[7]

Price data for products 1-6 are presented in tables V-3 to V-8 and figures V-2 to V-7. Nonsubject country prices are presented in Appendix E.

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

[7] Over the period January 2013-March 2016, the coverage for these pricing products was 7.9 percent for the producers of flanges in the United States, 13.8 percent for importers of flanges from India, 7.7 percent for importers of flanges from Italy, and 8.0 percent for importers of flanges from Spain. Data do not include two quarters with very low quantities of ***.

Table V-3
Flanges: Weighted-average f.o.b. prices and quantities of domestic and imported product 1[1] and margins of underselling/(overselling), by quarter, January 2013-March 2016

Period	United States		India			Italy		
	Price *(dollars per flange)*	Quantity *(flanges)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*
2013: Jan.-Mar.	$14.41	78,549	$8.98	63,303	37.7	$***	***	***
Apr.-June	14.32	72,015	10.41	47,538	27.3	***	***	***
July-Sept.	14.52	69,190	9.20	51,423	36.7	***	***	***
Oct.-Dec.	14.42	63,757	8.86	29,457	38.5	***	***	***
2014: Jan.-Mar.	14.44	77,974	8.51	79,109	41.1	***	***	***
Apr.-June	14.19	92,488	9.54	50,465	32.8	***	***	***
July-Sept.	14.08	96,338	9.61	57,306	31.8	***	***	***
Oct.-Dec.	14.19	66,143	10.18	36,799	28.3	***	***	***
2015: Jan.-Mar.	14.03	47,559	9.24	51,863	34.2	***	***	***
Apr.-June	14.17	42,650	9.35	49,582	34.0	***	***	***
July-Sept.	14.07	39,474	9.34	31,651	33.6	***	***	***
Oct.-Dec.	14.16	29,382	8.54	29,500	39.7	***	***	***
2016: Jan.-Mar.	12.30	31,187	9.32	29,276	24.2	***	***	***

Period	United States		Spain		
	Price *(dollars per flange)*	Quantity *(flanges)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*
2013: Jan.-Mar.	$14.41	78,549	$***	***	***
Apr.-June	14.32	72,015	***	***	***
July-Sept.	14.52	69,190	***	***	***
Oct.-Dec.	14.42	63,757	***	***	***
2014: Jan.-Mar.	14.44	77,974	***	***	***
Apr.-June	14.19	92,488	***	***	***
July-Sept.	14.08	96,338	***	***	***
Oct.-Dec.	14.19	66,143	***	***	***
2015: Jan.-Mar.	14.03	47,559	***	***	***
Apr.-June	14.17	42,650	***	***	***
July-Sept.	14.07	39,474	***	***	***
Oct.-Dec.	14.16	29,382	***	***	***
2016: Jan.-Mar.	12.30	31,187	***	***	***

[1] Product 1: 3 inch, 150 class, Raised Face, Weld neck standard flange (3 150 RF WN STD).

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

Table V-4
Flanges: Weighted-average f.o.b. prices and quantities of domestic and imported product 2[1] and margins of underselling/(overselling), by quarter, January 2013-March 2016

Period	United States		India			Italy		
	Price *(dollars per flange)*	Quantity *(flanges)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*
2013: Jan.-Mar.	$17.72	82,303	$13.39	44,891	24.5	$***	***	***
Apr.-June	17.47	79,002	12.96	40,611	25.8	***	***	***
July-Sept.	17.57	98,998	12.31	58,644	29.9	***	***	***
Oct.-Dec.	17.81	73,574	12.79	37,629	28.2	***	***	***
2014: Jan.-Mar.	17.73	85,141	11.68	58,203	34.1	***	***	***
Apr.-June	17.67	100,003	11.80	48,226	33.2	***	***	***
July-Sept.	17.40	103,822	11.84	55,128	31.9	***	***	***
Oct.-Dec.	17.35	73,344	12.31	46,643	29.0	***	***	***
2015: Jan.-Mar.	17.28	51,430	11.96	55,417	30.8	***	***	***
Apr.-June	17.60	47,183	12.19	48,401	30.7	***	***	***
July-Sept.	17.43	48,641	12.30	29,072	29.4	***	***	***
Oct.-Dec.	17.49	37,037	10.43	29,431	40.3	***	***	***
2016: Jan.-Mar.	15.13	32,438	10.74	28,780	29.0	***	***	***

Period	United States		Spain		
	Price *(dollars per flange)*	Quantity *(flanges)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*
2013: Jan.-Mar.	$17.72	82,303	$***	***	***
Apr.-June	17.47	79,002	***	***	***
July-Sept.	17.57	98,998	***	***	***
Oct.-Dec.	17.81	73,574	***	***	***
2014: Jan.-Mar.	17.73	85,141	***	***	***
Apr.-June	17.67	100,003	***	***	***
July-Sept.	17.40	103,822	***	***	***
Oct.-Dec.	17.35	73,344	***	***	***
2015: Jan.-Mar.	17.28	51,430	***	***	***
Apr.-June	17.60	47,183	***	***	***
July-Sept.	17.43	48,641	***	***	***
Oct.-Dec.	17.49	37,037	***	***	***
2016: Jan.-Mar.	15.13	32,438	***	***	***

[1] Product 2: 4 inch, 150 class, Raised Face, Weld neck standard flange (4 150 RF WN STD).

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

Table V-5
Flanges: Weighted-average f.o.b. prices and quantities of domestic and imported product 3[1] and margins of underselling/(overselling), by quarter, January 2013-March 2016

Period	United States		India			Italy		
	Price *(dollars per flange)*	Quantity *(flanges)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*
2013: Jan.-Mar.	$26.51	39,904	$19.71	37,381	25.7	$***	***	***
Apr.-June	24.40	45,621	20.00	40,438	18.0	***	***	***
July-Sept.	24.81	43,498	19.61	25,341	21.0	***	***	***
Oct.-Dec.	26.16	38,294	18.63	27,484	28.8	***	***	***
2014: Jan.-Mar.	26.51	47,995	18.16	47,751	31.5	***	***	***
Apr.-June	26.31	48,446	18.10	38,656	31.2	***	***	***
July-Sept.	26.33	49,833	17.67	36,747	32.9	***	***	***
Oct.-Dec.	24.73	44,845	18.48	34,693	25.3	***	***	***
2015: Jan.-Mar.	25.63	30,957	18.12	37,481	29.3	***	***	***
Apr.-June	24.77	29,064	17.80	34,467	28.1	***	***	***
July-Sept.	24.25	26,723	16.83	24,129	30.6	***	***	***
Oct.-Dec.	26.35	18,304	15.87	24,782	39.8	***	***	***
2016: Jan.-Mar.	23.03	21,707	15.87	24,731	31.1	***	***	***

Period	United States		Spain		
	Price *(dollars per flange)*	Quantity *(flanges)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*
2013: Jan.-Mar.	$26.51	39,904	$***	***	***
Apr.-June	24.40	45,621	***	***	***
July-Sept.	24.81	43,498	***	***	***
Oct.-Dec.	26.16	38,294	***	***	***
2014: Jan.-Mar.	26.51	47,995	***	***	***
Apr.-June	26.31	48,446	***	***	***
July-Sept.	26.33	49,833	***	***	***
Oct.-Dec.	24.73	44,845	***	***	***
2015: Jan.-Mar.	25.63	30,957	***	***	***
Apr.-June	24.77	29,064	***	***	***
July-Sept.	24.25	26,723	***	***	***
Oct.-Dec.	26.35	18,304	***	***	***
2016: Jan.-Mar.	23.03	21,707	***	***	***

[1] Product 3: 6 inch, 150 class, Raised Face, Weld neck standard flange (6 150 RF WN STD).

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

Table V-6
Flanges: Weighted-average f.o.b. prices and quantities of domestic and imported product 4[1] and margins of underselling/(overselling), by quarter, January 2013-March 2016

Period	United States		India			Italy		
	Price *(dollars per flange)*	Quantity *(flanges)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*
2013: Jan.-Mar.	$235.30	1,633	$151.18	2,085	35.7	$***	***	***
Apr.-June	236.85	2,087	150.38	1,914	36.5	***	***	***
July-Sept.	236.79	1,517	168.51	1,395	28.8	***	***	***
Oct.-Dec.	234.83	1,553	150.71	1,548	35.8	***	***	***
2014: Jan.-Mar.	236.75	1,486	151.65	2,080	35.9	***	***	***
Apr.-June	234.95	1,521	163.39	1,719	30.5	***	***	***
July-Sept.	237.37	1,562	150.78	1,449	36.5	***	***	***
Oct.-Dec.	238.18	1,595	153.07	1,540	35.7	***	***	***
2015: Jan.-Mar.	235.85	1,411	167.65	1,312	28.9	***	***	***
Apr.-June	228.02	998	155.94	683	31.6	***	***	***
July-Sept.	215.61	1,042	150.62	1,174	30.1	***	***	***
Oct.-Dec.	236.59	955	143.44	549	39.4	***	***	***
2016: Jan.-Mar.	197.67	1,406	138.69	977	29.8	--	0	--

Period	United States		Spain		
	Price *(dollars per flange)*	Quantity *(flanges)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*
2013: Jan.-Mar.	$235.30	1,633	$***	***	***
Apr.-June	236.85	2,087	***	***	***
July-Sept.	236.79	1,517	***	***	***
Oct.-Dec.	234.83	1,553	***	***	***
2014: Jan.-Mar.	236.75	1,486	***	***	***
Apr.-June	234.95	1,521	***	***	***
July-Sept.	237.37	1,562	***	***	***
Oct.-Dec.	238.18	1,595	***	***	***
2015: Jan.-Mar.[2]	235.85	1,411	--	0	--
Apr.-June	228.02	998	***	***	***
July-Sept.	215.61	1,042	***	***	***
Oct.-Dec.	236.59	955	***	***	***
2016: Jan.-Mar.	197.67	1,406	***	***	***

[1] Product 4: 16 inch, 150 class, Raised Face, Weld neck standard flange (16 150 RF WN STD).
[2] ***.

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

Table V-7
Flanges: Weighted-average f.o.b. prices and quantities of domestic and imported product 5[1] and margins of underselling/(overselling), by quarter, January 2013-March 2016

Period	United States		India			Italy		
	Price *(dollars per flange)*	Quantity *(flanges)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*
2013: Jan.-Mar.	$23.34	19,327	$16.08	51,181	31.1	$***	***	***
Apr.-June	22.85	20,611	16.16	39,113	29.3	***	***	***
July-Sept.	23.33	18,362	15.37	34,165	34.1	***	***	***
Oct.-Dec.	23.36	14,092	15.37	31,904	34.2	***	***	***
2014: Jan.-Mar.	22.97	17,506	13.43	53,626	41.5	***	***	***
Apr.-June	22.95	19,668	13.81	53,806	39.8	***	***	***
July-Sept.	22.78	16,629	13.81	52,259	39.4	***	***	***
Oct.-Dec.	22.62	13,563	14.37	44,949	36.5	***	***	***
2015: Jan.-Mar.	23.08	12,720	14.90	33,604	35.4	***	***	***
Apr.-June	22.88	12,435	14.00	49,543	38.8	***	***	***
July-Sept.	22.91	11,471	13.54	35,155	40.9	***	***	***
Oct.-Dec.	23.04	10,276	13.33	23,486	42.1	***	***	***
2016: Jan.-Mar.	20.64	9,056	13.62	22,579	34.0	***	***	***

Period	United States		Spain		
	Price *(dollars per flange)*	Quantity *(flanges)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*
2013: Jan.-Mar.	$23.34	19,327	$***	***	***
Apr.-June	22.85	20,611	***	***	***
July-Sept.	23.33	18,362	***	***	***
Oct.-Dec.	23.36	14,092	***	***	***
2014: Jan.-Mar.	22.97	17,506	***	***	***
Apr.-June	22.95	19,668	***	***	***
July-Sept.	22.78	16,629	***	***	***
Oct.-Dec.	22.62	13,563	***	***	***
2015: Jan.-Mar.	23.08	12,720	***	***	***
Apr.-June	22.88	12,435	***	***	***
July-Sept.	22.91	11,471	***	***	***
Oct.-Dec.	23.04	10,276	***	***	***
2016: Jan.-Mar.	20.64	9,056	***	***	***

[1] Product 5: 6 inch, 150 class, Raised Face, Slip on standard flange (6 150 RF Slip on).

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

Table V-8
Flanges: Weighted-average f.o.b. prices and quantities of domestic and imported product 6[1] and margins of underselling/(overselling), by quarter, January 2013-March 2016

Period	United States		India			Italy		
	Price *(dollars per flange)*	Quantity *(flanges)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*
2013: Jan.-Mar.	$12.35	25,528	$9.88	17,112	20.0	$***	***	***
Apr.-June	12.17	24,285	9.16	18,823	24.8	***	***	***
July-Sept.	12.17	32,345	10.96	16,694	10.0	***	***	***
Oct.-Dec.	12.32	20,836	9.76	18,174	20.8	***	***	***
2014: Jan.-Mar.	12.36	22,815	8.73	16,226	29.4	***	***	***
Apr.-June	12.14	25,313	6.60	24,949	45.7	***	***	***
July-Sept.	12.06	28,066	7.42	22,645	38.4	***	***	***
Oct.-Dec.	12.09	25,125	7.04	18,010	41.8	***	***	***
2015: Jan.-Mar.	11.94	19,501	7.32	18,188	38.7	***	***	***
Apr.-June	11.99	13,729	8.15	9,647	32.1	***	***	***
July-Sept.	12.02	17,545	6.41	13,918	46.7	***	***	***
Oct.-Dec.	11.95	14,984	6.61	11,173	44.7	***	***	***
2016: Jan.-Mar.	10.85	12,201	6.80	13,705	37.3	***	***	***

Period	United States		Spain		
	Price *(dollars per flange)*	Quantity *(flanges)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*
2013: Jan.-Mar.	$12.35	25,528	$***	***	***
Apr.-June	12.17	24,285	***	***	***
July-Sept.	12.17	32,345	***	***	***
Oct.-Dec.	12.32	20,836	***	***	***
2014: Jan.-Mar.	12.36	22,815	***	***	***
Apr.-June	12.14	25,313	***	***	***
July-Sept.	12.06	28,066	***	***	***
Oct.-Dec.	12.09	25,125	***	***	***
2015: Jan.-Mar.	11.94	19,501	***	***	***
Apr.-June	11.99	13,729	***	***	***
July-Sept.	12.02	17,545	***	***	***
Oct.-Dec.	11.95	14,984	***	***	***
2016: Jan.-Mar.	10.85	12,201	***	***	***

[1] Product 6: 2 inch, 150 class, Raised Face, Threaded standard flange (2 150 RF THD).

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

Figure V-2
Flanges: Weighted-average prices and quantities of domestic and imported product 1, by quarter, January 2013-March 2016

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Figure V-3
Flanges: Weighted-average prices and quantities of domestic and imported product 2, by quarter, January 2013-March 2016

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Figure V-4
Flanges: Weighted-average prices and quantities of domestic and imported product 3, by quarter, January 2013-March 2016

* * * * * * *

Figure V-5
Flanges: Weighted-average prices and quantities of domestic and imported product 4, by quarter, January 2013-March 2016

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Figure V-6
Flanges: Weighted-average prices and quantities of domestic and imported product 5, by quarter, January 2013-March 2016

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Figure V-7
Flanges: Weighted-average prices and quantities of domestic and imported product 6, by quarter, January 2013-March 2016

* * * * * * *

Price trends

Prices decreased during January 2013-March 2016 for all six products from the United States and all three subject countries except for prices of product 1 from India, which increased by 3.8 percent. Table V-9 summarizes the price trends, by country and by product. As shown in the table, U.S. price declines ranged from 11.6 to 16.0 percent while import price declines ranged from 8.3 to 31.1 percent for India, *** to *** percent for Italy, and *** to *** percent for Spain.

The majority of the U.S. price declines across all pricing products occurred primarily in the first quarter of 2016. In this quarter, prices fell by between 9.2 percent (product 6) and 16.4 percent (product 4). These six product-quarter changes were the largest of any price decreases in the period. Prior to this quarter, typical changes in U.S. prices for were very small, averaging

1.6 percent per quarter. Among the six domestically produced flange products, product 3 had the highest price variability (figure V-8). Boltex stated that it has reduced overall prices by 43 percent since February 2016.[8]

Table V-9
Flanges: Summary of weighted-average f.o.b. prices and price changes for products 1-6 from the United States and India, Italy, and Spain, January 2013-March 2016

Item	Number of quarters	Low price (per flange)	High price (per flange)	Change in price[1] (percent)
Product 1				
United States	13	$12.30	$14.52	(14.7)
India	13	8.51	10.41	3.8
Italy	13	***	***	***
Spain	13	***	***	***
Product 2				
United States	13	15.13	17.81	(14.6)
India	13	10.43	13.39	(19.7)
Italy	13	***	***	***
Spain	13	***	***	***
Product 3				
United States	13	23.03	26.51	(13.1)
India	13	15.87	20.00	(19.5)
Italy	13	***	***	***
Spain	13	***	***	***
Product 4				
United States	13	197.67	238.18	(16.0)
India	13	138.69	168.51	(8.3)
Italy	12	***	***	***
Spain	12	***	***	***
Product 5				
United States	13	20.64	23.36	(11.6)
India	13	13.33	16.16	(15.3)
Italy	13	***	***	***
Spain	13	***	***	***
Product 6				
United States	13	10.85	12.36	(12.2)
India	13	6.41	10.96	(31.1)
Italy	13	***	***	***
Spain	12	***	***	***

[1] Percentage change is calculated using data from the first quarter in which data were available in the first year to the last quarter in which data were available.

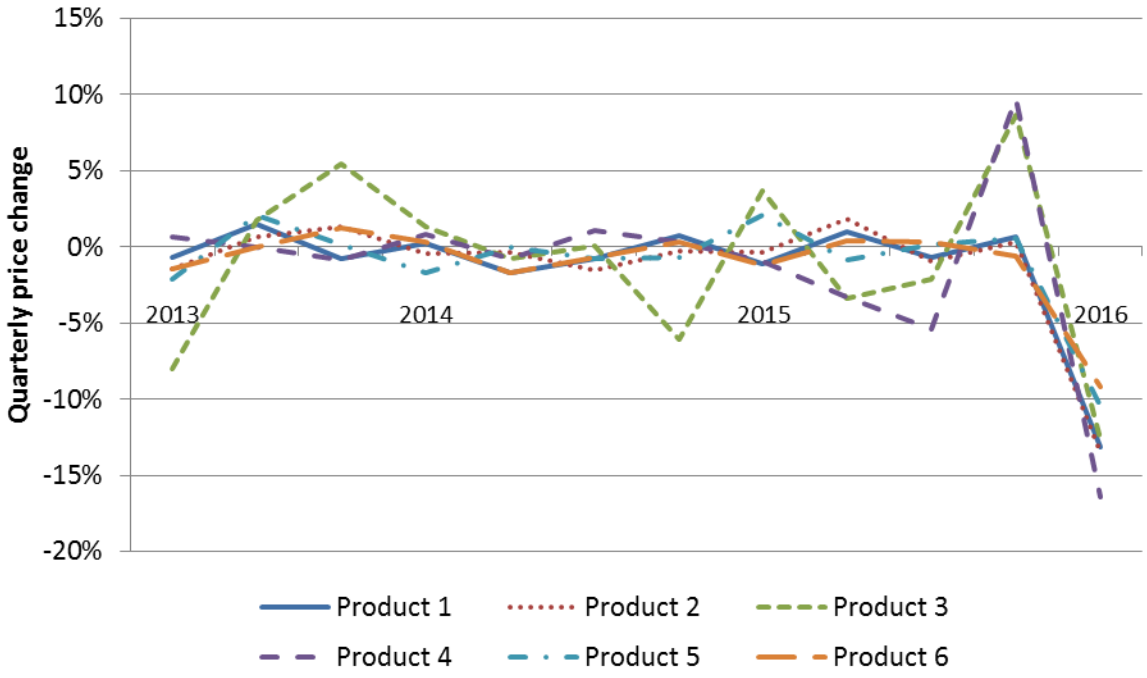
Source: Compiled from data submitted in response to Commission questionnaires.

Quarterly price changes for the six imported pricing products from all three subject countries were more variable than the domestic products. Average quarterly price variability for pricing products from India, Italy, and Spain were 6.1, 6.4, and 5.2 percent, respectively. Like the flanges from domestic producers, prices for imported flanges from Italy and Spain also

[8] Conference transcript, p. 35 (Bernobich).

decreased in the first quarter of 2016: *** percent across four pricing products from Italy and *** percent across six pricing products from Spain.[9] Prices of four of the products (1, 2, 5, and 6) from India increased in the first quarter of 2016, although prices of five of the products had decreased in each of the prior two quarters. Prices for flanges from Spain started decreasing in the second quarter of 2015 for all products except product 5. Across the last four quarters (starting with changes between the first and second quarters of 2015) and six pricing products, prices declined in 21 of the 24 quarters for Spain, in 16 of the 23 quarters for Italy, and in 14 of the 24 quarters for India.

Figure V-8
Flanges: Weighted-average f.o.b. quarterly price changes for products 1-6 from the United States, January-March 2013 to January-March 2016



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

Price comparisons

As shown in table V-10, prices for flanges imported from India, Italy, and Spain were below those for U.S.-produced product in all 78 instances for flanges from India (2.39 million pieces), all 77 instances for flanges from Italy (*** pieces), and 62 of 77 instances for flanges from Spain (*** pieces). Margins of underselling ranged from 10.0 to 46.7 percent for India, *** to *** percent for Italy, and *** to *** percent for Spain. In the remaining 15 instances for

[9] Product 6 from Italy increased in price by less than *** percent in the first quarter of 2016.

Spain (*** pieces), prices for flanges were *** to *** percent above prices for the domestic product. Average margins of underselling increased throughout the period for imported flanges from all three subject countries, although the average margins of underselling decreased with respect to India in the first quarter of 2016. For Spain, the only country which oversold the domestic product in any quarter, the number of quarters of overselling each year decreased over the period while at the same time Spain's average margin of overselling decreased.

Table V-10
Flanges: Instances, ranges, and average margins of underselling/(overselling), by country, January 2013-March 2016[1]

Country and Year	Number of quarters of underselling	Number of quarters of (overselling)	Margins of underselling			Margins of (overselling)		
			Average (percent)	*Range (percent)*		*Average (percent)*	*Range (percent)*	
				Min	*Max*		*Min*	*Max*
India:								
2013	24	0	28.2	10.0	37.7	--	--	--
2014	24	0	34.8	25.3	45.7	--	--	--
2015	24	0	35.4	28.1	46.7	--	--	--
2016	6	0	30.9	24.2	37.3	--	--	--
Total	78	0	32.6	10.0	46.7	--	--	--
Italy:								
2013	24	0	***	***	***	--	--	--
2014	24	0	***	***	***	--	--	--
2015	24	0	***	***	***	--	--	--
2016	5	0	***	***	***	--	--	--
Total	77	0	***	***	***	--	--	--
Spain:								
2013	17	7	***	***	***	***	***	***
2014	19	5	***	***	***	***	***	***
2015	20	3	***	***	***	***	***	***
2016	6	0	***	***	***	--	--	--
Total	62	15	***	***	***	***	***	***
Grand Total	217	15	22.9	0.0	46.7	(3.7)	(0.6)	(9.8)

[1] These data include only quarters in which there is a comparison between the U.S. and subject product.

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

LOST SALES AND LOST REVENUE

The Commission requested U.S. producers of flanges to report the names of purchasers where they experienced instances of lost sales or revenue due to competition from imports of flanges from India, Italy, and/or Spain since January 2013. All six responding U.S. producers reported that they had to reduce prices and that they had lost sales. No U.S. producer reported that they had to roll back announced price increases. Two U.S. producers (***) submitted lost sale and lost revenue allegations, and identified 40 firms where they lost sales and lost

revenue.[10] Both U.S. producers listed all three subject countries – India, Italy, and Spain – as the subject countries to which they had lost sales and revenue.

U.S. producers were also asked to provide information regarding the timing, method of sale, and product type related to the lost sales and lost revenue allegations. *** listed ***, and *** listed ***. The methods of sale listed by *** were "***" and the methods of sale listed by *** were "***" for all allegations. Regarding product type, *** listed "***" and *** listed "***" for all allegations.

Staff contacted 33 purchasers and received responses from seven.[11] Responding purchasers reported purchasing approximately 63.2 million pounds of flanges in 2015 (table V-11). During 2015, these purchasers bought 56.2 percent of their flanges from U.S. producers, 16.5 percent from subject countries (of which 76.4 percent from India, 11.6 percent from Italy, and 11.9 percent from Spain), 3.6 percent from nonsubject countries, and 23.7 percent from unknown sources. Of the responding purchasers, three reported decreasing purchases from domestic producers, one reported increasing purchases, two reported fluctuating purchases, and one did not purchase any domestic product.[12] The firm that reported an increase in purchases of domestic product reported that this was due to an increase in "customer demand or job activity." Explanations for decreasing purchases of domestic product included the following: "Price;" "Constant 2013-2014... 2015 decline in business and some market loss to import product;" and "Upstream and midstream end users primarily consumed domestic flanges but when the oil and gas market crashed they stopped buying and domestic flange manufacturer revenue was significantly reduced."

Table V-11
Flanges: Purchasers' responses to purchasing patterns

* * * * * * *

Of the seven responding purchasers, four reported that they had shifted purchases of flanges from U.S. producers to subject imports from India, two reported that they had shifted purchases to subject imports from Italy, and two reported that they had shifted purchases to subject imports from Spain since 2013. Two of the purchasers that shifted to imports from India reported that price was a primary reason for the shift, and one each of the purchasers that reported shifting to imports from Italy and Spain reported that price was a primary reason. The reported estimated quantity of purchases shifted to imports from India was *** pounds (table V-12). Other reasons reported for shifting purchases were that "business had already shifted to imports prior to 2013" (***), and that the imported flanges originated from unknown sources (***). *** added, however, that "{t}he flanges are priced less."

[10] The responding U.S. producers alleged both lost sales and lost revenues for all 40 firms listed.

[11] Staff had either incorrect or insufficient information to contact seven of the 40 purchasers.

[12] No firms reported no change in their purchases of domestic product. Of the seven responding purchasers, three purchasers indicated purchasing from unknown sources. One purchaser, ***, indicated that it did not know the source of the imported product that it purchased.

Table V-12
Flanges: Purchasers' responses to shifting supply sources

* * * * * * *

Of the seven responding purchasers, two reported that U.S. producers had reduced prices in order to compete with lower-priced imports from each of the subject countries; one reported that U.S. producers had not reduced prices in order to compete with these lower-priced imports; and three reported that they did not know whether domestic producers had reduced prices to compete (table V-13). The reported estimated price reductions ranged from *** to *** percent. In describing the price reductions, *** reported that "{the} Initial reduction was in February 2016" with an "additional drop in June 2016," and *** reported that "***."

Table V-13
Flanges: Purchasers' responses to U.S. producer price reductions

* * * * * * *

In responding to the lost sales lost revenue survey, some purchasers provided additional information on purchases and market dynamics. *** reported that "{t}here are many domestic 'manufacturers' that bring in minimally machined flanges and {resell} as 'domestic' product which clouds the data." *** reported that "{it} bought India{n} flanges for all of 2013, 2014, and 2015 primarily due to pricing." *** reported that "{t}he major midstream and upstream customers traditionally supported material from domestic flange suppliers. This accounted for a large part of the domestic producers' revenue. Downstream markets turned to international material 25 years ago so imports have served that portion of the market for many years. During this downturn in oil and gas, the domestic flange producers were hit hard with volume falling as much as 60 to 70 percent. This was largely due to reduced activity in the oil field." *** reported that it "was made aware at a meeting in the Spring of 2016 that ***. They still are not competitive with the imports."

PART VI: FINANCIAL EXPERIENCE OF U.S. PRODUCERS

BACKGROUND

The U.S. industry's financial results on flanges presented in this section of the report reflect the following U.S. producers: Ameriforge, Boltex, Federal Flange, Galperti, Piping Products, and Weldbend.[1] Combined and for the period as a whole, the three largest producers, *** account for *** percent of the U.S. industry's total quantity of sales. The remaining U.S. producers accounted for between *** percent (***) and *** percent (***).

While there were no plant closures during January 2013-March 2016, U.S. producers reported reductions in output and labor. One U.S. producer, ***, also reported that it was unable to utilize recently-purchased equipment due to market conditions. ***.[2]

OPERATIONS ON FLANGES

Income-and-loss data for the U.S. producers' flanges operations are presented in table VI-1. Table VI-2 presents a variance analysis of these financial results.[3] Table VI-3 presents company-specific financial results information.

---

[1] ***. USITC auditor preliminary-phase notes. With regard to U.S. producers whose financial results are presented in this section of the report, the majority reported their financial results for calendar-year periods and on the basis of generally accepted accounting principles (GAAP). ***, however, reported their financial results for fiscal years ending September 30 and October 31, respectively. ***. Petitioners' postconference brief (Exhibit 14), p. 1.

[2] July 19, 2016 e-mail with attachment from *** to USITC auditor.

[3] The Commission's variance analysis is calculated in three parts: sales variance, cost of goods sold (COGS) variance, and SG&A expenses variance. Each part consists of a price variance (in the case of the sales variance) or a cost or expense variance (in the case of the COGS and SG&A expenses variance), and a volume variance. The sales or cost/expense variance is calculated as the change in unit price or per-unit cost/expense times the new volume, while the volume variance is calculated as the change in volume times the old unit price or per-unit cost/expense. As summarized at the bottom of table VI-2, the price variance is from sales, the cost/expense variance is the sum of those items from the COGS and SG&A variances, respectively, and the volume variance is the sum of the volume components of the net sales, COGS, and SG&A expenses variances. With regard to their finished flange sales, U.S. industry witnesses at the Commission's staff conference stated that product mix did not change notably during the period. Conference transcript, p. 87 (Bernobich, Coulas). ***. In general, the utility of the Commission's variance analysis is enhanced when product mix remains the same throughout the period. To the extent that the variance analysis also relies on unitized revenue and cost information, issues related to the calculation of average revenue and cost values should be noted (see note 1 to table VI-3).

Table VI-1
Flanges: Results of operations of U.S. producers, 2013-15, January-March 2015, and January-March 2016

Item	Fiscal year			January to March	
	2013	2014	2015	2015	2016
	Quantity (1,000 pounds)				
Total net sales	151,764	152,512	106,079	31,932	20,393
	Value (1,000 dollars)				
Total net sales	239,205	236,786	164,791	48,095	29,600
Cost of goods sold.-- Raw materials	129,862	130,694	93,285	25,735	16,023
Direct labor	19,841	21,037	16,689	4,305	3,668
Other factory costs	25,641	27,098	22,347	5,387	4,495
Total COGS	175,344	178,829	132,321	35,427	24,186
Gross profit	63,861	57,957	32,470	12,668	5,414
SG&A expense	33,061	32,371	24,876	6,332	4,840
Operating income or (loss)	30,800	25,586	7,594	6,336	574
Interest expense	7,515	1,479	1,117	344	162
All other expenses	12,131	1,693	1,105	429	332
All other income	14,409	971	1,017	419	145
Other expense or (income), net	5,237	2,201	1,205	354	349
Net income or (loss)	25,563	23,385	6,389	5,982	225
Depreciation/amortization	12,719	9,332	8,390	2,273	2,066
Cash flow	38,282	32,717	14,779	8,255	2,291
	Ratio to net sales (percent)				
Cost of goods sold.-- Raw materials	54.3	55.2	56.6	53.5	54.1
Direct labor	8.3	8.9	10.1	9.0	12.4
Other factory costs	10.7	11.4	13.6	11.2	15.2
Average COGS	73.3	75.5	80.3	73.7	81.7
Gross profit	26.7	24.5	19.7	26.3	18.3
SG&A expense	13.8	13.7	15.1	13.2	16.4
Operating income or (loss)	12.9	10.8	4.6	13.2	1.9
Net income or (loss)	10.7	9.9	3.9	12.4	0.8

Table continued on next page.

Table VI-1--Continued
Flanges: Results of operations of U.S. producers, 2013-15, January-March 2015, and January-March 2016

Item	Calendar year			January to March	
	2013	2014	2015	2015	2016
	Ratio to total COGS (percent)				
Cost of goods sold.-- Raw materials	74.1	73.1	70.5	72.6	66.2
Direct labor	11.3	11.8	12.6	12.2	15.2
Other factory costs	14.6	15.2	16.9	15.2	18.6
Average COGS	100.0	100.0	100.0	100.0	100.0
	Unit value (dollars per 1,000 pounds)				
Total net sales	1,576	1,553	1,553	1,506	1,451
Cost of goods sold.-- Raw materials	856	857	879	806	786
Direct labor	131	138	157	135	180
Other factory costs	169	178	211	169	220
Average COGS	1,155	1,173	1,247	1,109	1,186
Gross profit	421	380	306	397	265
SG&A expense	218	212	235	198	237
Operating income or (loss)	203	168	72	198	28
Net income or (loss)	168	153	60	187	11
	Number of firms reporting				
Operating losses	2	2	3	2	3
Net losses	2	2	3	2	3
Data	6	6	6	6	6

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

The tabulation below shows changes in average unit values based on the financial results presented in table VI-1.

Changes in unit value	2013-15	2013-14	2014-15	Jan.-March 2015-16
	Unit value (dollars per 1,000 pounds)			
Total net sales	(23)	(24)	1	(55)
Cost of goods sold.-- Raw materials	24	1	22	(20)
Direct labor	27	7	19	45
Other factory costs	42	9	33	52
Average COGS	92	17	75	77
Gross profit	(115)	(41)	(74)	(131)
SG&A expense	17	(6)	22	39
Operating income or (loss)	(131)	(35)	(96)	(170)
Net income or (loss)	(108)	(15)	(93)	(176)

Source: Calculated from the data in table VI-1.

Table VI-2
Flanges: Variance analysis of financial results of U.S. producers, 2013-15, January-March 2015, January-March 2016

Item	Between fiscal years			Between partial year period
	2013-15	2013-14	2014-15	2015-16
Net sales:				
Price variance	(2,407)	(3,598)	96	(1,115)
Volume variance	(72,007)	1,179	(72,091)	(17,380)
Net sales variance	(74,414)	(2,419)	(71,995)	(18,495)
COGS:				
Price variance	(9,760)	(2,621)	(7,937)	(1,561)
Volume variance	52,783	(864)	54,445	12,802
COGS variance	43,023	(3,485)	46,508	11,241
Gross profit variance	(31,391)	(5,904)	(25,487)	(7,254)
SG&A expenses:				
Cost/expense variance	(1,767)	853	(2,361)	(796)
Volume variance	9,952	(163)	9,856	2,288
Total SG&A expense variance	8,185	690	7,495	1,492
Operating income variance	(23,206)	(5,214)	(17,992)	(5,762)
Summarized as:				
Price variance	(2,407)	(3,598)	96	(1,115)
Net cost/expense variance	(11,527)	(1,768)	(10,298)	(2,357)
Net volume variance	(9,272)	152	(7,790)	(2,290)

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

Table VI-3
Flanges: Results of commercial operations of U.S. producers, by firm, 2013-15, January-March 2015, and January-March 2016

* * * * * * *

Revenue

Table VI-1 shows that the U.S. industry's revenue, almost entirely commercial sales, declined in value terms throughout the period with the most substantial decline occurring in 2015.[4] As indicated in the revenue section of the variance analysis (table VI-2), the decline in revenue was driven by negative price variances (2013-14) and negative volume variances (2014-15, interim 2015-16). With regard to the pattern of company-specific average sales value, table VI-3 shows that U.S. producers were mixed during the full year period whereas they all reported lower average sales values in interim 2016 compared to interim 2015. While the

[4] Because finished flanges revenue primarily reflects commercial sales, the tables in this section of the report present a single revenue line item. ***.

company-specific directional pattern of sales volume was more uniform during the full-year period, particularly in 2015 when most U.S. producers reported sharp declines, all U.S. producers reported lower sales volume in interim 2016 compared to interim 2015.

Cost of goods sold

As noted in Part I of this report, finished carbon steel flanges are produced in an integrated process from carbon steel billets, as well as from purchased flange forgings. As shown in table VI-3 and consistent with *** generally reported the lowest average raw material costs.[5] [6] In contrast, the other U.S. producers, whose primary raw material input is flange forgings, generally reported higher average raw material costs.[7]

As shown in table VI-1, overall raw material cost, as a share of total COGS, declined somewhat during the full-year period and then was notably lower in interim 2016. To the extent that average raw material cost increased to its highest level in 2015, its lower share of COGS in that year was largely a function of higher conversion costs (direct labor and other factory costs). In contrast, the lower interim 2016 raw material cost share reflects a combination of lower average raw material cost and higher average conversion costs. Table VI-3 shows that the directional pattern of company-specific average raw material costs was mixed.[8]

At the Commission's staff conference, petitioners observed that fixed costs represent a relatively large share of total COGS, which requires U.S. producers to maintain production and sales volume in order to avoid underutilized capacity and higher average costs.[9] Making a related point, a Weldbend company official stated that finished flange production facilities are highly capital intensive and require significant investment to maintain.[10] On an average basis and as a share of COGS, increases in conversion costs (direct labor and other factory costs) corresponded directionally with declining sales volume.

---

[5] ***. Petitioners' postconference brief (Exhibit 13), p. 2. The Commission's practice requires that relevant cost information associated with inputs purchased from related suppliers correspond to the manner in which this information is reported in the U.S. producer's own accounting books and records. See *1,1,1,2-Tetrafluoroethane from China, Inv. Nos. 701-TA-509 and 731-TA-1244 (Final)*, USITC Publication 4503, December 2014, pp. 23 and 37.

[6] ***.

[7] ***. *** U.S. producer questionnaire response to III-6.

[8] The patterns reported by *** suggest that their raw material costs were reported broadly and likely include some level of associated conversion costs (see table VI-3 (note 2)).

[9] Conference transcript, p. 16 (McConkey). All things being equal, average cost would increase as capacity utilization and corresponding fixed cost absorption declines. With respect to 2015 total operating costs, Boltex reported that *** percent are variable and *** percent are fixed. Weldbend reported that *** percent of its 2015 costs are variable and *** percent are fixed. Petitioners' postconference brief (Exhibit 6), p. 5.

[10] Conference transcript, p. 28 (Coulas).

Gross profit

The U.S. industry's gross profit on an absolute basis and as a share of sales declined throughout the period. When considered on an average unit basis (see tabulation below table VI-1), lower gross profit reflects increases in average COGS which were amplified by corresponding declines in average sales value (full-year 2013-14, interim 2015-16).[11]

As noted in the *Cost of goods sold* section, average raw material cost (carbon steel billets and flange forgings) increased during the full-year period and then was lower in interim 2016 compared to interim 2015. Average COGS was impacted to a greater extent, however, by conversion costs (direct labor and other factory costs), which increased on an average basis throughout the period.

While company-specific gross profit ratios fell within a relatively wide range (see table VI-3), the directional pattern reflects declines for most producers throughout the period. The directional pattern of absolute gross profit was also negative for most U.S. producers.

SG&A expenses and operating income or loss

Table VI-1 shows that the U.S. industry's total SG&A expenses declined throughout the period, most notably in 2015.[12] Corresponding SG&A expense ratios (total SG&A expenses divided by revenue) were about the same in 2014 as it was in 2013, then increased somewhat in 2015 in conjunction with lower revenue, and reached its highest level in interim 2016 due to sharply lower revenue compared to interim 2015.

As shown in table VI-3 and while the directional pattern was generally negative, the company-specific pattern of operating results ranged considerably with *** reporting operating losses of varying magnitudes in each full and partial year. In contrast, *** reported operating income, albeit declining, in each full and partial year.[13]

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[11] At the staff conference, the decline in prices was linked to the need to reduce prices in order to maintain sales volume. Conference transcript, p. 16 (McConkey). As shown in table VI-1, the directional correspondence of average sales value and average raw material cost was most pronounced at the end of the period. With regard to the pattern of the U.S. industry's average raw material cost, it should be noted that it reflects, to some extent, changes in the relative share of overall finished flange operations accounted for by specific companies; e.g., ***.

[12] *** accounted for the majority of the overall decline in the U.S. industry's SG&A expenses in 2015. ***. Petitioners' postconference brief (Exhibit 13), p. 2. ***. Petitioners' postconference brief (Exhibit 14), p. 2. ***. Ibid. Among the three large volume producers, *** SG&A expense ratios which also consistently exceeded corresponding gross profit ratios.

[13] ***. July 19, 2016 e-mail with attachment from *** to USITC auditor.

***. Petitioners' postconference brief (Exhibit 14), p. 1.

***. Petitioners' postconference brief (Exhibit 13), p. 2.

***. July 22, 2016 e-mail from *** to USITC auditor.

Interest expense, other expenses, and net income or loss

The majority of U.S. producers reported some level of interest expense during the period with the exceptions being ***. As shown in table VI-1, the higher level of interest expense in 2013, and subsequent decline, is primarily attributable to *** which also accounted for the higher level of all other expenses (***) and all other income (***) in that year.[14] After 2013, the difference between the U.S. industry's operating income and net income narrowed due to declining interest expense and net all other expenses.

CAPITAL EXPENDITURES AND RESEARCH AND DEVELOPMENT EXPENSES

Table VI-4 presents capital expenditures and research and development (R&D) expenses related to U.S. producers' operations on finished flanges. As shown in table VI-4, *** reported R&D expenses related to their finished flange operations.

Table VI-4
Flanges: U.S. producers' capital expenditures and research and development (R&D) expenses, 2013-15, January-March 2015, and January-March 2016

Item	Fiscal year			January to March	
	2013	2014	2015	2015	2016
	Capital expenditures (1,000 dollars)				
Ameriforge	***	***	***	***	***
Boltex	***	***	***	***	***
Federal Flange	***	***	***	***	***
Galperti	***	***	***	***	***
Piping Products	***	***	***	***	***
Weldbend	***	***	***	***	***
Total capital expenditures	10,167	13,526	25,943	12,897	1,532
	Research and development expenses (1,000 dollars)				
Ameriforge	***	***	***	***	***
Boltex	***	***	***	***	***
Federal Flange	***	***	***	***	***
Galperti	***	***	***	***	***
Piping Products	***	***	***	***	***
Weldbend	***	***	***	***	***
Total R&D expenses	***	***	***	***	***

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

The majority of U.S. producers reported capital expenditures during the period with *** accounting for the largest share (*** percent).[15] ***, respectively, followed by ***.[16] As shown in table VI-4, *** reported no capital expenditures.

[14] ***. July 19, 2016 e-mail with attachment from *** to USITC auditor.

[15] ***. Petitioners' postconference brief (Exhibit 13), p. 3.

ASSETS AND RETURN ON INVESTMENT

Table VI-5 presents data on the U.S. producers' flanges-related total assets, asset turnover (sales divided by total assets), and return on assets.[17]

Table VI-5
Flanges: U.S. producers' total assets, asset turnover, and return on assets, 2013-15, January-March 2015, and January-March 2016

Firm	Fiscal years		
	2013	2014	2015
	Total net assets (1,000 dollars)		
Ameriforge	***	***	***
Boltex	***	***	***
Federal Flange	***	***	***
Galperti	***	***	***
Piping Products	***	***	***
Weldbend[1]	***	***	***
Total net assets	163,983	162,552	177,800
	Asset turnover ratio (multiple)		
Ameriforge	***	***	***
Boltex	***	***	***
Federal Flange	***	***	***
Galperti	***	***	***
Piping Products	***	***	***
Weldbend[1]	***	***	***
Average asset turnover	1.5	1.5	0.9

Table continued on next page.

(…*continued*)

[16] ***. *** U.S. producer questionnaire response to III-13 (note 1). ***. July 22, 2016 e-mail from *** to USITC auditor.

***. *** U.S. producer questionnaire response to III-13 (note 1).

***. *** U.S. producer questionnaire response to III-13 (note 1).

***. July 20, 2016 e-mail with attachment from *** to USITC auditor.

[17] Staff notes that a total asset value (i.e., the bottom line value on the asset side of a company's balance sheet) reflects an aggregation of a number of assets which in many instances are not product specific. Accordingly, high-level allocation factors presumably were required in order to report a total asset value specific to finished flange operations. As such, it should be noted that the pattern of asset values reported can reflect changes in underlying asset account balances, as well as period-to-period variations in relevant allocation factors. The ability of U.S. producers to assign total asset values to discrete product lines affects the meaningfulness of calculated asset turnover and corresponding return on investment; i.e., asset turnover ratio multiplied by corresponding profit ratio. See also table VI-5 (note 1).

Table VI-5--Continued
Flanges: U.S. producers' total assets, asset turnover, and return on assets, 2013-15, January-March 2015, and January-March 2016

Firm	Fiscal years		
	2013	2014	2015
	Operating return on assets (percent)		
Ameriforge	***	***	***
Boltex	***	***	***
Federal Flange	***	***	***
Galperti	***	***	***
Piping Products	***	***	***
Weldbend	***	***	***
Average operating return on assets	18.8	15.7	4.3

[1] ***. Petitioners' postconference brief (Exhibit 14), p. 2. ***.

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

CAPITAL AND INVESTMENT

The Commission requested the U.S. producers of flanges to describe any actual or potential negative effects on their return on investment or their growth, investment, ability to raise capital, existing development and production efforts (including efforts to develop a derivative or more advanced version of the product), or the scale of capital investments as a result of imports of flanges from India, Italy, or Spain. Table VI-6 tabulates the U.S. producers' responses regarding actual negative effects on investment, growth and development, as well as anticipated negative effects.[18] Table VI-7 presents U.S. producers' narrative responses regarding actual and anticipated negative effects on investment, growth and development.

[18] ***.

Table VI-6
Flanges: Negative effects of imports from subject sources on investment, growth, and development since January 1, 2013

Item	No	Yes
Negative effects of imports on investment:	2	5
Cancellation, postponement, or rejection of expansion projects		2
Denial or rejection or investment proposal		0
Reduction in the size of capital investments		2
Return on specific investments negatively impacted		2
Other		0
Does investment response differ by country?[1]	6	1
Negative effects of imports on growth and development:	2	5
Rejection of bank loans		0
Lowering of credit rating		0
Problem related to the issue of stocks or bonds		0
Ability to service debt		0
Other		5
Does growth and development response differ by country?[2]	6	1
Anticipated negative effects of imports	1	6
Does anticipated effect response differ by country?[3]	6	1

[1] Companies indicating that actual negative effects of imports on investment differed by country: ***.
[2] Companies indicating that actual negative effects of imports on growth and development differed by country: ***.
[3] Companies indicating that anticipated negative effects of imports differed by country: ***.

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

Table VI-7
Flanges: Narrative responses of U.S. producers regarding actual and anticipated negative effects of imports from subject sources on investment, growth, and development since January 1, 2013

* * * * * * *

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 alleged subsidies was 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.

THE INDUSTRY IN INDIA

The Commission issued foreign producers' or exporters' questionnaires to 36 firms identified in the petition as possible producers and/or exporters of flanges from India. Useable

[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."

responses to the Commission's questionnaire were received from 14 firms in India.[3] Table VII-1 presents summary data on responding producers in India by firm in 2015.

Bebitz Flanges Works is related to U.S. importer, Bebitz USA. The firm explained that ***.

Producers were asked to report any changes in operations since January 2013. Table VII-2 presents Indian producer responses. There was one reported plant opening and two reported expansions. Bebitz Flanges Works also noted that its "***."

Table VII-1

Flanges: Summary data on firms in India, 2015

Firm	Production (1,000 pounds)	Share of reported production (percent)	Exports to the United States (1,000 pounds)	Share of reported exports to the United States (percent)	Total shipments (1,000 pounds)	Share of firm's total shipments exported to the United States (percent)
Bebitz Flanges Works	***	***	***	***	***	***
CHW Forge	***	***	***	***	***	***
Echjay Forgings	***	***	***	***	***	***
Echjay Industries	***	***	***	***	***	***
Hindon Forge	***	***	***	***	***	***
JAI Auto	***	***	***	***	***	***
Norma (India)	***	***	***	***	***	***
R N Gupta	***	***	***	***	***	***
RD Forge	***	***	***	***	***	***
Steel Shape India	***	***	***	***	***	***
Tirupati Forge	***	***	***	***	***	***
Uma Shanker Khandelwal & Co.	***	***	***	***	***	***
USK Exports	***	***	***	***	***	***
Uma Shanker Khandelwal Forging	***	***	***	***	***	***
Total	143,143	100.0	99,379	100.0	142,737	69.6

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

Table VII-2

Flanges: Reported changes in operations for producers in India, since January 1, 2013

* * * * * * *

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

Table VII-3 presents information on the flange operations of the responding producers and exporters in India.

Table VII-3

Flanges: Data on subject industry in India, 2013-15, January to March 2015, and January to March 2016 and projection calendar years 2016 and 2017

Item	Actual experience					Projections	
	Calendar year			January to March		Calendar year	
	2013	2014	2015	2015	2016	2016	2017
	Quantity (1,000 pounds)						
Capacity	216,990	217,060	218,553	54,476	54,658	218,918	218,918
Production	141,399	165,010	143,143	51,026	24,853	100,491	132,975
End-of-period inventories	5,685	6,104	6,717	6,317	6,716	5,127	5,780
Shipments:							
Home market shipments:							
Internal consumption/ transfers	25,530	30,352	24,737	9,314	3,001	11,466	24,691
Commercial shipments	6,114	9,449	7,521	2,990	959	9,591	10,530
Subtotal, home market shipments	31,644	39,801	32,258	12,304	3,960	21,057	35,221
Export shipments to:							
United States	97,413	113,493	99,379	34,932	17,367	69,387	83,594
All other markets	10,132	11,164	11,100	3,488	3,486	11,476	13,291
Total exports	107,545	124,657	110,479	38,420	20,853	80,863	96,885
Total shipments	139,189	164,458	142,737	50,724	24,813	101,920	132,106
	Ratios and shares (percent)						
Capacity utilization	65.2	76.0	65.5	93.7	45.5	45.9	60.7
Inventories/production	4.0	3.7	4.7	3.1	6.8	5.1	4.3
Inventories/total shipments	4.1	3.7	4.7	3.1	6.8	5.0	4.4
Share of shipments:							
Home market shipments:							
Internal consumption/ transfers	18.3	18.5	17.3	18.4	12.1	11.3	18.7
Home market shipments	4.4	5.7	5.3	5.9	3.9	9.4	8.0
Subtotal, home market shipments	22.7	24.2	22.6	24.3	16.0	20.7	26.7
Export shipments to:							
United States	70.0	69.0	69.6	68.9	70.0	68.1	63.3
All other markets	7.3	6.8	7.8	6.9	14.0	11.3	10.1
Total exports	77.3	75.8	77.4	75.7	84.0	79.3	73.3
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.

Indian producers were asked to report constraints on their capacity to produce flanges. Firms reported the plant capacity, maintenance, raw material supply, unplanned electricity shutdowns, and market demand as the major constraints. In addition, RN Gupta also noted that ***.

All but one Indian producer reported production of other products on the same machinery as flanges. In addition, nine firms reported that it is able to switch production (capacity) between flanges and other products, using the same equipment and/or labor. However, most producers noted that product shifting would incur financial risks and additional costs and time to manufacture the dies and toolings required. Table VII-4 presents data on Indian producers' capacity and production of other products using the same equipment and machinery as subject flanges. Tables VII-5 presents data on India's top export markets.

Table VII-4

Flanges: Overall capacity and production on the same equipment as in-scope production for producers in India, 2013-15, January to March 2015, and January to March 2016

Item	Calendar year			January to March	
	2013	2014	2015	2015	2016
	Quantity (1,000 pounds)				
Overall capacity	355,269	357,385	355,610	132,486	136,626
Production:					
In-scope flanges	141,399	165,010	143,143	51,026	24,853
Tube/pipe fittings other flanges	19,529	22,982	20,203	5,279	5,744
All other products	65,679	73,554	62,297	17,251	15,013
Out-of-scope production	85,208	96,536	82,500	22,530	20,757
Total production on same machinery	226,607	261,546	225,643	73,556	45,610
	Ratios and shares (percent)				
Overall capacity utilization	63.8	73.2	63.5	55.5	33.4
Share of production:					
In-scope flanges	62.4	63.1	63.4	69.4	54.5
Tube/pipe fittings other flanges	8.6	8.8	9.0	7.2	12.6
All other products	29.0	28.1	27.6	23.5	32.9
Out-of-scope production	37.6	36.9	36.6	30.6	45.5
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.

Table VII-5

Flanges and fittings: India's exports by destination market, 2013-15

Item	Calendar year		
	2013	2014	2015
	Quantity (1,000 pounds)		
India's exports to the United States	150,938	178,679	151,305
India's exports to other major destination markets.-- Canada	17,495	13,581	19,239
Bahrain	192	458	2,488
Turkey	2,547	3,123	2,295
United Arab Emirates	5,950	4,736	1,789
United Kingdom	1,922	2,759	1,515
Germany	2,289	1,909	1,219
Australia	321	83	1,120
Netherlands	734	1,218	983
All other destination markets	19,320	20,366	11,139
Total India exports	201,709	226,912	193,093
	Value (1,000 dollars)		
India's exports to the United States	132,662	147,212	122,678
India's exports to other major destination markets.-- Canada	16,845	10,715	15,599
Bahrain	719	744	3,949
Turkey	2,303	2,909	2,040
United Arab Emirates	10,518	6,669	3,258
United Kingdom	2,714	3,013	2,049
Germany	3,433	2,334	1,801
Australia	433	75	1,710
Netherlands	723	1,327	1,063
All other destination markets	26,930	29,991	17,206
Total India exports	197,280	204,989	171,355

Table continued on next page.

Table VII-5--Continued

Flanges and fittings: India's exports by destination market, 2013-15

Item	Calendar year		
	2013	2014	2015
	Unit value (dollars per 1,000 pounds)		
India's exports to the United States	879	824	811
India's exports to other major destination markets.-- Canada	963	789	811
Bahrain	3,737	1,625	1,587
Turkey	904	931	889
United Arab Emirates	1,768	1,408	1,821
United Kingdom	1,412	1,092	1,353
Germany	1,500	1,222	1,478
Australia	1,351	895	1,527
Netherlands	986	1,089	1,082
All other destination markets	1,394	1,473	1,545
Total India exports	978	903	887
	Share of quantity (percent)		
India's exports to the United States	74.8	78.7	78.4
India's exports to other major destination markets.-- Canada	8.7	6.0	10.0
Bahrain	0.1	0.2	1.3
Turkey	1.3	1.4	1.2
United Arab Emirates	2.9	2.1	0.9
United Kingdom	1.0	1.2	0.8
Germany	1.1	0.8	0.6
Australia	0.2	0.0	0.6
Netherlands	0.4	0.5	0.5
All other destination markets	9.6	9.0	5.8
Total India exports	100.0	100.0	100.0

Source: Official exports statistics as reported by India in the Global Trade Atlas (GTA) database under HTS subheading 7307.91 ("Pipe Or Tube Fittings, Nesoi, Iron Or Nonstainless Steel Flanges"), accessed July 19, 2016.

THE INDUSTRY IN ITALY

The Commission issued foreign producers' or exporters' questionnaires to 26 firms identified in the petition as possible producers and/or exporters of flanges from Italy. Useable responses to the Commission's questionnaire were received from four firms in Italy.[4] Table VII-6 presents summary data on responding producers in Italy by firm in 2015.

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

Table VII-6

Flanges: Summary data on firms in Italy, 2015

Firm	Production (1,000 pounds)	Share of reported production (percent)	Exports to the United States (1,000 pounds)	Share of reported exports to the United States (percent)	Total shipments (1,000 pounds)	Share of firm's total shipments exported to the United States (percent)
Officine Santafede	***	***	***	***	***	***
Siderforgerossi Group	***	***	***	***	***	***
Officine Ambrogio Melesi	***	***	***	***	***	***
Metalfar Prodotti Industriali[1]	***	***	***	***	***	***
Total	***	***	***	***	***	***

[1] Metalfar Prodotti Industriali ***.

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

Producers were asked to report any changes in operations since January 2013. Table VII-7 presents Italian producer responses. There was one reported expansion and one consolidation.

Table VII-7

Flanges: Reported changes in operations for producers in Italy, since January 1, 2013

* * * * * * *

Table VII-8 presents information on the flange operations of the responding producers and exporters in Italy. Italian producers were asked to report constraints on their capacity to produce flanges. Firms reported down time related to production equipment (routine maintenance and unexpected breakdowns), as well as the product mix.

Table VII-8

Flanges: Data on subject industry in Italy, 2013-15, January to March 2015, and January to March 2016 and projection calendar years 2016 and 2017

* * * * * * *

All but one Italian producer reported production of other products on the same machinery as flanges. In addition, two firms reported that it is able to switch production (capacity) between flanges and other products, using the same equipment and/or labor. Table VII-9 presents data on Indian producers' capacity and production of other products using the same equipment and machinery as subject flanges. Tables VII-10 presents data on Italy's top export markets.

Table VII-9

Flanges: Overall capacity and production on the same equipment as in-scope production for producers in Italy, 2013-15, January to March 2015, and January to March 2016

* * * * * * *

Table VII-10

Flanges and fittings: Italy's exports by destination market, 2013-15

Item	Calendar year		
	2013	2014	2015
	Quantity (1,000 pounds)		
Italy's exports to the United States	44,325	50,111	44,332
Italy's exports to other major destination markets.--Germany	38,051	31,299	25,062
United Arab Emirates	31,577	22,098	21,350
Canada	12,699	18,322	14,682
Spain	10,378	8,621	10,304
France	11,500	10,643	9,244
Netherlands	11,780	12,242	9,080
United Kingdom	16,755	11,855	8,696
Turkey	5,731	5,128	7,227
All other destination markets	87,389	87,497	88,949
Total Italy exports	270,186	257,816	238,926
	Value (1,000 dollars)		
Italy's exports to the United States	52,378	52,365	44,176
Italy's exports to other major destination markets.--Germany	41,983	34,265	24,402
United Arab Emirates	60,998	47,892	33,379
Canada	17,586	18,813	15,245
Spain	15,434	11,105	12,132
France	19,961	15,978	12,497
Netherlands	27,906	34,989	19,479
United Kingdom	38,466	27,060	20,400
Turkey	10,296	9,435	9,683
All other destination markets	235,547	212,227	159,254
Total Italy exports	520,553	464,130	350,646

Table continued on next page.

Table VII-10--Continued

Flanges and fittings: Italy's exports by destination market, 2013-15

Item	Calendar year		
	2013	2014	2015
	Unit value (dollars per 1,000 pounds)		
Italy's exports to the United States	1,182	1,045	996
Italy's exports to other major destination markets.-- Germany	1,103	1,095	974
United Arab Emirates	1,932	2,167	1,563
Canada	1,385	1,027	1,038
Spain	1,487	1,288	1,177
France	1,736	1,501	1,352
Netherlands	2,369	2,858	2,145
United Kingdom	2,296	2,283	2,346
Turkey	1,796	1,840	1,340
All other destination markets	2,695	2,426	1,790
Total Italy exports	1,927	1,800	1,468
	Share of quantity (percent)		
Italy's exports to the United States	16.4	19.4	18.6
Italy's exports to other major destination markets.-- Germany	14.1	12.1	10.5
United Arab Emirates	11.7	8.6	8.9
Canada	4.7	7.1	6.1
Spain	3.8	3.3	4.3
France	4.3	4.1	3.9
Netherlands	4.4	4.7	3.8
United Kingdom	6.2	4.6	3.6
Turkey	2.1	2.0	3.0
All other destination markets	32.3	33.9	37.2
Total Italy exports	100.0	100.0	100.0

Source: Official exports statistics as reported by Italy in the Global Trade Atlas (GTA) database under HTS subheading 7307.91 ("Pipe Or Tube Fittings, Nesoi, Iron Or Nonstainless Steel Flanges"), accessed July 19, 2016.

THE INDUSTRY IN SPAIN

The Commission issued foreign producers' or exporters' questionnaires to six firms identified in the petition as possible producers and/or exporters of flanges from Spain. One questionnaire response was received from Aleaciones de Metales Sinterizados, S.A. ("AMES").[5] As discussed in Part I, AMES's exports of flanges to the U.S. represent only a very small percentage of total U.S. imports of flanges from Spain in 2015. AMES estimates that *** of its firm's total sales in its most recent fiscal year was represented by sales of flanges, and that ***.

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

All of AMES' production of flanges ***. In addition, the firm reported that ***. AMES ***. However, it ***.

According to AMES, the only constraint in its production of flanges is ***. AMES reported production of other *** on the same machinery as flanges. Table VII-11 presents data on AMES' capacity and production of flanges and other products using the same equipment and machinery as subject flanges. Table VII-12 presents data on Spain's top export markets.

Table VII-11

Flanges: Overall capacity and production on the same equipment as in-scope production for AMES of Spain, 2013-15, January to March 2015, and January to March 2016

* * * * * * *

Table VII-12

Flanges and fittings: Spain's exports by destination market, 2013-15

Item	Calendar year		
	2013	2014	2015
	Quantity (1,000 pounds)		
Spain's exports to the United States	22,934	16,894	28,760
Spain's exports to other major destination markets.-- Saudi Arabia	6,732	8,996	12,230
Canada	11,949	13,837	10,966
Netherlands	10,404	5,793	6,704
United Arab Emirates	10,809	6,605	4,857
United Kingdom	6,455	3,995	4,134
Brazil	6,694	5,533	3,575
Singapore	8,317	4,570	2,698
Portugal	872	1,183	2,661
All other destination markets	27,303	18,925	20,090
Total Spain exports	112,470	86,331	96,676
	Value (1,000 dollars)		
Spain's exports to the United States	29,564	21,602	28,052
Spain's exports to other major destination markets.-- Saudi Arabia	9,869	12,557	18,272
Canada	14,826	14,923	9,666
Netherlands	14,997	8,678	9,287
United Arab Emirates	13,459	7,951	6,114
United Kingdom	8,191	7,844	4,493
Brazil	9,549	8,121	4,442
Singapore	9,954	5,592	2,344
Portugal	1,009	4,248	2,451
All other destination markets	37,242	29,751	30,054
Total Spain exports	148,660	121,266	115,175

Table continued on next page.

Table VII-12--Continued

Flanges and fittings: Spain's exports by destination market, 2013-15

Item	Calendar year		
	2013	2014	2015
	Unit value (dollars per pound)		
Spain's exports to the United States	1.29	1.28	0.98
Spain's exports to other major destination markets.-- Saudi Arabia	1.47	1.40	1.49
Canada	1.24	1.08	0.88
Netherlands	1.44	1.50	1.39
United Arab Emirates	1.25	1.20	1.26
United Kingdom	1.27	1.96	1.09
Brazil	1.43	1.47	1.24
Singapore	1.20	1.22	0.87
Portugal	1.16	3.59	0.92
All other destination markets	1.36	1.57	1.50
Total Spain exports	1.32	1.40	1.19
	Share of quantity (percent)		
Spain's exports to the United States	20.4	19.6	29.7
Spain's exports to other major destination markets.-- Saudi Arabia	6.0	10.4	12.7
Canada	10.6	16.0	11.3
Netherlands	9.3	6.7	6.9
United Arab Emirates	9.6	7.7	5.0
United Kingdom	5.7	4.6	4.3
Brazil	6.0	6.4	3.7
Singapore	7.4	5.3	2.8
Portugal	0.8	1.4	2.8
All other destination markets	24.3	21.9	20.8
Total Spain exports	100.0	100.0	100.0

Source: Official exports statistics as reported by Spain in the Global Trade Atlas (GTA) database under HTS subheading 7307.91 (“Pipe Or Tube Fittings, Nesoi, Iron Or Nonstainless Steel Flanges”), accessed July 19, 2016.

THE INDUSTRIES IN THE SUBJECT COUNTRIES (COMBINED)

Table VII-13 presents information on the flange operations of the responding producers and exporters in all India, Italy, and Spain combined.

Table VII-13

Flanges: Data on all subject industries, 2013-15, January to March 2015, and January to March 2016 and projection calendar years 2016 and 2017

* * * * * * *

U.S. INVENTORIES OF IMPORTED MERCHANDISE

Table VII-14 presents data on U.S. importers’ reported inventories of flanges.

Table VII-14
Flanges: U.S. importers' end-of-period inventories of imports by source, 2013-15, January to March 2015, and January to March 2016

* * * * * * *

U.S. IMPORTERS' OUTSTANDING ORDERS

The Commission requested importers to indicate whether they imported or arranged for the importation of flanges after March 31, 2016. Nine responding importers reported that they arranged such shipments. Table VII-16 presents data reported by U.S. importers concerning their arranged imports of flanges.

Table VII-15
Flanges: Arranged imports, April 2016 through March 2017

Item	Period				
	Apr-Jun 2016	Jul-Sept 2016	Oct-Dec 2016	Jan-Mar 2017	Total
India	***	***	***	***	***
Italy	***	***	***	***	***
Spain	***	***	***	***	***
Subject sources	***	***	***	***	***
All other sources	***	***	***	***	***
Total U.S. imports	12,260	14,556	2,312	631	29,759

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

ANTIDUMPING OR COUNTERVAILING DUTY ORDERS IN THIRD-COUNTRY MARKETS

There are no known trade remedy actions on flanges in third-country markets.

INFORMATION ON NONSUBJECT COUNTRIES

Table VII-16 presents the ten largest exporting countries of steel pipe and tube fittings not elsewhere specified or indicated ("nesoi") and flanges. The value of total world exports of pipe and tube fittings decreased by 2.4 percent from 2013 to 2015. China accounted for the largest share (27.6 percent) of global exports in 2015, followed by Italy (17.5 percent), India (8.6 percent), and Korea (7.2 percent). Table VII-17 presents China's top export markets. In 2015, China's largest export destinations for these products included Korea (13 percent or $71 million), Japan (11 percent or $62 million), and the United States (10 percent or $53 million).

Table VII-16

Flanges and fittings: Global exports by exporter, 2013-15

Item	Calendar year		
	2013	2014	2015
	Value (1,000 dollars)		
United States	152,719	181,331	132,832
India	197,280	204,989	171,355
Italy	520,553	464,130	350,646
Spain	148,660	121,266	115,175
Subject to these investigations	1,019,212	971,715	770,008
All other major exporting countries.--China	652,877	656,144	552,568
Korea	230,362	219,563	143,537
Germany	165,621	157,436	121,214
United Kingdom	80,097	82,135	55,752
Japan	52,296	50,341	36,613
Netherlands	34,298	38,268	34,459
Singapore	46,821	42,507	34,321
Romania	33,221	34,527	25,748
Poland	28,566	32,415	23,788
Turkey	14,106	16,034	21,543
All other exporting countries.	288,061	323,533	183,725
Total global exports	2,645,537	2,624,619	2,003,276
	Share of value (percent)		
United States	5.8	6.9	6.6
India	7.5	7.8	8.6
Italy	19.7	17.7	17.5
Spain	5.6	4.6	5.7
Subject to these investigations	38.5	37.0	38.4
All other major exporting countries.--China	24.7	25.0	27.6
Korea	8.7	8.4	7.2
Germany	6.3	6.0	6.1
United Kingdom	3.0	3.1	2.8
Japan	2.0	1.9	1.8
Netherlands	1.3	1.5	1.7
Singapore	1.8	1.6	1.7
Romania	1.3	1.3	1.3
Poland	1.1	1.2	1.2
Turkey	0.5	0.6	1.1
All other exporting countries.	10.9	12.3	9.2
Total global exports	100.0	100.0	100.0

Source: Official exports statistics as reported by various national statistical authorities in the Global Trade Atlas (GTA) database under HTS subheading 7307.91 ("Pipe Or Tube Fittings, Nesoi, Iron Or Nonstainless Steel Flanges"), accessed July 19, 2016.

Table VII-17

Flanges and fittings: China's exports by destination market, 2013-15

Item	Calendar year		
	2013	2014	2015
	Quantity (1,000 pounds)		
China's exports to the United States	44,374	58,320	51,518
China's exports to other major destination markets.-- Korea	134,638	134,781	139,483
Japan	91,344	102,042	101,209
Germany	45,643	45,080	39,771
Italy	39,157	40,940	36,001
South Africa	33,618	30,209	30,977
Netherlands	27,979	33,219	28,090
Malaysia	31,853	35,705	27,143
Spain	19,476	19,191	24,971
All other destination markets	444,600	433,824	390,254
Total China exports	912,683	933,311	869,418
	Value (1,000 dollars)		
China's exports to the United States	47,260	64,286	52,927
China's exports to other major destination markets.-- Korea	83,339	77,347	71,009
Japan	65,933	68,033	61,782
Germany	38,305	37,762	29,590
Italy	24,814	25,998	20,163
South Africa	19,800	16,104	15,096
Netherlands	18,530	20,763	15,250
Malaysia	17,472	18,709	13,498
Spain	11,775	10,511	12,550
All other destination markets	325,650	316,631	260,703
Total China exports	652,877	656,144	552,568

Table continued on next page.

Table VII-17--Continued

Flanges and fittings: China's exports by destination market, 2013-15

Item	Calendar year		
	2013	2014	2015
	Unit value (dollars per 1,000 pounds)		
China's exports to the United States	1,065	1,102	1,027
China's exports to other major destination markets.-- Korea	619	574	509
Japan	722	667	610
Germany	839	838	744
Italy	634	635	560
South Africa	589	533	487
Netherlands	662	625	543
Malaysia	549	524	497
Spain	605	548	503
All other destination markets	732	730	668
Total China exports	715	703	636
	Share of quantity (percent)		
China's exports to the United States	4.9	6.2	5.9
China's exports to other major destination markets.-- Korea	14.8	14.4	16.0
Japan	10.0	10.9	11.6
Germany	5.0	4.8	4.6
Italy	4.3	4.4	4.1
South Africa	3.7	3.2	3.6
Netherlands	3.1	3.6	3.2
Malaysia	3.5	3.8	3.1
Spain	2.1	2.1	2.9
All other destination markets	48.7	46.5	44.9
Total China exports	100.0	100.0	100.0

Source: Official exports statistics as reported by China in the Global Trade Atlas (GTA) database under HTS subheading 7307.91 (“Pipe Or Tube Fittings, Nesoi, Iron Or Nonstainless Steel Flanges”), accessed July 19, 2016.

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
81 FR 44328 July 7, 2016	*Finished Carbon Steel Flanges From India, Italy, and Spain; Institution of Antidumping and Countervailing Duty Investigations and Scheduling of Preliminary Phase Investigations*	https://federalregister.gov/a/2016-16057
81 FR 49619 July 28, 2016	*Finished Carbon Steel Flanges From India, Italy, and Spain: Initiation of Less-Than-Fair-Value Investigations*	https://federalregister.gov/a/2016-17931
81 FR 49625 July 28, 2016	*Finished Carbon Steel Flanges From India: Initiation of Countervailing Duty Investigation*	https://federalregister.gov/a/2016-17929

APPENDIX B

CALENDAR OF THE PUBLIC STAFF CONFERENCE

CALENDAR OF PUBLIC PRELIMINARY CONFERENCE

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

Subject: Finished Carbon Steel Flanges from India, Italy, and Spain

Inv. Nos.: 701-TA-563 and 731-TA-1331-1333 (Preliminary)

Date and Time: July 21, 2016 - 9:30 a.m.

Sessions were held in connection with these preliminary investigations in the Main Hearing Room (Room 101), 500 E Street, S.W., Washington, DC.

EMBASSY APPEARANCE:

Embassy of India
Washington, DC

Sanjiv Tandon, First Secretary (Commerce)

OPENING REMARKS:

Petitioners (**Matthew J. McConkey**, Mayer Brown LLP)
Respondents (**Lizbeth R. Levinson**, Kutak Rock)

In Support of the Imposition of
Antidumping and Countervailing Duty Orders:

Mayer Brown LLP
Washington, DC
on behalf of

WeldBend Corporation
Boltex Mfg. Co., L.P.

James M. Coulas, Jr., President, Weldbend Corporation

Frank Bernobich, President, Boltex Mfg. Co., L.P.

In Support of the Imposition of
Antidumping and Countervailing Duty Orders (continued):

Jimmy Coulas, Sales Department Manager, Weldbend Corporation

Kevin Coulas, Vice President of Production, Weldbend Corporation

Mike Hammer, Assistant General Manager, Weldbend Corporation

Aldo Bernobich, Operations Manager, Boltex Mfg. Co., L.P.

Fabian P. Rivelis, Senior International Trade Advisor, Mayer Brown LLP

Dan Klett, Principal, Capital Trade, Inc.

Matthew J. McConkey)
) – OF COUNSEL
Simeon M. Kriesberg)

In Opposition to the Imposition of
Antidumping and Countervailing Duty Orders:

Grunfeld, Desiderio, Lebowitz, Silverman & Klestadt LLP
Washington, DC
on behalf of

Silbo Industries, Inc. ("Silbo")

Howard Jakob, Executive Vice President, Silbo

Alan Shalom, Executive Vice President, Silbo

Max F. Schutzman) – OF COUNSEL

In Opposition to the Imposition of
Antidumping and Countervailing Duty Orders (continued):

Kutak Rock
Washington, DC
on behalf of

Norma (India) Ltd.
RN Gupta & Co.
Bebitz Flanges Works Pvt. Ltd.
Bebitz U.S.A.

Gaurav Gupta, Director, RN Gupta & Co.

Sameer Khandelwar, Director, Norma (India) Ltd.

Lizbeth R. Levinson)
) – OF COUNSEL
Ronald M. Wisla)

REBUTTAL/CLOSING REMARKS:

Petitioners (**Matthew J. McConkey**, Mayer Brown LLP)
Respondents (**Max F. Schutzman**, Grunfeld, Desiderio, Lebowitz, Silverman & Klestadt LLP)

-END-

APPENDIX C

SUMMARY DATA

Table C-1
Flanges: Summary data concerning the U.S. market, 2013-15, January to March 2015, and January to March 2016
(Quantity=1,000 pounds; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per 1,000 pounds; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	Calendar year			January to March		Calendar year			Jan-March
	2013	2014	2015	2015	2016	2013-15	2013-14	2014-15	2015-16
U.S. consumption quantity:									
Amount	380,922	371,577	353,512	103,924	61,777	(7.2)	(2.5)	(4.9)	(40.6)
Producers' share (fn1)	39.8	41.2	28.3	30.2	32.2	(11.5)	1.4	(12.9)	1.9
Importers' share (fn1):									
India	35.2	32.9	42.1	42.8	34.5	6.8	(2.3)	9.1	(8.2)
Italy	5.5	7.1	8.8	7.9	12.2	3.3	1.6	1.7	4.3
Spain	5.7	4.1	7.4	6.4	7.5	1.8	(1.5)	3.3	1.1
Subject sources	46.4	44.2	58.3	57.1	54.3	11.9	(2.2)	14.1	(2.8)
All others sources	13.8	14.6	13.4	12.7	13.6	(0.4)	0.8	(1.3)	0.9
Total imports	60.2	58.8	71.7	69.8	67.8	11.5	(1.4)	12.9	(1.9)
U.S. consumption value:									
Amount	471,356	453,082	380,636	114,586	62,892	(19.2)	(3.9)	(16.0)	(45.1)
Producers' share (fn1)	50.0	51.9	41.3	41.8	46.1	(8.7)	1.9	(10.6)	4.4
Importers' share (fn1):									
India	21.5	18.3	25.8	27.3	19.3	4.3	(3.2)	7.5	(8.0)
Italy	6.0	7.5	9.3	8.4	11.9	3.3	1.5	1.7	3.4
Spain	6.2	4.7	7.6	6.4	6.9	1.4	(1.5)	2.9	0.5
Subject sources	33.7	30.6	42.6	42.2	38.1	8.9	(3.1)	12.1	(4.1)
All others sources	16.3	17.6	16.1	16.1	15.8	(0.3)	1.2	(1.5)	(0.3)
Total imports	50.0	48.1	58.7	58.2	53.9	8.7	(1.9)	10.6	(4.4)
U.S. shipments of imports from:									
India:									
Quantity	134,263	122,355	148,692	44,442	21,334	10.7	(8.9)	21.5	(52.0)
Value	101,400	83,090	98,213	31,278	12,111	(3.1)	(18.1)	18.2	(61.3)
Unit value	$755	$679	$661	$704	$568	(12.5)	(10.1)	(2.7)	(19.3)
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Italy:									
Quantity	20,909	26,333	31,101	8,211	7,561	48.7	25.9	18.1	(7.9)
Value	28,222	34,060	35,259	9,681	7,473	24.9	20.7	3.5	(22.8)
Unit value	$1,350	$1,293	$1,134	$1,179	$988	(16.0)	(4.2)	(12.4)	(16.2)
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Spain:									
Quantity	21,530	15,377	26,270	6,682	4,628	22.0	(28.6)	70.8	(30.7)
Value	29,175	21,280	28,788	7,346	4,360	(1.3)	(27.1)	35.3	(40.6)
Unit value	$1,355	$1,384	$1,096	$1,099	$942	(19.1)	2.1	(20.8)	(14.3)
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Subject sources:									
Quantity	176,702	164,064	206,063	59,335	33,522	16.6	(7.2)	25.6	(43.5)
Value	158,796	138,430	162,259	48,305	23,944	2.2	(12.8)	17.2	(50.4)
Unit value	$899	$844	$787	$814	$714	(12.4)	(6.1)	(6.7)	(12.3)
Ending inventory quantity	***	***	***	***	***	***	***	***	***
All other source:									
Quantity	52,683	54,422	47,304	13,166	8,392	(10.2)	3.3	(13.1)	(36.3)
Value	77,044	79,669	61,202	18,437	9,942	(20.6)	3.4	(23.2)	(46.1)
Unit value	$1,462	$1,464	$1,294	$1,400	$1,185	(11.5)	0.1	(11.6)	(15.4)
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Total imports:									
Quantity	229,385	218,486	253,367	72,501	41,914	10.5	(4.8)	16.0	(42.2)
Value	235,840	218,099	223,461	66,741	33,887	(5.2)	(7.5)	2.5	(49.2)
Unit value	$1,028	$998	$882	$921	$808	(14.2)	(2.9)	(11.6)	(12.2)
Ending inventory quantity	***	***	***	***	***	***	***	***	***
U.S. producers':									
Average capacity quantity	219,197	225,103	230,519	57,457	60,528	5.2	2.7	2.4	5.3
Production quantity	156,331	144,691	101,295	33,349	19,967	(35.2)	(7.4)	(30.0)	(40.1)
Capacity utilization (fn1)	71.3	64.3	43.9	58.0	33.0	(27.4)	(7.0)	(20.3)	(25.1)
U.S. shipments:									
Quantity	151,537	153,091	100,145	31,423	19,863	(33.9)	1.0	(34.6)	(36.8)
Value	235,516	234,983	157,175	47,845	29,005	(33.3)	(0.2)	(33.1)	(39.4)
Unit value	$1,554	$1,535	$1,569	$1,523	$1,460	1.0	(1.2)	2.3	(4.1)
Export shipments:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	60,451	50,542	50,628	52,189	50,528	(16.2)	(16.4)	0.2	(3.2)
Inventories/total shipments (fn1)	39.4	32.7	50.0	41.2	62.9	10.7	(6.7)	17.3	21.8
Production workers	414	414	365	401	303	(11.8)	0.0	(11.8)	(24.4)
Hours worked (1,000s)	1,063	1,043	892	240	186	(16.1)	(1.9)	(14.5)	(22.5)
Wages paid ($1,000)	20,148	21,190	18,129	4,690	3,735	(10.0)	5.2	(14.4)	(20.4)
Hourly wages (dollars)	$18.95	$20.32	$20.32	$19.54	$20.08	7.2	7.2	0.0	2.8
Productivity (pounds per hour)	147.1	138.7	113.6	139.0	107.3	(22.8)	(5.7)	(18.1)	(22.7)
Unit labor costs	$129	$146	$179	$141	$187	38.9	13.6	22.2	33.0
Net sales:									
Quantity	151,764	152,512	106,079	31,932	20,393	(30.1)	0.5	(30.4)	(36.1)
Value	239,205	236,786	164,791	48,095	29,600	(31.1)	(1.0)	(30.4)	(38.5)
Unit value	$1,576	$1,553	$1,553	$1,506	$1,451	(1.4)	(1.5)	0.1	(3.6)
Cost of goods sold (COGS)	175,344	178,829	132,321	35,427	24,186	(24.5)	2.0	(26.0)	(31.7)
Gross profit or (loss)	63,861	57,957	32,470	12,668	5,414	(49.2)	(9.2)	(44.0)	(57.3)
SG&A expenses	33,061	32,371	24,876	6,332	4,840	(24.8)	(2.1)	(23.2)	(23.6)
Operating income or (loss)	30,800	25,586	7,594	6,336	574	(75.3)	(16.9)	(70.3)	(90.9)
Net income or (loss)	25,563	23,385	6,389	5,982	225	(75.0)	(8.5)	(72.7)	(96.2)
Capital expenditures	10,167	13,526	25,943	12,897	1,532	155.2	33.0	91.8	(88.1)
Unit COGS	$1,155	$1,173	$1,247	$1,109	$1,186	8.0	1.5	6.4	6.9
Unit SG&A expenses	$218	$212	$235	$198	$237	7.6	(2.6)	10.5	19.7
Unit operating income or (loss)	$203	$168	$72	$198	$28	(64.7)	(17.3)	(57.3)	(85.8)
Unit net income or (loss)	$168	$153	$60	$187	$11	(64.2)	(9.0)	(60.7)	(94.1)
COGS/sales (fn1)	73.3	75.5	80.3	73.7	81.7	7.0	2.2	4.8	8.0
Operating income or (loss)/sales (fn1)	12.9	10.8	4.6	13.2	1.9	(8.3)	(2.1)	(6.2)	(11.2)
Net income or (loss)/sales (fn1)	10.7	9.9	3.9	12.4	0.8	(6.8)	(0.8)	(6.0)	(11.7)

Notes:

fn1.--Reported data are in percent and period changes are in percentage points.

APPENDIX D

APPROVED MANUFACTURER LISTS

Table D-1
Flanges: Select purchasers' approved manufacturers’ lists

* * * * * * *

APPENDIX E

NONSUBJECT COUNTRY PRICE DATA

One importer reported price data for China for products 1-6. Price data reported by this firm accounted for 0.01 percent of U.S. commercial shipments from nonsubject countries during January 2013-March 2016. These price items and accompanying data are comparable to those presented in tables V-3 to V-8. Price and quantity data for China are shown in tables E-1 to E-6 and in figures E-1 to E-6 (with domestic and subject sources).

In comparing nonsubject country pricing data with U.S. producer pricing data, prices for product imported from China were lower than prices for U.S.-produced product in all 26 instances. In comparing nonsubject country pricing data with subject country pricing data, prices for product imported from China were lower than prices for product imported from subject countries in 56 instances and higher in 22 instances. More specifically, prices of product from China were lower than those from Italy and Spain in the vast majority of comparisons, but higher than those from India, whether measured by observations or volume. A summary of price differentials is presented in table E-7.

Table E-1
Flanges: Weighted-average f.o.b. prices and quantities of domestic and imported product 1[1] and margins of underselling/(overselling), by quarter, January 2013-March 2016

Period	United States		India			Italy		
	Price *(dollars per flange)*	Quantity *(flanges)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*
2013: Jan.-Mar.	$14.41	78,549	$8.98	63,303	37.7	$***	***	***
Apr.-June	14.32	72,015	10.41	47,538	27.3	***	***	***
July-Sept.	14.52	69,190	9.20	51,423	36.7	***	***	***
Oct.-Dec.	14.42	63,757	8.86	29,457	38.5	***	***	***
2014: Jan.-Mar.	14.44	77,974	8.51	79,109	41.1	***	***	***
Apr.-June	14.19	92,488	9.54	50,465	32.8	***	***	***
July-Sept.	14.08	96,338	9.61	57,306	31.8	***	***	***
Oct.-Dec.	14.19	66,143	10.18	36,799	28.3	***	***	***
2015: Jan.-Mar.	14.03	47,559	9.24	51,863	34.2	***	***	***
Apr.-June	14.17	42,650	9.35	49,582	34.0	***	***	***
July-Sept.	14.07	39,474	9.34	31,651	33.6	***	***	***
Oct.-Dec.	14.16	29,382	8.54	29,500	39.7	***	***	***
2016: Jan.-Mar.	12.30	31,187	9.32	29,276	24.2	***	***	***

Period	United States		Spain			China	
	Price *(dollars per flange)*	Quantity *(flanges)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*	Price *(dollars per flange)*	Quantity *(flanges)*
2013: Jan.-Mar.	$14.41	78,549	$***	***	***	--	0
Apr.-June	14.32	72,015	***	***	***	--	0
July-Sept.	14.52	69,190	***	***	***	--	0
Oct.-Dec.	14.42	63,757	***	***	***	--	0
2014: Jan.-Mar.	14.44	77,974	***	***	***	--	0
Apr.-June	14.19	92,488	***	***	***	--	0
July-Sept.	14.08	96,338	***	***	***	$***	***
Oct.-Dec.	14.19	66,143	***	***	***	***	***
2015: Jan.-Mar.	14.03	47,559	***	***	***	***	***
Apr.-June	14.17	42,650	***	***	***	***	***
July-Sept.	14.07	39,474	***	***	***	--	0
Oct.-Dec.	14.16	29,382	***	***	***	--	0
2016: Jan.-Mar.-	12.30	31,187	***	***	***	--	0

[1] Product 1: 3 inch, 150 class, Raised Face, Weld neck standard flange (3 150 RF WN STD).

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

Table E-2
Flanges: Weighted-average f.o.b. prices and quantities of domestic and imported product 2[1] and margins of underselling/(overselling), by quarter, January 2013-March 2016

Period	United States		India			Italy		
	Price *(dollars per flange)*	Quantity *(flanges)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*
2013: Jan.-Mar.	$17.72	82,303	$13.39	44,891	24.5	$***	***	***
Apr.-June	17.47	79,002	12.96	40,611	25.8	***	***	***
July-Sept.	17.57	98,998	12.31	58,644	29.9	***	***	***
Oct.-Dec.	17.81	73,574	12.79	37,629	28.2	***	***	***
2014: Jan.-Mar.	17.73	85,141	11.68	58,203	34.1	***	***	***
Apr.-June	17.67	100,003	11.80	48,226	33.2	***	***	***
July-Sept.	17.40	103,822	11.84	55,128	31.9	***	***	***
Oct.-Dec.	17.35	73,344	12.31	46,643	29.0	***	***	***
2015: Jan.-Mar.	17.28	51,430	11.96	55,417	30.8	***	***	***
Apr.-June	17.60	47,183	12.19	48,401	30.7	***	***	***
July-Sept.	17.43	48,641	12.30	29,072	29.4	***	***	***
Oct.-Dec.	17.49	37,037	10.43	29,431	40.3	***	***	***
2016: Jan.-Mar.	15.13	32,438	10.74	28,780	29.0	***	***	***

Period	United States		Spain			China	
	Price *(dollars per flange)*	Quantity *(flanges)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*	Price *(dollars per flange)*	Quantity *(flanges)*
2013: Jan.-Mar.	$17.72	82,303	$***	***	***	--	0
Apr.-June	17.47	79,002	***	***	***	--	0
July-Sept.	17.57	98,998	***	***	***	--	0
Oct.-Dec.	17.81	73,574	***	***	***	--	0
2014: Jan.-Mar.	17.73	85,141	***	***	***	$***	***
Apr.-June	17.67	100,003	***	***	***	--	0
July-Sept.	17.40	103,822	***	***	***	***	***
Oct.-Dec.	17.35	73,344	***	***	***	--	0
2015: Jan.-Mar.	17.28	51,430	***	***	***	***	***
Apr.-June	17.60	47,183	***	***	***	--	0
July-Sept.	17.43	48,641	***	***	***	--	0
Oct.-Dec.	17.49	37,037	***	***	***	--	0
2016: Jan.-Mar.-	15.13	32,438	***	***	***	--	0

[1] Product 2: 4 inch, 150 class, Raised Face, Weld neck standard flange (4 150 RF WN STD).

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

Table E-3
Flanges: Weighted-average f.o.b. prices and quantities of domestic and imported product 3[1] and margins of underselling/(overselling), by quarter, January 2013-March 2016

Period	United States		India			Italy		
	Price *(dollars per flange)*	Quantity *(flanges)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*
2013: Jan.-Mar.	$26.51	39,904	$19.71	37,381	25.7	$***	***	***
Apr.-June	24.40	45,621	20.00	40,438	18.0	***	***	***
July-Sept.	24.81	43,498	19.61	25,341	21.0	***	***	***
Oct.-Dec.	26.16	38,294	18.63	27,484	28.8	***	***	***
2014: Jan.-Mar.	26.51	47,995	18.16	47,751	31.5	***	***	***
Apr.-June	26.31	48,446	18.10	38,656	31.2	***	***	***
July-Sept.	26.33	49,833	17.67	36,747	32.9	***	***	***
Oct.-Dec.	24.73	44,845	18.48	34,693	25.3	***	***	***
2015: Jan.-Mar.	25.63	30,957	18.12	37,481	29.3	***	***	***
Apr.-June	24.77	29,064	17.80	34,467	28.1	***	***	***
July-Sept.	24.25	26,723	16.83	24,129	30.6	***	***	***
Oct.-Dec.	26.35	18,304	15.87	24,782	39.8	***	***	***
2016: Jan.-Mar.	23.03	21,707	15.87	24,731	31.1	***	***	***

Period	United States		Spain			China	
	Price *(dollars per flange)*	Quantity *(flanges)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*	Price *(dollars per flange)*	Quantity *(flanges)*
2013: Jan.-Mar.	$26.51	39,904	$***	***	***	$***	***
Apr.-June	24.40	45,621	***	***	***	***	***
July-Sept.	24.81	43,498	***	***	***	***	***
Oct.-Dec.	26.16	38,294	***	***	***	--	0
2014: Jan.-Mar.	26.51	47,995	***	***	***	--	0
Apr.-June	26.31	48,446	***	***	***	--	0
July-Sept.	26.33	49,833	***	***	***	--	0
Oct.-Dec.	24.73	44,845	***	***	***	***	***
2015: Jan.-Mar.	25.63	30,957	***	***	***	--	0
Apr.-June	24.77	29,064	***	***	***	--	0
July-Sept.	24.25	26,723	***	***	***	--	0
Oct.-Dec.	26.35	18,304	***	***	***	--	0
2016: Jan.-Mar.-	23.03	21,707	***	***	***	--	0

[1] Product 3: 6 inch, 150 class, Raised Face, Weld neck standard flange (6 150 RF WN STD).

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

Table E-4
Flanges: Weighted-average f.o.b. prices and quantities of domestic and imported product 4[1] and margins of underselling/(overselling), by quarter, January 2013-March 2016

Period	United States		India			Italy		
	Price *(dollars per flange)*	Quantity *(flanges)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*
2013: Jan.-Mar.	$235.30	1,633	$151.18	2,085	35.7	$***	***	***
Apr.-June	236.85	2,087	150.38	1,914	36.5	***	***	***
July-Sept.	236.79	1,517	168.51	1,395	28.8	***	***	***
Oct.-Dec.	234.83	1,553	150.71	1,548	35.8	***	***	***
2014: Jan.-Mar.	236.75	1,486	151.65	2,080	35.9	***	***	***
Apr.-June	234.95	1,521	163.39	1,719	30.5	***	***	***
July-Sept.	237.37	1,562	150.78	1,449	36.5	***	***	***
Oct.-Dec.	238.18	1,595	153.07	1,540	35.7	***	***	***
2015: Jan.-Mar.	235.85	1,411	167.65	1,312	28.9	***	***	***
Apr.-June	228.02	998	155.94	683	31.6	***	***	***
July-Sept.	215.61	1,042	150.62	1,174	30.1	***	***	***
Oct.-Dec.	236.59	955	143.44	549	39.4	***	***	***
2016: Jan.-Mar.	197.67	1,406	138.69	977	29.8	--	0	--

Period	United States		Spain			China	
	Price *(dollars per flange)*	Quantity *(flanges)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*	Price *(dollars per flange)*	Quantity *(flanges)*
2013: Jan.-Mar.	$235.30	1,633	$***	***	***	$***	***
Apr.-June	236.85	2,087	***	***	***	***	***
July-Sept.	236.79	1,517	***	***	***	***	***
Oct.-Dec.	234.83	1,553	***	***	***	--	0
2014: Jan.-Mar.	236.75	1,486	***	***	***	--	0
Apr.-June	234.95	1,521	***	***	***	--	0
July-Sept.	237.37	1,562	***	***	***	--	0
Oct.-Dec.	238.18	1,595	***	***	***	--	0
2015: Jan.-Mar.	235.85	1,411	--	0	--	--	0
Apr.-June	228.02	998	***	***	***	--	0
July-Sept.	215.61	1,042	***	***	***	--	0
Oct.-Dec.	236.59	955	***	***	***	--	0
2016: Jan.-Mar.-	197.67	1,406	***	***	***	--	0

[1] Product 4: 16 inch, 150 class, Raised Face, Weld neck standard flange (16 150 RF WN STD).

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

Table E-5
Flanges: Weighted-average f.o.b. prices and quantities of domestic and imported product 5[1] and margins of underselling/(overselling), by quarter, January 2013-March 2016

Period	United States		India			Italy		
	Price *(dollars per flange)*	Quantity *(flanges)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*
2013: Jan.-Mar.	$23.34	19,327	$16.08	51,181	31.1	$18.08	3,464	22.6
Apr.-June	22.85	20,611	16.16	39,113	29.3	***	***	***
July-Sept.	23.33	18,362	15.37	34,165	34.1	***	***	***
Oct.-Dec.	23.36	14,092	15.37	31,904	34.2	***	***	***
2014: Jan.-Mar.	22.97	17,506	13.43	53,626	41.5	***	***	***
Apr.-June	22.95	19,668	13.81	53,806	39.8	***	***	***
July-Sept.	22.78	16,629	13.81	52,259	39.4	***	***	***
Oct.-Dec.	22.62	13,563	14.37	44,949	36.5	***	***	***
2015: Jan.-Mar.	23.08	12,720	14.90	33,604	35.4	***	***	***
Apr.-June	22.88	12,435	14.00	49,543	38.8	***	***	***
July-Sept.	22.91	11,471	13.54	35,155	40.9	***	***	***
Oct.-Dec.	23.04	10,276	13.33	23,486	42.1	***	***	***
2016: Jan.-Mar.	20.64	9,056	13.62	22,579	34.0	***	***	***

Period	United States		Spain			China	
	Price *(dollars per flange)*	Quantity *(flanges)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*	Price *(dollars per flange)*	Quantity *(flanges)*
2013: Jan.-Mar.	$23.34	19,327	$***	***	***	$***	***
Apr.-June	22.85	20,611	***	***	***	***	***
July-Sept.	23.33	18,362	***	***	***	***	***
Oct.-Dec.	23.36	14,092	***	***	***	***	***
2014: Jan.-Mar.	22.97	17,506	***	***	***	***	***
Apr.-June	22.95	19,668	***	***	***	***	***
July-Sept.	22.78	16,629	***	***	***	***	***
Oct.-Dec.	22.62	13,563	***	***	***	--	0
2015: Jan.-Mar.	23.08	12,720	***	***	***	--	0
Apr.-June	22.88	12,435	***	***	***	--	0
July-Sept.	22.91	11,471	***	***	***	--	0
Oct.-Dec.	23.04	10,276	***	***	***	--	0
2016: Jan.-Mar.-	20.64	9,056	***	***	***	--	0

[1] Product 5: 6 inch, 150 class, Raised Face, Slip on standard flange (6 150 RF Slip on).

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

Table E-6
Flanges: Weighted-average f.o.b. prices and quantities of domestic and imported product 6[1] and margins of underselling/(overselling), by quarter, January 2013-March 2016

Period	United States		India			Italy		
	Price *(dollars per flange)*	Quantity *(flanges)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*
2013: Jan.-Mar.	$12.35	25,528	$9.88	17,112	20.0	$***	***	***
Apr.-June	12.17	24,285	9.16	18,823	24.8	***	***	***
July-Sept.	12.17	32,345	10.96	16,694	10.0	***	***	***
Oct.-Dec.	12.32	20,836	9.76	18,174	20.8	***	***	***
2014: Jan.-Mar.	12.36	22,815	8.73	16,226	29.4	***	***	***
Apr.-June	12.14	25,313	6.60	24,949	45.7	***	***	***
July-Sept.	12.06	28,066	7.42	22,645	38.4	***	***	***
Oct.-Dec.	12.09	25,125	7.04	18,010	41.8	***	***	***
2015: Jan.-Mar.	11.94	19,501	7.32	18,188	38.7	***	***	***
Apr.-June	11.99	13,729	8.15	9,647	32.1	***	***	***
July-Sept.	12.02	17,545	6.41	13,918	46.7	***	***	***
Oct.-Dec.	11.95	14,984	6.61	11,173	44.7	***	***	***
2016: Jan.-Mar.	10.85	12,201	6.80	13,705	37.3	***	***	***

Period	United States		Spain			China	
	Price *(dollars per flange)*	Quantity *(flanges)*	Price *(dollars per flange)*	Quantity *(flanges)*	Margin *(percent)*	Price *(dollars per flange)*	Quantity *(flanges)*
2013: Jan.-Mar.	$12.35	25,528	$***	***	***	***	***
Apr.-June	12.17	24,285	***	***	***	***	***
July-Sept.	12.17	32,345	***	***	***	***	***
Oct.-Dec.	12.32	20,836	***	***	***	***	***
2014: Jan.-Mar.	12.36	22,815	***	***	***	--	0
Apr.-June	12.14	25,313	***	***	***	***	***
July-Sept.	12.06	28,066	***	***	***	--	0
Oct.-Dec.	12.09	25,125	***	***	***	--	0
2015: Jan.-Mar.	11.94	19,501	***	***	***	--	0
Apr.-June	11.99	13,729	***	***	***	--	0
July-Sept.	12.02	17,545	***	***	***	--	0
Oct.-Dec.	11.95	14,984	***	***	***	--	0
2016: Jan.-Mar.-	10.85	12,201	***	***	***	--	0

[1] Product 6: 2 inch, 150 class, Raised Face, Threaded standard flange (2 150 RF THD).

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

Figure E-1
Flanges: Weighted-average prices and quantities of domestic and imported product 1, by quarter, January 2013-March 2016

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Figure E-2
Flanges: Weighted-average prices and quantities of domestic and imported product 2, by quarter, January 2013-March 2016

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Figure E-3
Flanges: Weighted-average prices and quantities of domestic and imported product 3, by quarter, January 2013-March 2016

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Figure E-4
Flanges: Weighted-average prices and quantities of domestic and imported product 4, by quarter, January 2013-March 2016

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Figure E-5
Flanges: Weighted-average prices and quantities of domestic and imported product 5, by quarter, January 2013-March 2016

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Figure E-6
Flanges: Weighted-average prices and quantities of domestic and imported product 6, by quarter, January 2013-March 2016

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Table E-7
Flanges: Summary of nonsubject price comparisons, by country, January 2013-March 2016

Comparison	Total number of comparisons	Nonsubject lower than the comparison source		Nonsubject higher than the comparison source	
		Number of quarters	Quantity (short tons)	Number of quarters	Quantity (short tons)
Nonsubject vs. United States:					
China vs. United States	26	26	***	0	***
Nonsubject vs. subject countries:					
China vs. India	26	8	***	18	***
China vs. Italy	26	23	***	3	***
China vs. Spain	26	25	***	1	***

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