Aluminum Foil from Armenia, Brazil, Oman, Russia, and Turkey

Investigation Nos. 701-TA-658-659 and 731-TA-1538-1542 (Preliminary)

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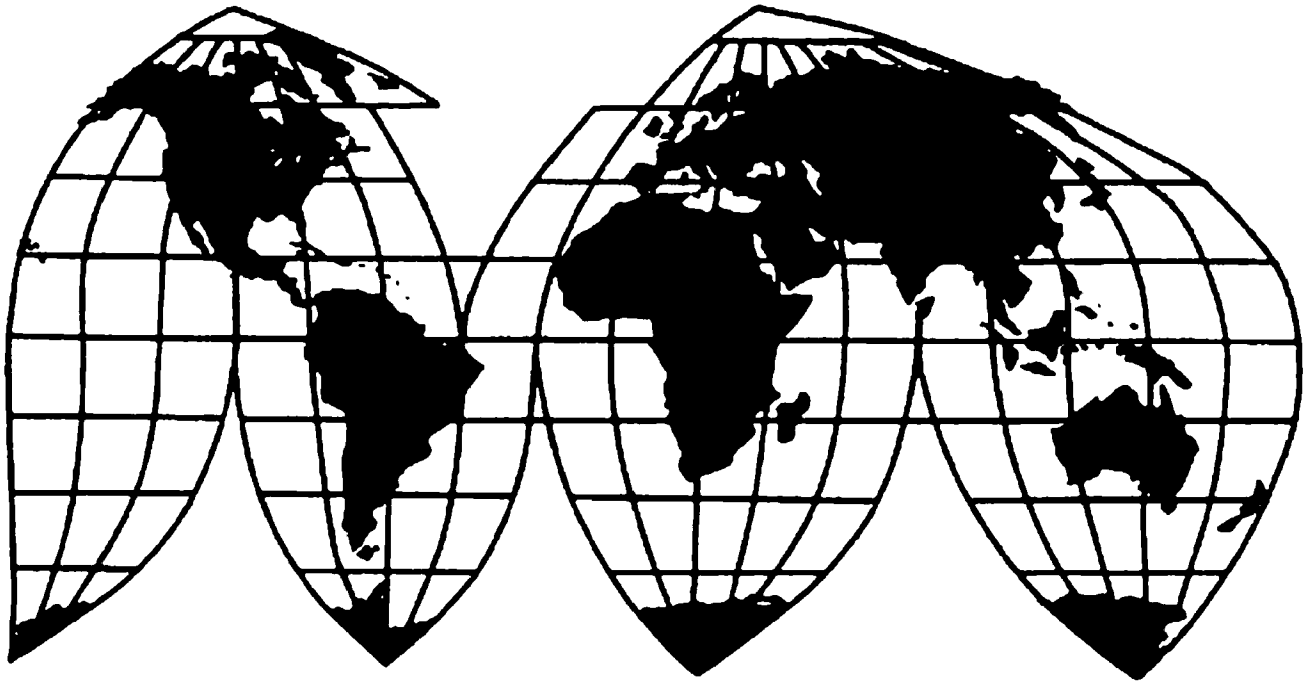

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Note.—Information that would reveal confidential operations of individual concerns may not be published. Such information is identified by brackets in confidential reports and is deleted and replaced with asterisks (***) in public reports.

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 701-TA-658-659 and 731-TA-1538-1542 (Preliminary)

Aluminum Foil from Armenia, Brazil, Oman, Russia, and Turkey

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 aluminum foil from Armenia, Brazil, Oman, Russia, and Turkey, that are alleged to be sold in the United States at less than fair value ("LTFV") and imports of aluminum foil that are allegedly subsidized by the governments of Oman and Turkey.[2] The products subject to these investigations are primarily provided for in subheadings 7607.11.30, 7607.11.60, 7607.11.90, and 7607.19.60 of the Harmonized Tariff Schedule of the United States ("HTS").

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 § 207.21 of the Commission's rules, upon notice from the U.S. Department of Commerce ("Commerce") of affirmative preliminary determinations in the investigations under §§ 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 §§ 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

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

[2] 85 FR 67711 (October 26, 2020) and 85 FR 68287 (October 28, 2020).

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 September 29, 2020, the Aluminum Association Trade Enforcement Working Group, Arlington, Virginia, and its individual members – Gränges Americas, Inc., Franklin, Tennessee; JW Aluminum Company, Daniel Island, South Carolina; and Novelis Corporation, Atlanta, Georgia, 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 imports of aluminum foil from Armenia, Brazil, Oman, Russia, and Turkey that are alleged to be sold in the United States at LTFV and alleged to be subsidized by the governments of Oman and Turkey. Accordingly, effective September 29, 2020, the Commission instituted countervailing duty investigation Nos. 701-TA-658-659 and antidumping duty investigation Nos. 731-TA-1538-1542 (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 October 5, 2020 (85 FR 62759). In light of the restrictions on access to the Commission building due to the COVID–19 pandemic, the Commission conducted its conference through written testimony and video conference on October 20, 2020. All persons who requested the opportunity were permitted to participate.

Views of the Commission

Based on the record in the preliminary phase of these investigations, we determine that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of aluminum foil from Armenia, Brazil, Oman, Russia, and Turkey that are allegedly sold in the United States at less than fair value ("LTFV") and imports of aluminum foil that are allegedly subsidized by the Governments of Oman and Turkey.

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

The Aluminum Association Trade Enforcement Working Group and its individual members,[3] all of which are U.S. producers of aluminum foil (collectively "Petitioners"), filed petitions on September 29, 2020, seeking imposition of antidumping duties on imports of aluminum foil from Armenia, Brazil, Oman, Russia, and Turkey and imposition of countervailing duties on imports of aluminum foil from Oman and Turkey.[4] Representatives and counsel for

[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 individual members of The Aluminum Association Trade Enforcement Working Group are Gränges Americas, Inc. ("Gränges"), J.W. Aluminum Company ("JW Aluminum"), and Novelis Corporation ("Novelis"). Petitions, Volume 1 (General and Injury Sections) at 2-3 (filed September 29, 2020).

[4] Petitions, Volume I at 1-2.

Petitioners submitted witness testimony, participated in the conference held October 20, 2020, and filed a postconference brief and responses to staff questions.[5] [6]

Several respondent entities participated in these investigations. Trinidad Benham Corporation ("Trinidad"), Goodman Manufacturing, LP ("Goodman"), Amcor Flexibles North America/Bemis Company Inc. ("Bemis"), and ProAmpac Intermediate Inc./Ampac Holding, LLC, and Jen-Coat, Inc., d/b/a Prolamina ("ProAmpac"), which are importers of subject merchandise, all filed witness testimony[7] and participated in the conference. All of these respondents as well as U.S. importer New Process Steel ("New Process") (collectively "Joint Respondents") jointly filed a postconference brief and responses to staff questions.[8] Companhia Brasileira de Aluminio ("CBA"), a producer and exporter of subject merchandise from Brazil, filed witness testimony, participated in the conference, and filed a postconference brief and responses to staff questions.[9] Assan Aluminyum Sanayi ve Ticaret A.S. ("Assan"), a producer and exporter of subject merchandise from Turkey, filed witness testimony and participated in the conference. Istanbul Ferrous and Non-Ferrous Metals Exporters' Association ("IDDMIB") and its members (including Assan)[10] (collectively "Turkish Producers and Exporters"), which are producers and exporters of subject merchandise from Turkey, filed a postconference brief and responses to staff questions.[11] Joint Stock Company Rusal Sayanal, JSC Ural Foil, and Rusal Armenal Closed Joint Stock Company (collectively "Rusal"), which are producers and exporters of subject merchandise from Armenia and Russia, filed a postconference brief.[12]

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[5] In light of the restrictions on access to the Commission building due to the COVID-19 pandemic, the Commission conducted its staff conference in these investigations through submissions of written testimony on October 19, 2020 and a videoconference held on October 20, 2020, as set forth in procedures provided to the parties on October 5, 2020.

[6] Petitioners' Witness Testimony dated October 19, 2020 ("Petitioners' Witness Testimony"); Petitioners' Postconference Brief dated October 23, 2020 ("Petitioners' Postconference Brief").

[7] Bemis and Goodman filed witness testimony in a joint submission dated October 19, 2020 ("Goodman/Bemis's Witness Testimony").

[8] Joint Respondents' Postconference Brief dated Oct. 23, 2020 ("Joint Respondents' Postconference Brief"). Goodman and Bemis joined the Postconference Brief submitted by Joint Respondents and submitted separate answers to staff questions ("Goodman/Bemis's Answers to Staff Questions").

[9] CBA Witness Testimony dated Oct. 19, 2020 ("CBA Witness Testimony"); CBA Postconference Brief dated Oct. 23, 2020 ("CBA Postconference Brief").

[10] IDDMIB's members are Assan, Asas Aluminyum Sanayi ve Ticaret Anonim Sirketi ("ASAS") and Panda Aluminyum Anonim Sirketi ("Panda").

[11] Assan Witness Testimony dated Oct. 19, 2020 ("Assan Witness Testimony"); Turkish Producers and Exporters' Postconference Brief dated Oct. 23, 2020 ("Turkish Respondents' Postconference Brief").

[12] Rusal Postconference Brief dated Oct. 23, 2020 ("Rusal Postconference Brief").

U.S. industry data are based on the questionnaire responses of five U.S. producers which accounted for *** percent of U.S. production of aluminum foil in 2019.[13] U.S. import data are based on questionnaire responses from 40 U.S. importers; these firms' imports of aluminum foil represent approximately *** percent of subject imports from Armenia, Brazil, Oman, and Russia, *** percent of subject imports from Turkey, and *** percent of imports from all other sources, based on official import statistics from the Department of Commerce ("Commerce").[14] The Commission received questionnaire responses from foreign producers in each of the five subject countries whose exports to the United States accounted for approximately *** of subject imports from each of the subject countries and whose reported production are estimated to account for *** percent of overall production of aluminum foil in each of the subject countries.[15]

[13] Confidential Report ("CR")/Public Report ("PR") at I-4 & n.7, III-1, n.1.

[14] CR/PR at IV-2.

[15] The Commission received a response to its questionnaire from one foreign producer of aluminum foil in Armenia, Rusal, whose exports to the United States accounted for approximately *** subject imports from Armenia in 2019; Rusal estimated that its reported production accounts for approximately *** percent of overall production of aluminum foil in Armenia. CR at VII-3.

The Commission received responses to its questionnaires from four foreign producers of aluminum foil in Brazil (Bemis do Brasil Ind. E Com. De Embalagens, Ltda.; CBA; CBA Itapissuma Ltda., and Westaflex Tubos Flexiveis Ltda.) whose exports to the United States accounted for approximately *** subject imports from Brazil in 2019; the four responding Brazilian producers estimated that their reported production accounts for approximately *** percent of overall production of aluminum foil in Brazil. CR/PR at VII-9-10.

The Commission received a response to its questionnaire from one foreign producer of aluminum foil in Oman, Oman Aluminum Rolling Company LLC ("OARC"), whose exports to the United States accounted for approximately *** percent of subject imports from Oman in 2019; OARC estimated that its reported production accounts for approximately *** percent of overall production of aluminum foil in Oman. CR/PR at VII-16.

The Commission received responses to its questionnaires from two foreign producers of aluminum foil in Russia (Rusal Sayanal Joint Stock Company and JSC Ural Foil) whose exports to the United States accounted for approximately *** subject imports from Russia in 2019; the two responding Russian producers estimated that their reported production accounts for approximately *** percent of overall production of aluminum foil in Russia. CR/PR at VII-22.

The Commission received responses to its questionnaires from three foreign producers of aluminum foil in Turkey (ASAS, Assan, and Panda) whose exports to the United States accounted for approximately *** subject imports from Turkey in 2019; the three Turkish producers estimated that their reported Turkish production accounts for approximately *** percent of overall production of aluminum foil in Turkey. CR/PR at VII-28-29.

III. Domestic Like Product

In determining whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of imports of the subject merchandise, the Commission first defines the "domestic like product" and the "industry."[16] 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."[17] 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."[18]

By statute, the Commission's "domestic like product" analysis begins with the "article subject to an investigation," *i.e.*, the subject merchandise as determined by Commerce.[19] Therefore, Commerce's determination as to the scope of the imported merchandise that is subsidized and/or sold at LTFV is "necessarily the starting point of the Commission's like product analysis."[20] The Commission then defines the domestic like product in light of the imported articles Commerce has identified.[21] 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

[16] 19 U.S.C. § 1677(4)(A).

[17] 19 U.S.C. § 1677(4)(A).

[18] 19 U.S.C. § 1677(10).

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

[20] *Cleo Inc. v. United States*, 501 F.3d 1291, 1298 (Fed. Cir. 2007); *see also Hitachi Metals, Ltd. v. United States*, 949 F.3d 710, 714-15 (Fed. Cir. 2020) (the statute requires the Commission to start with Commerce's subject merchandise in reaching its own like product determination).

[21] *Cleo*, 501 F.3d at 1298 n.1 ("Commerce's {scope} finding does not control the Commission's {like product} determination."); *Hosiden Corp. v. Advanced Display Mfrs.,* 85 F.3d 1561, 1568 (Fed. Cir. 1996) (the Commission may find a single like product corresponding to several different classes or kinds defined by Commerce); *Torrington Co. v. United States*, 747 F. Supp. 744 at 748-52 (Ct. Int'l Trade 1990), (affirming the Commission's determination defining six like products in investigations where Commerce found five classes or kinds) *aff'd*, 938 F.2d 1278 (Fed. Cir. 1991).

basis.[22] No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.[23] The Commission looks for clear dividing lines among possible like products and disregards minor variations.[24]

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

> {A}luminum foil having a thickness of 0.2 mm or less, in reels exceeding 25 pounds, regardless of width. Aluminum foil is made from an aluminum alloy that contains more than 92 percent aluminum. Aluminum foil may be made to ASTM specification ASTM B479, but can also be made to other specifications. Regardless of specification, however, all aluminum foil meeting the scope description is included in the scope, including aluminum foil to which lubricant has been applied to one or both sides of the foil. Excluded from the scope of these investigations is aluminum foil that is backed with paper, paperboard, plastics, or similar backing materials on one side or both sides of the aluminum foil, as well as etched capacitor foil and aluminum foil that is cut to shape. Where the nominal and actual measurements vary, a product is within the scope if application of either the nominal or actual measurement would place it within the scope based on the definitions set forth above. The products under investigation are currently classifiable under Harmonized Tariff Schedule of the United States (HTSUS) subheadings 7607.11.3000, 7607.11.6090, 7607.11.9030, 7607.11.9060, 7607.11.9090, and 7607.19.6000. Further, merchandise that falls within the scope of these proceedings may also be entered into the United States under HTSUS

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[22] *See, e.g., Cleo Inc. v. United States*, 501 F.3d 1291, 1299 (Fed. Cir. 2007); *NEC Corp. v. Dep't of Commerce*, 36 F. Supp. 2d 380, 383 (Ct. Int'l Trade 1998); *Nippon Steel Corp. v. United States*, 19 CIT 450, 455 (1995); *Torrington*, 747 F. Supp. at 749 n.3 ("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).

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

[24] *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.").

subheadings 7606.11.3060, 7606.11.6000, 7606.12.3045, 7606.12.3055, 7606.12.3091, 7606.12.3096, 7606.12.6000, 7606.91.3095, 7606.91.6095, 7606.92.3035, and 7606.92.6095. Although the HTSUS subheadings are provided for convenience and customs purposes, the written description of the scope of these investigations is dispositive.[25]

Aluminum foil subject to the scope of these investigations is a thin wrought aluminum product that is produced via a rolling process that has a thickness of 0.2 mm or less, is in reels exceeding 25 pounds, regardless of width, and is made from an aluminum alloy that contains between 92 and 99 percent aluminum.[26] It is commonly produced using 1XXX, 3XXX and 8XXX series alloys.[27] Aluminum foil can be produced to meet the requirements of various international standard specifications, including ASTM specification ASTM B-479. The alloy type, level of thickness, surface finish, temper, and width all play an important role in meeting the specifications of end users.[28] Aluminum foil is produced and imported in a variety of gauges or levels of thickness; the major categories of aluminum foil by thickness include ultra-thin, thin, standard, heavy, and extra-heavy.[29] The product is used extensively in food and pharmaceutical packaging because it provides protection against light, oxygen, moisture, and bacteria. It is also used in industrial applications such as thermal insulation, cables, and electronics where properties such as heat reflectivity and barrier protection are desired.[30]

Petitioners argue that the Commission should define a single domestic like product coextensive with the scope of the investigations. They observe that this is the same domestic

[25] *Certain Aluminum Foil From the Republic of Armenia, Brazil, the Sultanate of Oman, the Russian Federation, and the Republic of Turkey: Initiation of Less-Than-Fair-Value Investigations,* 85 Fed. Reg. 67711, 67717 (Dep't Commerce Oct. 26, 2020); *Certain Aluminum Foil From the Sultanate of Oman and the Republic of Turkey: Initiation of Countervailing Duty Investigations,* 85 Fed. Reg. 68287, 68291 (Dep't Commerce Oct. 28, 2020).

[26] CR/PR at I-10.

[27] CR/PR at I-10. 1XXX series contains 99 percent or more aluminum by weight. This is considered commercially pure by industry standards. The main alloying metal in 3XXX series aluminum is manganese. 8XXX series alloys include metals such as lithium, tin, nickel, and titanium. *Id.* at nn.35-37 and Table I-1.

[28] CR/PR at I-10-11.

[29] CR/PR at I-12.

[30] CR/PR at I-13.

like product that the Commission defined in *Aluminum Foil from China*,[31] which had the same scope as these investigations.[32]

Rusal argues that the Commission should define two domestic like products that are collectively coextensive with the scope of the investigations: (1) household/container aluminum foil and (2) industrial/converter aluminum foil. Rusal defines household foil as having a thickness of 10-22.9 microns and a width of 229-458 mm and container foil as having a thickness of 56-102 microns and a width of 229-787 mm.[33] It states that household/container foil is distinct from industrial/converter foil because it is used in contact with food and consequently is subject to U.S. Food and Drug Administration (FDA) regulations on food contact material.[34] By contrast, industrial foils are used to produce fin stock for air conditioners, electrical coils for transformers, insulation for storage tanks and automotive radiators and other industrial uses. Converter foils are used to produce packaging materials for food, pharmaceutical, and beauty industries and thermal insulation for construction industries.[35] Rusal argues that household foil is supplied directly to rewinders and container foil is supplied to companies that produce stamped containers, while industrial and converter foils are sold to industrial companies.[36] It further argues that household/container foils are not interchangeable with the industrial foil products contained in the proposed industrial/converter foil domestic like product, which do not have to comply with strict FDA regulations, and further that converter foil is too thin to be used as household foil. It argues that that the lack of interchangeability between household/container foil and industrial/converter foil leads to different customer perceptions of the products.[37] Rusal acknowledges that

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[31] *Aluminum Foil from China*, Inv. Nos. 701-TA-570 and 731-TA-1346 (Final), USITC Pub. 4771 (Apr. 2018) at 5-6, 10-16. In those investigations, the Commission considered and rejected arguments that ultra-thin foils and certain fin stock should be treated as separate like products. It also declined to include smaller reels in the domestic like product. *Id.* at 15-16.

Various respondents appealed the Commission's findings that ultra-thin aluminum foil and fin stock were not separate domestic like products. The Court of International Trade affirmed the Commission's findings as supported by substantial evidence. *Valeo N. Am. v. United States*, 404 F. Supp. 3d 1303, 1313-15, 1319-23 (Ct. Int'l Trade 2019). The CIT's judgment as to ultra-thin foil was appealed to the Federal Circuit, which affirmed in a nonprecedential opinion. *Valeo N. Am., Inc. v. United States*, 823 Fed. Appx. 937 (Fed. Cir. 2020).

[32] Petitioners' Postconference Brief at 4-6.

[33] Rusal defines household/container foil using specifications for the foil that it exports to the U.S. market rather than aluminum foil produced in the United States. Rusal Postconference Brief at 2.

[34] Rusal Postconference Brief at 1-3.

[35] Rusal Postconference Brief at 3.

[36] Rusal Postconference Brief at 4-5.

[37] Rusal Postconference Brief at 5.

household/container foil and industrial/converter foil have similar manufacturing processes, although industrial/converter foils require some specific equipment. It asserts that household and container foils are less expensive than industrial and converter foils, which include ultra-thin foils.[38]

A. Analysis

The sole like product argument asserted in this phase of the investigations is the one Rusal asserted: whether the Commission should define household/container foil and industrial/converter foil as separate domestic like products.[39] We address this issue below. Based on the record for the preliminary phase of these investigations, we define a single domestic like product consisting of aluminum foil coextensive with the scope of these investigations.

Physical Characteristics and Uses. Based on Rusal's descriptions of these products,[40] there is some overlap between household/container foil and industrial/converter foil in terms of the thickness criteria identified by Rusal.[41] Specifically, Rusal describes household foil as having a thickness of 10-22.9 microns, corresponding to standard gauge foil, and container foil as having a thickness of 56-102 microns, which corresponds to extra-heavy aluminum foil.[42] Rusal states that industrial foil encompasses foil used in fin stock which the Commission indicated in its prior investigations can have a thickness of 45 microns or greater.[43] This also corresponds to extra-heavy industrial foil. Additionally, it asserts that converter foil encompasses foil with a thickness of 9 microns or less, which corresponds to thin or ultra-thin aluminum foil.[44] Thus, industrial/converter foil can be thinner, thicker, or as thick as the household/container foil that Rusal exports to the United States.

With respect to end use, Rusal argues that household/container foil is distinguished from the industrial foil products contained in the proposed industrial/converter foil domestic like product by its use in food-contact applications, which makes household/converter foil

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[38] Rusal Postconference Brief at 5-7.

[39] Several respondents did not assert like product arguments in the preliminary phase but indicated a likely or possible intention to do so in the final phase. In any final phase of these investigations, the Commission will consider all timely and properly raised like product arguments.

[40] Rusal Postconference Brief at 2 (indicating definitions based on specifications for Rusal's exported container foil and *** percent of its household foil).

[41] *See* Rusal Postconference Brief at 1-4.

[42] *Compare* Rusal Postconference Brief at 2 *with* CR/PR at I-11-12 (setting out the major categories of aluminum foil by thickness).

[43] *See Aluminum from China*, USITC Pub. 4771 at 8, n.34; CR/PR at I-11-12.

[44] *Compare* Rusal Postconference Brief at 3, 5 *with* CR/PR at I-11-12.

subject to FDA regulations, although Rusal does not argue that household/container foil are exclusively used in food contact applications.[45] Rusal also states that industrial/converter foil is used in flexible packaging materials for the food, beauty, and pharmaceutical industries, which appears to overlap with some uses for household/container foil as described by Rusal.[46]

Manufacturing Facilities, Production Processes, and Employees. The record reflects that all aluminum foil within the scope subject to these investigations is produced by melting and refining aluminum, casting the aluminum into a semifinished form (either by continuous casting or direct chill casting) that can enter the rolling process, and rolling the semifinished forms into the flat rolled aluminum foil.[47] U.S. producers generally reported that most foil products can be produced using the same production process, except that ultra-thin foil may require additional processing.[48] These statements are consistent with Rusal's statement that household/container foils and industrial/converter foils have similar manufacturing processes, although industrial/converter foils require some specific equipment.[49]

Channels of Distribution. The information on channels of distribution on the record has limited applicability to this like product analysis because the data collected do not correspond to Rusal's proposed domestic like products, nor did Rusal provide any meaningful data on this issue that would enable the Commission to evaluate its claims of differing channels of distribution across the product categories it identifies. *** states that aluminum products typically follow the same distribution channel as they are shipped to a company that is further processing the material; *** states that the same brokers could sell ultra-thin aluminum foil, fin stock, and other in-scope aluminum foils.[50] Domestically produced aluminum foil within the scope is sold through several different channels of distribution.[51]

Interchangeability. There is limited record information with respect to interchangeability across the categories of aluminum foil set out by Rusal because the Commission did not collect data based on these product groupings. Generally, U.S. producers indicated some degree of interchangeability across products, whereas importers' responses were mixed and leaned toward less interchangeability with respect to ultra-thin aluminum foil

[45] *See* Rusal Postconference Brief at 1-4.
[46] Rusal Postconference Brief at 3.
[47] CR/PR at I-15-20.
[48] CR/PR at D-3 and D-7.
[49] Rusal Postconference Brief at 6.
[50] CR/PR at D-3 and D-7.
[51] CR/PR at Table II-1.

products.[52] In its prior investigations of aluminum foil, the Commission indicated that numerous individual aluminum foil products within the scope had limited interchangeability with each other.[53]

Producer and Customer Perceptions. The record in the preliminary phase of these investigations does not contain information on producer and customer perceptions on Rusal's specific product groupings; however, U.S. producers ***.[54]

Price. Although the Commission collected pricing data on four aluminum foil products, none was defined in terms of end use. Instead, each was defined in terms of thickness, which as discussed above, does not correlate with Rusal's proposed like product groupings.[55] The record also does not contain average unit value data conforming to Rusal's proposed domestic like products.

Conclusion. We do not define household/container foil and industrial/converter foil as separate like products. As an initial matter, Rusal did not provide and the record does not contain, comprehensive and objective definitions for these proposed domestic like products.[56] However, the limited information available in the record indicates the lack of clear dividing lines between these product categories with respect to any of the like product factors, and there appears to be overlap between these product categories as to their physical characteristics and uses, their channels of distribution, and their manufacturing processes. Accordingly, we define a single domestic like product which is aluminum foil, coextensive with the scope of these investigations.

IV. Domestic Industry and Related Parties

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."[57] In defining the domestic industry, the Commission's general practice has been to include in the industry producers of all

[52] *Id.* at I-22 and Appx. D.

[53] *Aluminum Foil from China*, USITC Pub. 4771 at 10 (ultra-thin gauge foil), 15 (fin stock).

[54] CR/PR at D-3 and D-8.

[55] *See* CR/PR at V-5.

[56] We will consider requests made in comments on the draft questionnaires to collect data covering separate domestic like products in any final phase of these investigations. In their draft questionnaire comments, parties seeking to define a separate domestic like product should provide reasons why an alternative like product definition is appropriate and identify such products with specificity and in a way that would enable the Commission to collect appropriate data.

[57] 19 U.S.C. § 1677(4)(A).

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.[58] Exclusion of such a producer is within the Commission's discretion based upon the facts presented in each investigation.[59]

Domestic producer *** is subject to potential exclusion pursuant to the related parties provision because it imported subject merchandise during the January 2017-June 2020 period of investigation (POI).[60] Therefore, we must consider whether appropriate circumstances exist to exclude this domestic producer from the domestic industry.[61]

*** accounted for *** percent of U.S. production in 2019 and was the *** largest domestic producer. It *** the petitions.[62] *** imports of subject merchandise were *** short

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[58] *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).

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

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

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

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

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

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

[60] CR/PR at Table III-9. Two other domestic producers, ***, are affiliated with ***, a producer of subject merchandise in Brazil. CR/PR at Table III-2. However, the information in the record indicates that *** did not export subject merchandise during the POI. *See* CR/PR at III-3 n.2. Because the record does not indicate that *** exported subject merchandise, *** and *** are not related parties.

[61] Petitioners contend that although *** are related parties, the Commission should not exclude them from the domestic industry pursuant to the related party provision because their principal interests are in domestic production rather than importation. Petitioners' Postconference Brief at 6-7 & Exhibit 1 at 9-11. None of the respondents addressed any related party or other domestic industry issues in their briefs or conference testimony.

[62] CR/PR at III-1.

tons in 2017, *** short tons in 2018, *** short tons in 2019, *** short tons in interim (January to June) 2019, and *** short tons in interim 2020.[63] *** indicated that ***.[64] The ratio of its subject imports to U.S. production was *** during the POI and the interim period –

*** percent in 2017, *** percent in 2018, *** percent in 2019, *** percent in interim 2019, and *** percent in interim 2020.[65] Its operating income margin was *** the industry average in 2017 but *** it in the subsequent periods of the POI.[66]

During the POI, *** primary interest appears to have been domestic production, given its limited volume of subject imports. Given that *** domestic production *** its imports of subject merchandise, and the fact that no party has argued for its exclusion from the domestic industry, we find that appropriate circumstances do not exist to exclude *** from the domestic industry pursuant to the related parties provision.

Given the foregoing and our domestic like product definition, we define the domestic industry to consist of all domestic producers of aluminum foil, coextensive with the scope of these investigations.

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 generally be deemed negligible.[67]

Based on the Commission's importer questionnaire data, during the period September 2019 through August 2020, the 12-month period preceding the filing of the petitions on September 29, 2020, subject imports from Armenia accounted for *** percent of total U.S. imports of aluminum foil by quantity, subject imports from Brazil accounted for *** percent,

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

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

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

[66] CR/PR at Table VI-5. *** operating income margin was *** percent in 2017, *** percent in 2018, *** percent in 2019, *** percent in interim 2019, and *** percent in interim 2020. *Id*.

[67] 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)). The exceptions to this general rule are not applicable here.

subject imports from Oman accounted for *** percent, subject imports from Russia accounted for *** percent, and subject imports from Turkey accounted for *** percent.[68]

We therefore find that subject imports from Armenia, Brazil, Oman, Russia, and Turkey are not negligible for purposes of these antidumping and countervailing duty investigations.

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:

(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.[69]

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

[68] CR/PR at Table IV-3. Oman and Turkey are not developing countries as designated by the United States Trade Representative. *See* 85 Fed. Reg. 7613 (USTR Feb. 10, 2020).

[69] *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).

determining whether the subject imports compete with each other and with the domestic like product.[70] Only a "reasonable overlap" of competition is required.[71]

Based on the record of the preliminary phase of these investigations, we consider subject imports from Armenia, Brazil, Oman, Russia, and Turkey on a cumulated basis because the statutory criteria for cumulation are satisfied.[72] As an initial matter, Petitioners filed the antidumping/countervailing duty petitions with respect to all five subject countries on the same day, September 29, 2020.[73] The record also indicates a reasonable overlap of competition among subject imports from the subject countries, and between subject imports from each source and the domestic like product, for reasons described below.

Fungibility. All responding U.S. producers reported that the domestic like product and imports from each subject country were always or frequently interchangeable and that imports from each subject country were always or frequently interchangeable with each other.[74] In every comparison between the domestic like product and imports from individual subject countries and between imports from individual subject countries except one (United States-Brazil), a majority of importers reported that products were always or frequently interchangeable.[75]

Further, the record indicates that domestic producers and importers from each subject country ship aluminum foil in overlapping thicknesses. U.S. producers and U.S. importers of subject merchandise from Turkey and Brazil shipped aluminum foil in all five thickness

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

[71] 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.").

[72] Petitioners argue that the Commission should cumulate imports from all five subject countries for purposes of its material injury analysis because the antidumping and countervailing duty petitions in these investigations were all filed on the same day and there is a reasonable overlap of competition between subject imports and the domestic like product. None of the respondents made any arguments related to cumulation with respect to the Commission's material injury determinations.

[73] CR/PR at I-1. None of the statutory exceptions to cumulation applies.

[74] CR/PR at Table II-7.

[75] CR/PR at Table II-7. In comparing the domestic like product with subject imports from Brazil, half of responding importers reported that the products were always or frequently interchangeable and half reported that they were sometimes or never interchangeable. *Id*.

categories surveyed: ultra-thin, thin, standard, heavy, and extra-heavy.[76] U.S. importers of subject merchandise from the three other subject countries shipped extra-heavy aluminum foil, and U.S. importers of subject merchandise from Armenia also shipped standard aluminum foil.[77] Extra-heavy and standard were the two largest thickness categories for U.S. shipments.[78]

Channels of Distribution. U.S. producers and U.S. importers of subject merchandise from each subject country except Oman shipped a substantial proportion of their shipments of aluminum foil to household use/spoolers.[79] U.S. importers of subject merchandise from Oman shipped *** of their shipments to industrial applications, a channel in which the domestic like product and imports from each subject country except Russia were present.[80]

Geographic Overlap. U.S. producers reported selling aluminum foil in all regions in the contiguous United States during the POI.[81] U.S. importers reported selling subject merchandise from Brazil in all regions in the contiguous United States during the POI, subject merchandise from Turkey exclusively in the Northeast region of the United States, and subject merchandise from Oman in the Southeast region, the Central Southwest, and the Pacific Coast.[82] None of the importers of subject merchandise from Armenia or Russia responded to this question.[83] The record indicates that imports from all subject countries entered the United States through ports of entry in the East in 2019, although the quantity of subject imports from Oman that entered through that region was extremely small.[84]

Simultaneous Presence in Market. With respect to the 44-month period from January 2017 through August 2020, subject imports from Armenia were present in 33 of those months; subject imports from Brazil, 37; subject imports from Oman, 22; subject imports from Russia, 39; and subject imports from Turkey, 38 of those months.[85] The domestic like product was present in the U.S. market throughout the POI.[86]

Conclusion. The record supports finding that subject imports from each subject country are fungible with the domestic like product and each other, and that subject imports from each

[76] CR/PR at Table IV-4.
[77] CR/PR at Table IV-4.
[78] CR/PR at Table IV-4.
[79] CR/PR at Table II-2.
[80] CR/PR at Table II-2.
[81] CR/PR at II-4 and Table II-3.
[82] CR/PR at II-4 and Table II-3.
[83] CR/PR at II-4 and Table II-3.
[84] CR/PR at Table IV-6.
[85] CR/PR at IV-15 and Table IV-7.
[86] CR/PR at Tables V-4-7.

subject country and the domestic like product have been simultaneously present in the U.S. market. The available data also indicate substantial overlaps in channels of distribution and geographic presence. Based on these considerations and the lack of contrary argument, we find that there is a reasonable overlap of competition between the domestic like product and imports from each subject country and between imports from each subject country.

Accordingly, for our analysis of whether there is a reasonable indication of material injury by subject imports, we cumulate subject imports from Armenia, Brazil, Oman, Russia, and Turkey.

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.[87] 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.[88] The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant."[89] 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.[90] 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."[91]

Although the statute requires the Commission to determine whether there is a reasonable indication that the domestic industry is "materially injured or threatened with material injury by reason of" unfairly traded imports,[92] it does not define the phrase "by reason of," indicating that this aspect of the injury analysis is left to the Commission's reasonable

[87] 19 U.S.C. §§ 1671b(a), 1673b(a).

[88] 19 U.S.C. § 1677(7)(B). The Commission "may consider such other economic factors as are relevant to the determination" but shall "identify each {such} factor ... and explain in full its relevance to the determination." 19 U.S.C. § 1677(7)(B).

[89] 19 U.S.C. § 1677(7)(A).

[90] 19 U.S.C. § 1677(7)(C)(iii).

[91] 19 U.S.C. § 1677(7)(C)(iii).

[92] 19 U.S.C. §§ 1671b(a), 1673b(a).

exercise of its discretion.[93] 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.[94]

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.[95] In performing its examination, however, the Commission need not isolate

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[93] *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).

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

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

the injury caused by other factors from injury caused by unfairly traded imports.[96] 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.[97] It is clear that the existence of injury caused by other factors does not compel a negative determination.[98]

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."[99] The Commission ensures that it has "evidence in the record" to "show that the harm occurred 'by reason of' the LTFV imports," and that it is "not attributing injury from other

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[96] 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.").

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

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

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

sources to the subject imports."[100] The Federal Circuit has examined and affirmed various Commission methodologies and has disavowed "rigid adherence to a specific formula."[101]

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.[102] Congress has delegated this factual finding to the Commission because of the agency's institutional expertise in resolving injury issues.[103]

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.

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

[101] *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.").

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

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

1. Captive Production

We consider the applicability of the statutory captive production provision.[104] Petitioners and Goodman/Bemis argue that the Commission should apply the captive production provision in these investigations, as it did in *Aluminum Foil from China*.[105]

We determine that the threshold criterion for application of the captive production provision has been met. The captive production provision can be applied only if, as a threshold matter, significant production of the domestic like product is internally transferred and significant production is sold in the merchant market. In these investigations, internal consumption accounted for between *** percent and *** percent of domestic producers' U.S. shipments of aluminum foil in each year and interim period of the POI, and commercial shipments accounted for between *** percent and *** percent of domestic producers' U.S. shipments.[106] We find that both shares of the market constitute significant portions of the market.

We also determine that the first statutory criterion has been met. This criterion focuses on whether any of the domestic like product that is transferred internally for further processing

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

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

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

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

[105] Petitioners' Postconference Brief, Exhibit 1 at 6-8. Respondents Goodman/Bemis Answers to Staff Questions at 5-8. CBA does not object to its application here. Respondent CBA Postconference Brief, Responses to Commission Staff Questions at 2. Other respondents did not take a position on the applicability of the captive production provision.

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

is in fact sold on the merchant market.[107] ***.[108] In other words, no aluminum foil that was to be captively consumed was diverted to the merchant market. Thus, this criterion is satisfied.

In applying the second statutory criterion, we generally consider whether the domestic like product is the predominant material input into a downstream product by referring to its share of the raw material cost of the downstream product.[109] Aluminum foil reportedly comprises *** percent of the finished cost of household foil and interleaved foil sheets, the downstream products *** captively produces.[110] Thus, this criterion is satisfied.

We conclude that the criteria for application of the captive production provision are satisfied in these investigations. Accordingly, we focus primarily on the merchant market in analyzing the market share and financial performance of the domestic industry.

2. Demand Conditions

Demand for aluminum foil depends on the demand for a wide range of U.S.-produced downstream products. Reported end uses include food and beverage packaging and containers, heat exchangers, flexible duct, metal packaging, and HVAC systems.[111] Aluminum foil is also used in aerospace and automotive production.[112] Different applications require different types of aluminum foil. For example, extra-thin and thin aluminum foil is primarily used in flexible packaging for food and pharmaceutical packaging; standard aluminum foil generally corresponds to aluminum foil used for production of household foil products, although some household foil products are produced using a heavier gauge; heavy duty and extra-heavy duty aluminum foil is generally used in household applications for baking, grilling,

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[107] *See*, *e.g.*, *Hot-Rolled Steel Products from Argentina and South Africa*, Inv. Nos. 701-TA-404, 731-TA-898, 905 (Final), USITC Pub. 3446 at 15-16 (Aug. 2001); *Certain Cold-Rolled Steel Products from Argentina, Brazil*, *China*, *Indonesia*, *Japan*, *Russia*, *Slovakia*, *South Africa*, *Taiwan*, *Turkey and Venezuela*, Inv. Nos. 701-TA-393 and 731-TA-829-840 (Final) (Remand), USITC Pub. 3691 at 2 & n.19 (May 2004).

[108] CR/PR at III-14.

[109] *See generally*, *e.g.*, *Polyethylene Terephthalate Film*, *Sheet, and Strip from Brazil*, *China*, *Thailand*, *and the United Arab Emirates*, Inv. Nos. 731-TA-1131-1134 (Final), USITC Pub. 4040 (October 2008) at 17 n.103; *Polyethylene Terephthalate Film*, *Sheet*, *and Strip from India and Taiwan*, Inv. Nos. 701-TA-415 and 731-TA-933-934 (Final), USITC Pub. 3518 (June 2002) at 11 & n.51. The Commission has construed "predominant" material input to mean the main or strongest element, and not necessarily a majority, of the inputs by value. *See Polyvinyl Alcohol from Germany and Japan*, Inv. Nos. 731-TA-1015-1016 (Final), USITC Pub. 3604 (June 2003) at 15 n.69.

[110] CR/PR at III-14.

[111] CR/PR at II-9.

[112] CR/PR at II-9.

and storage, and extra-heavy duty aluminum foil is used in fin stock, which includes HVAC applications.[113]

Reported cost shares of aluminum foil in end-use products varied widely, ranging from as high as 100 percent for food and beverage containers to as low as two percent of use in aerospace production.[114] The market for aluminum foil is subject to seasonal shifts depending on the end-use products; aluminum foil that is used in the construction industry faces high periods of demand in the spring and summer when the weather permits construction and demand for aluminum foil used in food packaging peaks around certain holidays, such as Christmas, Easter, and Independence Day.[115] Apparent U.S. consumption in the merchant market was relatively stable from 2017 to 2018 and declined from 2018 to 2019 by *** percent; it was *** percent lower in interim 2020 than in interim 2019.[116] We note that the COVID-19 pandemic may have reduced demand for aluminum foil and hence contributed to the lower apparent U.S. consumption in interim 2020.[117]

3. Supply Conditions

The domestic industry was the largest source of supply to the U.S. market throughout the POI. Its share of apparent U.S. consumption in the merchant market decreased overall from 2017 to 2019; the domestic industry's share of the U.S. merchant market was *** percent in 2017, *** percent in 2018, and *** percent in 2019.[118] By the end of the POI, the domestic

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[113] CR/PR at I-12 & nn.40-44, I-14.

[114] CR/PR at II-9.

[115] CR/PR at II-9.

[116] CR/PR at Table C-2. In the merchant market, apparent U.S. consumption of aluminum was *** short tons in 2017, *** short tons in 2018, *** short tons in 2019, *** short tons in interim 2019 and *** short tons in interim 2020. CR/PR at Table IV-10.

Apparent U.S. consumption in the total market followed similar trends. In the total market, apparent U.S. consumption of aluminum foil was 601,047 short tons in 2017, 602,781 short tons in 2018, 578,694 short tons in 2019, 299,630 short tons in interim 2019, and 273,127 short tons in interim 2020. CR/PR at Table IV-8.

By contrast, all producers and a majority of U.S. importers reported an increase in U.S. demand for aluminum foil since January 1, 2017. CR/PR at Table II-5.

[117] Petitioners state that COVID 19 had a negative impact on demand for aluminum foil in interim 2020. Petitioners' Postconference Brief at 40. A *** Goodman/Bemis submitted states that COVID-19 has negatively impacted demand for ***. Goodman/Bemis Answers to Staff Questions, Exhibit 4.

[118] The domestic industry's share of the U.S. merchant market was lower in interim 2020 than in interim 2019; it was *** percent in interim 2019, and *** percent in interim 2020. CR/PR at Table IV-11. The domestic industry's share of the total U.S. market for aluminum foil was 73.3 percent in 2017, 75.3 (Continued…)

industry consisted of four large producers: Gränges, Novelis, Reynolds, and JW Aluminum.[119] As discussed earlier, *** internally consumes all of its aluminum foil production.[120] Some of the domestic producers expanded their operations during the POI and others reduced them.[121] The domestic industry's capacity increased from 2017 to 2019, driven by *** increased capacity.[122] Although the domestic industry supplies aluminum foil in all of the surveyed thickness categories, *** percent of the domestic industry's U.S. shipments were in thicknesses corresponding with extra-heavy aluminum foil and *** percent of its shipments were in thicknesses corresponding with standard aluminum foil in 2019. Consequently, the domestic industry's shipments of aluminum foil in ultra-thin, thin, and heavy thicknesses were relatively limited.[123]

Cumulated subject imports sharply increased in 2018, the year that antidumping and countervailing duties were imposed on aluminum foil from China; they became the second-largest source of supply to the U.S. market that year as subject imports from China retreated from the U.S. market. Cumulated subject imports continued to be the second-largest source of supply in 2019.[124] Cumulated subject imports' share of apparent U.S. consumption in the

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percent in 2018, 72.6 percent in 2019, 74.0 percent in interim 2019, and 72.9 percent in interim 2020. CR/PR at Table IV-9.

[119] CR/PR at Table III-1. Novelis acquired domestic producer Aleris in April 2020. CR/PR at Table III-3.

[120] CR/PR at VI-1.

[121] CR/PR at Table III-3 and Table III-4. During the POI, Gränges reopened additional foil rolling operations in its Newport, Arkansas facility and expanded capacity in its Huntingdon, Tennessee facility and Reynolds invested in a new separator; however, JW Aluminum closed its St. Louis manufacturing facility and *** reduced the number of days/hours worked at its production facilities. *Id.*

[122] CR/PR at Table III-5. The domestic industry's capacity was lower in interim 2020 than in interim 2019. *Id.*

[123] CR/PR at Table IV-4; *see* CR/PR at I-12 (showing the thickness associated with each surveyed thickness category).

Several respondents argue that the domestic industry is not interested in supplying ultra-thin aluminum foil, household foil for the merchant market, or the types of fin stock required by purchasers. Joint Respondents' Postconference Brief at 8-25, 30; Turkish Respondents' Brief at 3-4, Respondent CBA Postconference Brief at 1, 5-6.

Petitioners disagree and state that the data collected by the Commission show that the domestic industry participated to a substantial degree in the aluminum foil market within every thickness range of aluminum foil identified by the Commission. Petitioners' Postconference Brief, Exhibit 1 at 5.

[124] *See* CR/PR at Table IV-11 (market share, merchant market), Table IV-9 (market share, total market), and Table IV-2 (subject import volumes), I-4 (indicating that Commerce issued antidumping and countervailing duty orders on aluminum foil from China in April 2018); EDIS Doc. No. 724698 (volumes of nonsubject imports from China).

merchant market rose from *** percent in 2017 to *** percent in 2018 and *** percent in 2019.[125] Although in 2019 there were U.S. shipments of cumulated subject imports in all five surveyed thickness categories, *** percent of cumulated subject imports' U.S. shipments were in thicknesses corresponding with standard aluminum foil and *** percent of their shipments were in thicknesses corresponding with extra-heavy aluminum foil, while their shipments of aluminum foil of thin or heavy thickness were much smaller.[126]

Nonsubject imports were the second-largest source of supply of aluminum foil to the U.S. market in 2017. These include imports from China, which became subject to antidumping and countervailing duty investigations in 2017 and subject to orders in 2018.[127] After 2017, nonsubject import volume sharply decreased, and in particular, nonsubject imports from China decreased each year from 2017 to 2019.[128] Nonsubject imports' share of apparent U.S. consumption in the merchant market declined from *** percent in 2017 to *** percent in 2018, and then increased *** percent in 2019.[129] Although in 2019 there were U.S. shipments of nonsubject imports in all of the surveyed thickness categories, *** percent of their U.S. shipments were in thicknesses corresponding to ultra-thin aluminum foil and *** percent of their U.S. shipments were in thicknesses corresponding to extra-heavy.[130] The largest sources of nonsubject imports were China, Germany, and Korea.[131]

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[125] CR/PR at Table IV-11. Cumulated subject imports' share of apparent U.S. consumption in the merchant market was *** percent in interim 2019 and *** percent in interim 2020. *Id.*

Cumulated subject imports' share of the total U.S. market for aluminum foil was 6.8 percent in 2017, 12.4 percent in 2018, 14.9 percent in 2019, 14.9 percent in interim 2019, and 12.6 percent in interim 2020. CR/PR at Table IV-9.

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

[127] *Certain Aluminum Foil From the People's Republic of China: Initiation of Countervailing Duty Investigation,* 82 Fed. Reg. 15688 (Mar. 30, 2017); *Certain Aluminum Foil From the People's Republic of China: Initiation of Less-Than-Fair-Value Investigation,* 82 Fed. Reg. 15691 (Mar. 30, 2017); CR/PR at I-4.

[128] CR/PR at Table IV-2. According to official Commerce statistics, imports of aluminum foil from China were 71,693 short tons in 2017, 29,609 short tons in 2018, 16,349 short tons in 2019, 9,961 short tons in interim 2019 and 5,712 short tons in interim 2020. EDIS Doc. No. 724698.

[129] CR/PR at Table IV-11. Nonsubject imports' share of apparent U.S. consumption in the merchant market was *** percent in interim 2019 and *** percent in interim 2020. *Id.*

Nonsubject imports' share of the total U.S. market for aluminum foil was 19.9 percent in 2017, 12.3 percent in 2018, 12.4 percent in 2019, 11.1 percent in interim 2019, and 14.5 percent in interim 2020. CR/PR at Table IV-9.

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

[131] CR/PR at II-9.

4. Substitutability and Other Conditions

Based on the record, we find that subject imports and the domestic like product are highly substitutable within product type. Factors limiting substitutability include quality and conditions of sale.[132]

Almost all responding U.S. producers reported that aluminum foil from the United States, the subject countries, and the nonsubject countries was interchangeable.[133] A majority of U.S. importers of subject merchandise reported that aluminum foil from all sources was always or frequently interchangeable, with two exceptions.[134]

Price is an important factor in purchasing decisions, but other factors are important as well. Six of 11 responding purchasers identified price as among the three most important purchasing factors. Purchasers identified quality most frequently as a major purchasing factor, with all 11 responding purchasers having done so.[135] All U.S. producers reported that factors other than price were never significant in purchasing decisions when comparing aluminum foil from the United States and the subject countries, but U.S. importers reported a wide range of responses as to whether nonprice factors were important in purchasing decisions.[136]

The major raw materials used to produce aluminum foil are re-roll stock, primary aluminum, and secondary aluminum.[137] Raw materials costs ranged from *** to *** percent of the domestic industry's cost of goods sold (COGS) in the merchant market during the years and interim periods of the POI.[138]

Aluminum foil prices are largely determined by three factors: the LME (a market-determined price for raw materials), the Platts Midwest Premium (a daily premium U.S. primary aluminum producers add to the LME price), and the conversion price.[139] The conversion price is the sole element an aluminum foil producer determines. Its level reflects the producer's

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[132] CR/PR at II-10.

[133] CR/PR at Table II-7.

[134] CR/PR at Table II-7. Half of the responding U.S. importers reported that the domestic like product and subject imports from Brazil were always or frequently interchangeable and half reported that they were sometimes or never interchangeable. *Id.* Nine of the responding U.S. importers reported that the domestic like product and nonsubject imports were always or frequently interchangeable and 11 reported that they were sometimes or never interchangeable. *Id.*

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

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

[137] CR/PR at V-1.

[138] CR/PR at Table VI-3.

[139] CR/PR at V-3.

production costs and profits from operations.[140] The LME price of high-grade aluminum increased from January 2017 until May 2018, at which point it decreased until January 2020; the Platts Midwest premium price increased sharply between December 2017 and April 2018, at which point it decreased until June 2020.[141]

The vast majority of domestic producers' U.S. commercial shipments of aluminum foil in 2019 were long-term or annual contractual sales, whereas importer sales were split between long-term contracts and spot sales.[142] Petitioners state that the market for aluminum foil is characterized by sizeable purchasers with market power in contract negotiations.[143] Although contracts may be negotiated well before product is delivered, contract prices are subject to renegotiation.[144] Petitioners contend that the vast majority of subject imports are direct imports, *i.e.*, imports by purchasers for their own use or for retail sale.[145] ***, producers of downstream aluminum foil products, collectively imported *** percent of cumulated subject imports in 2019.[146]

Subject imports became subject to additional 10 percent *ad valorem* duties pursuant to Section 232 of the Trade Expansion Act of 1962 ("Section 232 tariffs") between March and June 2018.[147] U.S. producers and importers did not indicate a consensus on whether the Section 232 tariffs had an effect on supply of domestic or imported aluminum foil or demand for aluminum foil, and 20 out of 27 importers stated that the Section 232 tariffs had caused prices of aluminum foil in the U.S. market to increase.[148] Respondents state that Commerce has reportedly granted over 2,900 exclusions from Section 232 duties on aluminum foil.[149]

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[140] CR/PR at V-3. Conversion prices can vary significantly based on gauge. U.S. producers' average reported conversion prices for aluminum foil increased on average from 2017 to 2019 and they were higher in interim 2020 than in interim 2019. *Id.*

[141] CR/PR at V-3-4 and Figures V-1 and V-2.

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

[143] Petitioners' Postconference Brief, Exhibit 1 at 1-3.

[144] Petitioners' Postconference Brief, Exhibit 1 at 1-3.

[145] Petitioners' Postconference Brief, Exhibit 1 at 24.

[146] CR/PR at Table IV-1; Statements of ***.

[147] 19 U.S.C. § 1862. Subject imports from Armenia, Oman, Russia, and Turkey have been subject to 10 percent additional section 232 tariffs since March 23, 2018. Subject imports from Brazil have been subject to such tariffs since June 1, 2018. CR/PR at I-8-9 & nn.26-27

[148] CR/PR at II-1 and Table II-1.

[149] Joint Respondents' Brief at 17, 29. The parties disagree as to the meaning of the exclusions. Joint Respondents contend that when Commerce grants the exclusions, it makes factual findings that the domestic product in question is not of a "sufficient and reasonably available amount" or "of a satisfactory quality" to meet respondents' needs. They further assert that Petitioners likely did not object to many of the exclusions because they were aware of their production capacity constraints and (Continued…)

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."[150]

Cumulated subject imports had a sizable and increasing presence in the U.S. market from 2017 to 2019. Cumulated subject imports rose each year of the POI, from 47,668 short tons in 2017 to 75,061 short tons in 2018 and 91,355 short tons in 2019, an overall increase of 91.6 percent.[151] Cumulated subject imports' share of the U.S. merchant market rose from *** percent in 2017 to *** percent in 2018 and *** percent in 2019 – an increase of *** percentage points.[152] Subject import market penetration in the merchant market more than doubled from 2017 to 2019.[153] [154]

Respondents argue that subject import volume is not significant because subject imports have only replaced nonsubject imports from China and other sources.[155] We disagree. First, as a factual matter, subject imports took *** percentage points of market share from the domestic industry in the merchant market from 2018 to 2019 and took *** percentage points from the domestic industry from 2017 to 2019.[156] Second, the fact that

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that there was inadequate domestic supply of these products. Joint Respondents' Postconference Brief, Trinidad Responses to Commission Staff Questions at 2-3.

Petitioners disagree and assert that the exclusion process provides no useful information about the interest or ability of the domestic industry to supply the U.S. aluminum foil market. Petitioners assert that the absence of objections was due to the low impact of the Section 232 tariffs, the burden of tracking so many requests, and ***. Petitioners assert that the language Commerce uses to grant the exclusions is boilerplate and that it undertakes no independent analysis of domestic industry availability. Petitioners' Postconference Brief, Exhibit 1 at 4-5.

[150] 19 U.S.C. § 1677(7)(C)(i).

[151] CR/PR at Table IV-2. Subject import volume was 49,633 short tons in interim 2019 and 39,499 short tons in interim 2020. *Id.*

[152] CR/PR at Table C-2, Table IV-11.

[153] CR/PR at Table C-2. Cumulated subject imports' share of apparent U.S. consumption in the total market rose from 6.8 percent in 2017 to 12.4 percent in 2018 and 14.9 percent in 2019, an increase of 8.1 percentage points from 2017 to 2019. CR/PR at Table C-1, Table IV-9.

[154] Subject import volume and market share were lower in interim 2020 than in interim 2019 but subject import market share was higher in interim 2020 than in 2017 or 2018. Cumulated subject imports' share of apparent U.S. consumption in the merchant market was *** percent in interim 2019 and *** percent in interim 2020. CR/PR at Table IV-11. Cumulated subject imports' share of apparent U.S. consumption in the total market was 14.9 percent in interim 2019 and 12.6 percent in interim 2020.

[155] Joint Respondents' Postconference Brief at 30-31; Turkish Respondents' Postconference Brief at 10.

[156] CR/PR at Table C-2.

subject imports displaced nonsubject imports does not change our finding that subject import volume and the increase in that volume is significant. We base our finding on the volume of subject imports, comprising between 47,668 and 91,355 short tons from 2017 to 2019[157] and comprising between *** and *** percent of apparent U.S. consumption in the merchant market from 2017 to 2019, and the increase in that volume rising by 43,687 short tons[158] and *** percentage points from 2017 to 2019.[159]

Based on the foregoing, we find that the cumulated subject import volume and the increase in that volume absolutely and relative to apparent consumption is significant.

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.[160]

As discussed in section VII.B.4 above, we find that subject imports and the domestic like product are highly substitutable within product type, and that price is an important purchasing factor for aluminum foil.

We have examined several sources of information in our underselling analysis, including pricing data, import purchase cost data, and responses by purchasers to the Commission's lost sales/lost revenue questionnaire survey ("LSLR Survey"). The Commission collected quarterly f.o.b. pricing data on sales of four aluminum foil products shipped to unrelated U.S. retailers during the POI.[161] Four U.S. producers and five importers provided usable pricing data for sales

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

[158] Calculated from Table IV-2.

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

[160] 19 U.S.C. § 1677(7)(C)(ii).

[161] CR/PR at V-5. The four pricing products are:

Product 1—Aluminum in the 8XXX series, standard tempers, 0.002-0.0039 inch thickness width 6-40," mill finish.

(Continued…)

of the requested products, although not all firms reported pricing for all products for all quarters.[162] The pricing data reported by these firms accounted for approximately *** percent of the U.S. producers' U.S. commercial shipments of aluminum foil in 2019, *** percent of U.S. commercial shipments of subject merchandise from Oman, and *** percent of U.S. commercial shipments of subject merchandise from Turkey.[163] Importers did not report pricing data for subject imports from Armenia, Brazil, or Russia.[164]

These pricing data show that subject imports undersold the domestic like product in *** out of *** (or *** percent of) quarterly comparisons at margins ranging between *** and *** percent, and an average underselling margin of *** percent.[165] Subject imports oversold the domestic like product in the remaining *** (or *** percent of) quarterly comparisons at margins ranging between *** and *** percent, and an average overselling margin of *** percent.[166] The pricing data reflect that *** pounds of subject imports were associated with quarters of underselling, as compared to *** pounds of subject imports associated with quarters of overselling. Thus, the limited available pricing data reflect a mix of underselling and overselling.

The Commission also requested that firms that imported aluminum foil from the subject countries for their own use or for retail sales provide quarterly purchase cost data for the four pricing products.[167] Ten importers reported usable import purchase cost data, although not all firms reported purchase costs for all products for all quarters.[168] Purchase cost data reported

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Product 2—Aluminum in the 8XXX series, standard tempers, 0.004-0.0078 inch thickness width 6-40," mill finish.

Product 3—Aluminum in the 8XXX series, standard tempers, 0.003-0.0078 inch thickness width 6-40," mill finish.

Product 4—Aluminum in the 8XXX series, standard tempers, 0.0016-0.0032 inch thickness width 6-40," mill finish.

[162] CR/PR at V-5.

[163] CR/PR at V-6. Additionally, the record does not contain any pricing data for imported pricing product 2.

[164] CR/PR at V-6. In any final phase of these investigations, we encourage parties to provide suggestions in their comments on draft questionnaires for pricing products that may provide higher coverage for both domestic producers' sales of the domestic like product and U.S. importers' sales and purchase cost data of subject merchandise from each of the subject countries. In the same vein, we seek products that will yield a greater number of pricing comparisons between domestic product and subject imports and welcome party comments on this issue.

[165] CR/PR at Table V-13. All of the reported instances of underselling involved subject imports from ***. CR/PR at V-27. No price comparisons were available for ***. *Id*. Limited price comparisons were available for ***. *Id*.

[166] CR/PR at Table V-13.

[167] CR/PR at V-15.

[168] CR/PR at V-15. No direct purchase cost data were reported for pricing product 3. *Id*.

by these firms accounted for approximately *** percent of 2019 U.S. shipments of subject imports from Armenia, *** percent of 2019 U.S. shipments of subject imports from Brazil, and *** percent of 2019 U.S. shipments of subject imports from Turkey.[169] U.S. importers of aluminum foil from Russia did not report purchase cost data, and purchase cost data was not requested for subject imports from Oman.[170] The purchase cost data indicate that landed duty-paid costs for subject imports were below the sales price for U.S. produced aluminum foil in 38 quarterly comparisons (involving a total of *** pounds of subject imports), by differentials ranging from 0.4 to 27.8 percent, with an average price-cost differential of 11.4 percent.[171] Landed duty-paid costs for subject imports were above the sales price for U.S. produced aluminum foil in 14 quarterly comparisons (involving a total of *** pounds of subject imports), at differentials ranging from 1.1 to 13.6 percent, with an average price-cost differential of 6.2 percent.[172] Thus, purchase costs for the subject imports were lower than prices for the domestic product in the large majority of quarterly comparisons involving a substantial majority of the quantity of subject imports.

We recognize that the import purchase cost data may not reflect the total cost of importing and therefore requested that direct importers provide additional information regarding the costs and benefits of directly importing aluminum foil. Five of 11 responding importers reported that the cost of direct importing themselves was less than the cost of purchasing from a U.S. producer or importer when including the additional costs associated with importing. Nine of 12 responding importers reported that the cost of importing themselves was less than the cost of purchasing from a U.S. producer or importer without including the additional costs associated with importing directly. Four importers estimated that they saved between *** percent by importing aluminum foil themselves instead of purchasing from a U.S. producer, and two importers estimated that they saved between *** percent by importing aluminum foil themselves instead of purchasing subject imports from importers.[173] Four of 12 importers reported that they incurred additional costs beyond landed duty-paid costs of importing aluminum directly rather than purchasing from a U.S. producer or importer. Of these, three importers estimated the total additional cost of importing subject imports incurred with estimates ranging from 1 to 10 percent compared to the landed-duty paid value.[174]

[169] CR/PR at V-15.
[170] CR/PR at V-15.
[171] CR/PR at Table V-15.
[172] CR/PR at Table V-15.
[173] CR/PR at V-16.
[174] CR/PR at V-15-16.

We have also considered information purchasers provided in their responses to the LSLR Survey. Commission staff contacted 15 purchasers and received responses from 12 purchasers. Eight purchasers reported that since 2017 they had purchased subject imports from Armenia, Brazil, Oman, Russia, or Turkey instead of U.S.-produced product. Six of these eight purchasers reported that subject imports were priced lower than the domestic like product.[175]

One purchaser stated that price was a primary reason it purchased subject imports rather than the domestic like product,[176] whereas other purchasers identified the domestic industry's inability to supply the products they desired as a reason for purchasing subject imports rather than the domestic like product.[177] Petitioners dispute the contention that the domestic industry cannot supply purchasers with the products that they desire and asserts that it lost sales for product it offered to supply due to the lower prices of the subject imports.[178] We intend to examine the transactions in which purchasers purchased lower-priced subject imports over domestically produced aluminum foil in any final phase of these investigations. For purposes of these preliminary determinations, the materials in the record, particularly those submitted by petitioners, do indicate some level of competition for sales to the same accounts between the cumulated subject imports and the domestic like product, notwithstanding respondents' arguments to the contrary.

Consistent with the foregoing, when the orders on imports of aluminum foil from China were put in place in 2018, instead of the domestic industry gaining market share, there was a market share shift in the merchant market from nonsubject imports to subject imports and then from the domestic industry to cumulated subject imports over the POI, owing to subject imports' gains from 2018 to 2019 at the expense of the domestic industry. Specifically, the domestic industry, after gaining only *** percentage points of market share in the merchant market from 2017 to 2018 from nonsubject imports compared to *** percentage points of market share that went to cumulated subject imports from 2017 to 2018, lost *** percentage points of market share to cumulated subject imports from 2018 to 2019 (and an additional ***

[175] CR/PR at V-30.

[176] CR/PR at V-30.

[177] CR/PR at Appx. F.

[178] ***. ***. ***. CR/PR at F-3. ***. CR/PR at F-3-5. ***. CR/PR at F-5-6. ***. CR/PR at F-8. *** CR/PR at F-8.

Petitioners assert that *** made their purchasing decisions based primarily on price. Petitioners' Postconference Brief at 16, Exhibits 7, 8, and 9. Specifically, Petitioners provide ***. *Id.* at Exhibit 7. Additionally, Petitioners ***. *Id.* at Exhibit 7. Petitioners also ***. *Id.* at Exhibit 8. In addition, Petitioners provide ***. Petitioners' Postconference Brief at 17, Exhibit 9.

percentage points to nonsubject imports), for an overall loss of *** percentage points of market share across the investigation period.[179]

The overall data on the record, particularly the direct import and lost sales data, indicate that cumulated subject imports were frequently available at lower prices than domestically produced aluminum foil. Given the substitutability of the products and the importance of price in purchasing decisions, we find, for purposes of these preliminary determinations, that there has been significant price underselling by the subject imports. This underselling led to a shift in market share from domestic producers to cumulated subject imports after 2018 after preventing domestic producers from gaining most of the market share ceded by nonsubject imports following institution of antidumping and countervailing duty investigations and the ultimate imposition of duties on China in 2018.

We have also examined available data on price trends. Prices for domestically produced products rose from January 2017 until September 2018 and declined thereafter to below January 2017 price levels in the last quarter of the POI, with price declines intensifying in interim 2020.[180] [181] Demand also declined during the period of investigation, *** from 2017 to 2018 and then declining by *** percent from 2018 to 2019 and by *** percent from interim 2019 to interim 2020. Unit raw material costs and COGS for domestic merchant market producers rose from 2017 to 2018, then declined from 2018 to 2019 and were lower in interim 2020 than in interim 2019, for an overall decline over the period of investigation.[182] Domestic producers' conversion prices, which reflect production costs and profits from operations, increased each year from 2017 to 2019 and were higher in interim 2020 than in interim 2019.[183] We intend to examine further in any final phase of this investigation the extent to which price declines observed in the pricing data may be attributable to subject imports or other factors

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[179] CR/PR at Table C-2. In the total market, after gaining 2.0 percentage points of market share from 2017 to 2018 at the expense of nonsubject imports, which lost an additional 5.6 percentage points of market share to cumulated subject imports from 2017 to 2018, the domestic industry lost 2.5 percentage points of market share to cumulated subject imports from 2018 to 2019 (and an additional 0.1 percentage points to nonsubject imports), for an overall loss of 2.6 percentage points of market share across the investigation period. CR/PR at Table C-1.

[180] CR/PR at V-23, Tables V-4-7.

[181] Data are available for the average unit values (AUVs) of subject imports. On a cumulated basis, AUVs for U.S. shipments of subject imports rose from 2017 to 2018, declined from 2018 to 2019, and were higher in interim 2020 than in interim 2019. CR/PR at Table C-2.

[182] CR/PR at Table VI-3. The LME and the Midwest pricing premium also generally declined from 2018 to 2019. CR/PR at Figure V-1 and Figure V-2 .

[183] For purposes of any final phase investigations, we invite the parties to comment on, and/or provide supporting documentation, as to whether subject import competition compelled domestic producers to offer lower prices in contractual negotiations during the POI.

such as demand or declining raw material costs as well as data concerning changes in conversion price.

We also have considered whether subject imports prevented U.S. price increases that would otherwise have occurred to a significant degree. Domestic producers' COGS to net sale ratio in the merchant market declined from *** percent in 2017 to *** percent in 2018 and remained essentially flat in 2019 at ***, before rising from *** percent in interim 2019 to *** percent in interim 2020. This reflects, with the exception of the interim period where apparent U.S. consumption in the merchant market declined *** percent, that domestic producer prices generally tracked changes in costs. Unit raw material costs and unit COGS each decreased after 2018 as did apparent U.S. consumption in the merchant market.[184] Based on the foregoing, for purposes of the preliminary phase of this investigation, we find that subject imports did not prevent U.S. price increases that would otherwise have occurred to a significant degree.

Because significant underselling caused subject imports to capture market share from the domestic industry, especially from 2018 to 2019, we find for purposes of these preliminary determinations that subject imports have had significant adverse price effects.

E. Impact of the Subject Imports[185]

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."[186]

The domestic industry's capacity increased over the POI, but its production fluctuated. Capacity rose by 5.6 percent from 2017 to 2019, increasing from 541,692 short tons in 2017 to

[184] CR/PR at Table VI-3 and Table C-2.

[185] Commerce initiated antidumping duty investigations based on estimated dumping margins of 45.65 percent for subject imports from Armenia, 63.05 percent for subject imports from Brazil, 57.74 percent for subject imports from Oman, 62.18 percent for subject imports from Russia, and 34.27 percent for subject imports from Turkey. *Certain Aluminum Foil From the Republic of Armenia, Brazil, the Sultanate of Oman, the Russian Federation, and the Republic of Turkey: Initiation of Less-Than-Fair-Value Investigations,* 85 Fed. Reg. 67711, 67714 (Dep't Commerce Oct. 26, 2020).

[186] 19 U.S.C. § 1677(7)(C)(iii). This provision was amended by the Trade Preferences Extension Act (TPEA) of 2015, Pub. L. 114-27.

544,180 short tons in 2018 and 572,057 short tons in 2019.[187] Production decreased by 4.8 percent from 2017 to 2019, increasing from 469,677 short tons in 2017 to 482,607 short tons in 2018 and then declining to 447,204 short tons in 2019.[188] Capacity utilization decreased by *** percentage points from 2017 to 2019, rising from 86.7 percent in 2017 to 88.7 percent in 2018 and falling to 78.2 percent in 2019.[189]

The domestic industry's commercial U.S. shipments in the merchant market decreased by *** percent from 2017 to 2019, rising from *** short tons in 2017 to *** short tons in 2018 and then declining to *** short tons in 2019.[190] The value of these shipments increased by *** percent, increasing from $*** in 2017 to $*** in 2018 and then declining to $*** in 2019.[191] The domestic industry's end-of-period inventories rose by *** percent, increasing from *** short tons in 2017 to *** short tons in 2018 and to *** short tons in 2019.[192] The domestic industry's share of apparent U.S. consumption in the merchant market increased from *** percent in 2017 to *** percent in 2018 and then declined to *** percent in 2019, a level below that of 2017.[193]

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[187] CR/PR at Table C-1, Table III-5. The domestic industry's production capacity was 276,343 short tons in interim 2019 and 273,015 short tons in interim 2020. *Id.*

[188] CR/PR at Table C-1, Table III-5. The domestic industry's production was 234,120 short tons in interim 2019 and 203,025 short tons in interim 2020. *Id.*

[189] CR/PR at Table C-1, Table III-5. The domestic industry's capacity utilization was 84.7 percent in interim 2019 and 74.4 percent in interim 2020. *Id.*

[190] CR/PR at Table C-2, Table III-7. The domestic industry's commercial U.S. shipments in the merchant market were *** short tons in interim 2019 and *** short tons in interim 2020. *Id.* The domestic industry's U.S. shipments in the total market decreased by *** percent between 2017 and 2019, increasing from 440,551 short tons in 2017 to 453,607 short tons in 2018 and declining to 420,313 short tons in 2019; they were 221,766 short tons in interim 2019 and 199,037 short tons in interim 2020. CR/PR at Table C-1, Table III-7. Internal consumption was *** short tons in 2017, *** short tons in 2018, *** short tons in 2019, *** short tons in interim 2019, and *** short tons in interim 2020. CR/PR at Table III-7.

[191] CR/PR at Table C-2, Table III-7. The value of the domestic industry's U.S. commercial shipments was $*** in interim 2019 and $*** in interim 2020. *Id.* In the total market, the value of the domestic industry's U.S. shipments rose by 3.8 percent between 2017 and 2019, increasing from $1.33 billion in 2017 to $1.58 billion in 2018 and declining to $1.38 billion in 2019; they were $740.5 million in interim 2019 and $600.3 million in interim 2020. CR/PR at Table C-1, Table III-7. The value of internal consumption was $*** in 2017, $*** in 2018, $*** in 2019, $*** in interim 2019, and $*** in interim 2020. CR/PR at Table III-7.

[192] CR/PR at Table C-1, Table III-8. End-of-period inventories were 36,062 short tons in interim 2019 and 32,101 short tons in interim 2020. *Id.*

[193] CR/PR at Table C-2, Table IV-11. The domestic industry's share of apparent U.S. consumption in the merchant market was *** percent in interim 2019 and *** percent in interim 2020. *Id.* The domestic industry's share of apparent U.S. consumption in the total market increased from 73.3 percent (Continued…)

Most of the domestic industry's employment indicators were positive from 2017 to 2019. Employment rose by 5.0 percent from 2017 to 2019, increasing from 1,453 production-related workers ("PRWs") in 2017 to 1,514 PRWs in 2018 and 1,526 PRWs in 2019.[194] Total hours worked increased by 4.5 percent from 2017 to 2019, from 3.10 million hours in 2017 to 3.21 million hours in 2018 and 3.24 million hours in 2019.[195] Wages paid rose by *** percent, increasing from $*** in 2017 to $*** in 2018 and $*** in 2019.[196] Productivity decreased by *** percent, decreasing from *** short tons per 1,000 hours in 2017 to *** short tons per 1,000 hours in 2018, and *** short tons per 1,000 hours in 2019.[197]

Merchant market producers' financial indicators displayed some improvement from 2017 to 2018 as the orders on imports of aluminum foil from China were imposed in April 2018 but declined markedly from 2018 to 2019; cumulated subject imports took market share from nonsubject imports that might otherwise have gone to the domestic industry in 2018 and then took additional market share from the domestic industry in 2019. Merchant market producers' revenues from commercial sales increased from $*** in 2017 to $*** in 2018 and then declined to $*** in 2019.[198] These producers' gross profits increased from $*** in 2017 to $*** in 2018 and then declined to $*** in 2019.[199] Their operating income increased from

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in 2017 to 75.3 percent in 2018 and declined to 72.6 percent in 2019; it was 74.0 percent in interim 2019 and 72.9 percent in interim 2020. CR/PR at Table C-1, Table IV-9.

[194] CR/PR at Table C-1, Table III-10. The domestic industry employed 1,553 PRWs in interim 2019 and 1,367 PRWs in interim 2020. *Id.*

[195] CR/PR at Table C-1, Table III-10. Total hours worked were 2.1 million hours in interim 2019 and 1.9 million hours in interim 2020. Hours worked per PRW were 2,136 hours in 2017, 2,119 hours in 2018, 2,126 hours in 2019, 1,360 hours in interim 2019, and 1,361 hours in interim 2020. *Id.*

[196] CR/PR at Table C-1. Table III-10. Wages paid were $57.9 million in interim 2019 and $52.7 million in interim 2020. Hourly wages were $34.11 in 2017, $35.35 in 2018, $35.26 in 2019, $27.42 in interim 2019, and $28.36 in interim 2020. *Id.*

[197] CR/PR at Table C-1, Table III-10. Productivity was 110.9 short tons per 1,000 hours in interim 2019 and 109.2 short tons per 1,000 hours in interim 2020. *Id.* Unit labor costs per short ton were $225 in 2017, $235 in 2018, $256 in 2019, $247 in interim 2019 and $260 in interim 2020. *Id.*

[198] CR/PR at Table C-2, Table VI-3. Merchant market producers' revenues from commercial sales were $*** in interim 2019 and $*** in interim 2020. *Id.* In the total market, the domestic industry's revenues from total net sales increased from $1.41 billion in 2017 to $1.67 billion in 2018, and then declined to $1.46 billion in 2019; its revenues from total net sales were $781.3 million in interim 2019 and $630.4 million in interim 2020. *See* CR/PR at Table C-1, Table VI-1.

[199] CR/PR at Table C-2, Table VI-3. Merchant market producers' gross profits were $*** in interim 2019 and $*** in interim 2020. *Id.* In the total market, the domestic industry's gross profits increased from $95.5 million in 2017 to $108.2 million in 2018, and then declined to $75.7 million in 2019; they were $60.2 million in interim 2019 and $13.1 million in interim 2020. CR/PR at Table C-1, Table VI-1.

$*** in 2017 to $*** in 2018 and then declined to $*** in 2019, a figure below that of 2017.[200] Merchant market producers' operating margin increased from *** percent in 2017 to *** percent in 2018, before declining to *** percent in 2019, a level below that of 2017 and likely lower than the domestic industry would have experienced had it been able to recover more market share previously lost to China.[201] Merchant market producers' net income worsened overall, increasing from *** in 2017 to $*** in 2018 and then decreasing to *** in 2019.[202]

The domestic industry's capital expenditures rose from $*** in 2017 to $*** in 2018 and $*** in 2019.[203] It incurred research and development expenses of $*** in 2017, $*** in 2018, and $*** in 2019.[204] Five U.S. producers reported that cumulated subject imports had negative effects on their firms' growth, investment, ability to raise capital, development and production efforts, or the scale of capital investments.[205] The domestic industry's total assets were $630.0 million in 2017, $686.7 million in 2018, and $766.8 million in 2019; its operating return on its assets was 7.5 percent in 2017, 7.6 percent in 2018, and 2.5 percent in 2019.[206]

Over the POI, significant and increasing volumes of cumulated subject imports entered the U.S. market. Between 2017 and 2019 cumulated subject imports more than doubled their market share in the merchant market and significantly undersold the domestic like product, capturing most of the market share vacated by the nonsubject imports as nonsubject imports

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[200] CR/PR at Table C-2, Table VI-3. Merchant market producers' operating income was *** in interim 2019 and *** in interim 2020. *Id.* In the total market, the domestic industry's operating income increased from $47.0 million in 2017 to $52.2 million in 2018, and then declined to $18.8 million in 2019; its operating income was $31.0 million in interim 2019 and negative $14.7 million in interim 2020. CR/PR at Table C-1, Table VI-1.

[201] CR/PR at Table C-2, Table VI-3. Merchant market producers' operating margin was *** percent in interim 2019 and *** percent in interim 2020. *Id.* In the total market, the domestic industry's operating margin decreased from 3.3 percent in 2017 to 3.1 percent in 2018 and 1.3 percent in 2019; its operating margin was 4.0 percent in interim 2019 and negative 2.3 percent in interim 2020. CR/PR at Table C-1, Table VI-3.

[202] CR/PR at Table C-2, Table VI-3. Merchant market producers' net income was $*** in interim 2019 and *** in interim 2020. *Id.* In the total market, the domestic industry's net income also worsened overall from 2017 to 2019, increasing from negative $5.9 million in 2017 to $5.8 million in 2018 and then decreasing to negative $33.5 million in 2019; it was $2.7 million in interim 2019 and negative $40.2 million in interim 2020. CR/PR at Table C-1, Table VI-1.

[203] CR/PR at Table VI-9. The domestic industry's capital expenditures were $*** in interim 2019 and $*** in interim 2020. *Id.* The changes in capital expenditures over the POI were largely attributable to ***, which ***. CR/PR at VI-19.

[204] CR/PR at Table VI-9. Research and development (R&D) expenditures were $*** in interim 2019 and $*** in interim 2020. *Id*.

[205] CR/PR at VI-20 and Table VI-10 and Table VI-11.

[206] CR/PR at Table VI-9.

declined following the 2017 investigations and 2018 orders on nonsubject imports from China, moderating the domestic industry's increase in market share in 2018, and ultimately taking market share from the domestic industry from 2018 to 2019. With ***[207] and the continued exit of nonsubject imports from China, the domestic industry would reasonably have been anticipated to have more rather than fewer merchant market shipments in 2019 as compared to 2018. The record of these preliminary phase investigations thus indicates that the significant volumes of low-priced subject imports caused the domestic industry's output and revenues to be lower than they would have been otherwise, following the imposition of the orders on imports from China. Indeed, the domestic industry's production, capacity utilization, merchant market shipments, and financial performance all declined from 2018 to 2019.

We are unpersuaded by respondents' argument that, because the domestic industry does not adequately supply certain segments of the U.S. market, specifically household foil, thin and ultra-thin aluminum foil, and fin stock, the impact of subject import competition on the domestic industry is attenuated.[208] The current record does not support a finding that the domestic industry's losses of market share to the subject imports are a function of subject imports participating in segments where the domestic industry could not supply demand as the record reflects that the domestic industry participates in all thickness segments of the U.S. aluminum foil market.[209] While respondents' arguments focus in part on a purportedly insufficient supply of ultra-thin foil and household foil available from the domestic industry, we observe that the domestic industry registered ***.[210] In addition, to the extent the respondents argue that competition is attenuated because the domestic industry is focused on the extra-heavy product, we observe that cumulated subject import volume was also considerable in this category in 2019.[211] Additionally, as discussed above in the price effects section, the record contains documentary material indicating that the domestic industry and

[207] Petitioners' Postconference Brief at 14.

[208] Joint Respondents' Postconference Brief at 7-25; CBA Postconference Brief at 1-6; Turkish Respondents' Postconference Brief at 3-4.

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

[210] CR/PR at Table IV-4. Specifically, in 2019, U.S. producers had *** short tons in U.S. shipments of ultra-thin product and *** short tons in U.S. shipments of thin product, whereas cumulated subject imports had *** short tons in U.S. shipments of ultra-thin product and *** in U.S. shipments of thin product. *Id.*

[211] CR/PR at Table IV-4. Specifically, in 2019, U.S. producers had *** short tons in U.S. shipments of extra-heavy product, whereas cumulated subject imports had *** short tons in U.S. shipments of extra-heavy product. *Id.*

cumulated subject imports competed for sales to the same accounts.[212] In any final phase investigations, we will collect shipment data for the domestic product and subject imports over time to enable us further to assess to what extent subject import volume gains have been focused in specific market segments.

We have also considered whether there are other factors that may have had an impact on the domestic industry to ensure that we are not attributing injury from such other factors to subject merchandise. Apparent U.S. consumption declined over the POI, particularly in interim 2020. Petitioners state that the COVID 19 pandemic had a modest negative impact on their operations in interim 2020.[213] While demand declines due to the COVID-19 pandemic may have adversely affected domestic industry output and performance in interim 2020, industry participants generally did not perceive demand to be declining earlier in the POI.[214] Moreover, declining demand cannot fully explain the adverse changes experienced by the domestic industry in 2019, particularly the domestic industry's loss of market share that year to subject imports and its inability to capture market share that had been previously lost to nonsubject imports from China before the imposition of the orders on those imports.

Nonsubject import volume declined from 2017 to 2019 and nonsubject imports' market share in the merchant market declined from 2017 to 2019.[215] Therefore, nonsubject imports cannot explain the declines in output and market share experienced by the domestic industry. We will examine further in any final phase of these investigations the role of nonsubject imports from sources other than China.

Accordingly, for purposes of these preliminary determinations, we conclude that subject imports had a significant impact on the domestic industry.

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[212] Petitioners and Respondents differ in their perspectives on several important supply relationships and contract negotiations, which we intend to explore further in any final phase of these investigations.

[213] Petitioners' Postconference Brief at 18.

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

[215] CR/PR at Table IV-2, C-2. Nonsubject import volume was lower in interim 2020 than in interim 2019. CR/PR at Table IV-2. Nonsubject import market share in the merchant market was below 2017 levels in interim 2020. CR/PR at Table C-2. In the total market, nonsubject import market share exhibited similar trends.

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 aluminum foil from Armenia, Brazil, Oman, Russia, and Turkey that are sold in the United States at less than fair value and subject imports of aluminum foil from Oman and Turkey that are allegedly subsidized.

Part I: Introduction

Background

These investigations result from petitions filed with the U.S. Department of Commerce ("Commerce") and the U.S. International Trade Commission ("USITC" or "Commission") by the Aluminum Association Trade Enforcement Working Group, Arlington, Virginia and its individual members - Gränges Americas Inc., Franklin, Tennessee; JW Aluminum Company, Daniel Island, South Carolina; and Novelis Corporation, Atlanta, Georgia, on September 29, 2020, alleging that an industry in the United States is materially injured and threatened with material injury by reason of less-than-fair-value ("LTFV") imports of certain aluminum foil ("aluminum foil")[1] from Armenia, Brazil, Oman, Russia, and Turkey and subsidized imports of aluminum foil from Oman and Turkey. The following tabulation provides information relating to the background of these investigations.[2] [3]

Effective date	Action
September 29, 2020	Petitions filed with Commerce and the Commission; institution of Commission investigations (85 FR 62759, October 5, 2020)
October 19, 2020	Commerce's notice of initiation (85 FR 68287, October 28, 2020), (countervailing duty), and (85 FR 67711, October 26, 2020 (antidumping duty)
October 20, 2020	Commission's conference
November 12, 2020	Commission's vote
November 13, 2020	Commission's determinations
November 20, 2020	Commission's views

Statutory criteria

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

> *shall consider (I) the volume of imports of the subject merchandise, (II) the effect of imports of that merchandise on prices in the United States for*

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

[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.

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

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

[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.

United States merely because that industry is profitable or because the performance of that industry has recently improved.

Organization of report

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

Market summary

Aluminum foil is generally used in food and pharmaceutical packaging. Aluminum foil is also used to manufacture thermal insulation for the construction industry, fin stock for air conditioners, electrical coils for transformers, capacitors for radios and televisions, and insulation for storage tanks.[6] The leading U.S. producers of aluminum foil are Gränges Americas, Inc. ("Gränges"), Novelis Corporation ("Novelis"), and Reynolds Consumer Products ("Reynolds"), while leading producers of aluminum foil outside the United States include *** of Armenia, *** of Brazil, *** of Oman, *** of Russia, and *** of Turkey. The leading U.S. importer of aluminum foil from subject sources (Armenia, Brazil, and Russia) is ***, while *** is the leading U.S. importer from Oman. In addition, the leading U.S. importers of aluminum foil from Turkey are ***. Leading importers of aluminum foil from nonsubject countries (primarily China, Germany, and South Korea) include ***. U.S. purchasers of aluminum foil are firms that distribute aluminum foil or use aluminum foil in their manufacturing processes; leading purchasers include ***, ***, and ***.

[6] Petition, Vol. I, p. 8.

Apparent U.S. consumption of aluminum foil totaled approximately 578,694 short tons ($1.9 billion) in 2019. Currently, seven firms are known to produce aluminum foil in the United States.[7] U.S. producers' U.S. shipments of aluminum foil totaled 420,313 short tons ($1.4 billion) in 2019, and accounted for 72.6 percent of apparent U.S. consumption by quantity and 72.1 percent by value. U.S. importers' U.S. shipments of imports from subject sources totaled 86,399 short tons ($267.0 million) in 2019 and accounted for 14.9 percent of apparent U.S. consumption by quantity and 14.0 percent by value. U.S. importers' U.S. shipments of imports from nonsubject sources totaled 71,982 short tons ($265.6 million) in 2019 and accounted for 12.4 percent of apparent U.S. consumption by quantity and 13.9 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 five firms that accounted for *** percent of U.S. production of aluminum foil during 2019.[8] Unless otherwise noted, U.S. imports are based on firms' responses to Commission questionnaires.

Previous and related investigations

Aluminum foil has been the subject of prior countervailing and antidumping duty investigations in the United States. In 2018, the Commission conducted final phase antidumping duty and countervailing duty investigations on aluminum foil from China. The Commission determined that an industry in the United States was materially injured by reason of imports of aluminum foil from China that Commerce determined to be subsidized and sold in the United States at less than fair value.[9] On April 19, 2018, Commerce issued antidumping and countervailing duty orders on aluminum foil from China.[10]

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[7] The Commission received U.S. producer questionnaire responses from five firms, Aleris Rolled Products, Inc. ("Aleris"), Gränges, JW Aluminum, Novelis, and Reynolds. The petition listed two additional producers, *** which are estimated to account for *** percent of U.S. production of aluminum foil in 2019. Petition, Volume I, p. 5 and Exh. GEN-1.

[8] Petition, Volume I, p. 5 and Exh. GEN-1.

[9] *Aluminum Foil from China, Investigation Nos. 701-TA-570 and 731-TA-1346 (Final)*, USITC Publication 4771, May 2018, p. 1 and *Aluminum Foil From China*, 83 FR 16128, April 13, 2018

[10] *Certain Aluminum Foil From the People's Republic of China: Amended Final Affirmative Countervailing Duty Determination and Countervailing Duty Order*, 83 FR 17360 and *Certain Aluminum Foil From the People's Republic of China: Amended Final Determination of Sales at Less Than Fair Value and Antidumping Duty Order*, 83 FR 17362.

Nature and extent of alleged subsidies and sales at LTFV

Alleged subsidies

On October 28, 2020, Commerce published a notice in the *Federal Register* of the initiation of its countervailing duty investigations on aluminum foil from Oman and Turkey.[11] Commerce identified the following government programs in Oman and Turkey:[12] [13]

Oman

- Corporate Income Tax Exemption for Export Sectors
- Tariff Exemptions on Imported Equipment, Machinery, Materials, and Packaging
- Loans for Industrial Projects by the Oman Development Bank
- Pre-Shipment Credit Guarantee Scheme
- Post-Shipment Export Financing
- Provision of Land for Less Than Adequate Remuneration
- Provision of Electricity for Less Than Adequate Remuneration
- Grants Pursuant to Oman's Ninth Five-Year Plan Under the Tanfeedh Program

Turkey

- Tax Programs
    1. Deductions from Taxable Income for Export Revenue
    2. Inward Processing Certificates
    3. Exemption from Property Tax
    4. Free Zones Law No. 3218: Corporate Income Tax Exemption
    5. Free Zones Law No. 3218: Exemption from Income Tax for Workers' Wages
    6. Exemption on Exchange Tax for Foreign Exchange Transactions
    7. Tax and Fee Incentives for Renewable Energy

[11] 85 FR 68287, October 28, 2020.

[12] Department of Commerce Enforcement and Compliance Office of AD/CVD Operations, CVD Initiation Checklist, Certain Aluminum Foil from Oman, Case No. C-523-816, October 19, 2020.

[13] Department of Commerce Enforcement and Compliance Office of AD/CVD Operations, CVD Initiation Checklist, Certain Aluminum Foil from Turkey, Case No. C-489-845, October 19, 2020.

- Investment Incentive Scheme Programs
    1. Investment Incentive Scheme
    2. Regional Investment Incentive Scheme
    3. Large Scale Investment Incentive Scheme
    4. Strategic Investment Incentive Scheme
    5. Project-Based Investment Incentive Program
- Loan Programs from Export Credit Bank of Turkey
    1. Rediscount Program
    2. Investment Credit for Export Program
    3. Export-Oriented Working Capital Credit Program
    4. Export Buyer's Credits
- Provision of Goods and Services for LTAR
    1. Provision of Land for LTAR Under Law No. 5084
    2. Provision of Land for LTAR Under Law No. 4916
    3. Provision of Natural Gas for LTAR
- Grant Programs
    1. Renewable Energy Support Mechanism
    2. Foreign Fair Support Program
    3. Foreign Market Research and Market Entry Grants
    4. Turquality® Program
- R&D Incentives
    1. Incentives Under the R&D Law
    2. TUBITAK Grants

Alleged sales at LTFV

On October 26, 2020, Commerce published a notice in the *Federal Register* of the initiation of its antidumping duty investigations on aluminum foil from Armenia, Brazil, Oman, Russia, and Turkey.[14] Commerce has initiated antidumping duty investigations based on the following estimated dumping margins for aluminum foil:

[14] 85 FR 67711, October 26, 2020.

(1) Armenia—45.65 percent;

(2) Brazil—63.05 percent;

(3) Oman—57.74 percent;

(4) Russia—62.18 percent; and

(5) Turkey—34.27 percent.

The subject merchandise

Commerce's scope

In the current proceeding, Commerce has defined the scope as follows:[15]

> *The merchandise covered by these investigations is aluminum foil having a thickness of 0.2 mm or less, in reels exceeding 25 pounds, regardless of width. Aluminum foil is made from an aluminum alloy that contains more than 92 percent aluminum. Aluminum foil may be made to ASTM specification ASTM B479, but can also be made to other specifications. Regardless of specification, however, all aluminum foil meeting the scope description is included in the scope, including aluminum foil to which lubricant has been applied to one or both sides of the foil.*
>
> *Excluded from the scope of these investigations is aluminum foil that is backed with paper, paperboard, plastics, or similar backing materials on one side or both sides of the aluminum foil, as well as etched capacitor foil and aluminum foil that is cut to shape. Where the nominal and actual measurements vary, a product is within the scope if application of either the nominal or actual measurement would place it within the scope based on the definitions set forth above.*

Tariff treatment

Based upon the scope set forth by Commerce, information available to the Commission indicates that the merchandise subject to these investigations are imported under the following provisions of the Harmonized Tariff Schedule of the United States ("*HTSUS*" or "HTS"):

[15] 85 FR 67711, October 26, 2020.

statistical reporting numbers 7607.11.3000, 7607.11.6090,[16] 7607.11.9030, 7607.11.9060, 7607.11.9090, 7607.19.6000.[17] Foil classified in heading 7607 must measure 0.2 mm or less in thickness. The 2020 column 1-General rate of duty is 5.8 percent ad valorem for HTS subheading 7607.11.30, 5.3 percent ad valorem for HTS subheading 7607.11.60, and 3 percent ad valorem for HTS subheadings 7607.11.90, and 7607.19.60.[18] Subject aluminum foil originating in Oman are eligible for special duty rates under the United States-Oman Free Trade Agreement Implementation Act.[19] The Column 1-Special rate of duty for aluminum foil originating in Oman is "Free" for HTS subheadings 7607.11.30, 7607.11.60, 7607.11.90, and 7607.19.60.[20] Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection ("CBP").

Section 232 tariff treatment

Aluminum foil classifiable under HTS heading 7607 was included in the enumeration of aluminum articles that became subject to the additional 10 percent *ad valorem* Section 232 duties,[21] as of March 23, 2018.[22] At this time, imports of these products originating in

[16] Effective January 1, 2019, HTS statistical reporting number 7607.11.6000 was annotated and divided into statistical reporting numbers 7607.11.6010 and 7607.11.6090. Boxed aluminum foil weighing not more than 11.3 kg, of a thickness exceeding 0.01 mm is imported under HTS statistical reporting number 7607.11.6010, and is excluded from the scope of this investigation. Other aluminum foil of a thickness exceeding 0.01 mm is imported under HTS statistical reporting number 7607.11.6090, and is within the scope of this investigation.; *HTS Change Record 2019*.

[17] Merchandise subject to this investigation, if measuring over 2 mm in thickness may also be imported under HTS statistical reporting numbers 7606.11.3060, 7606.11.6000, 7606.12.3045, 7606.12.3055, 7606.12.3091, 7606.12.3096, 7606.12.6000, 7606.91.3095, 7606.91.6095, 7606.92.3035, and 7606.92.6095.

[18] *HTSUS (2020) Revision 25,* USITC Publication 5133, October 2020, p. 76-10.

[19] *HTSUS (2020) Revision 25*, USITC Publication 5133, October 2020, HTS General Note 3(c)i, p. GN-7, p.GN-726.

[20] *HTSUS (2020) Revision 25,* USITC Publication 5133, October 2020, p. 76-10.

[21] Section 232 of the *Trade Expansion Act of 1962*, as amended (19 U.S.C. 1862), authorizes the President, on advice of the Secretary of Commerce, to adjust the imports of an article and its derivatives that are being imported into the United States in such quantities or under such circumstances as to threaten to impair the national security.

[22] *Adjusting Imports of Aluminum Into the United States*, Presidential Proclamation 9704, March 8, 2018, 83 FR 11619, March 15, 2018.

Australia,[23] Canada, and Mexico[24] are exempt from duties or quota limits; imports originating in Argentina are exempt from duties, but instead are subject to quota limits;[25] and imports originating in all other countries – including subject countries Armenia, Brazil,[26] Oman, Russia, and Turkey are subject to the 10 percent additional duties.[27] See also U.S. notes 19(a) and 19(b) in subchapter III of HTS chapter 99.[28]

[23] Imports of aluminum articles originating in Australia were exempted from the Section 232 duties as of March 23, 2018 (83 FR 13355, March 28, 2018), with the exemption continued as of May 1, 2018 (83 FR 20677, May 7, 2018) and subsequently continued as of June 1, 2018 (83 FR 25849, June 5, 2018).

[24] Imports of aluminum articles originating in Canada and Mexico were initially exempted from the Section 232 duties as of March 23, 2018 (83 FR 11619, March 15, 2018 and 83 FR 13355, March 28, 2018), with these exemptions continued as of May 1, 2018 (83 FR 20677, May 7, 2018), not continued as of June 1, 2018 (83 FR 25849, June 5, 2018), and restored as of May 20, 2019 (84 FR 23983, May 23, 2019). Exemptions were discontinued and an additional duty of 10 percent ad valorem was reinstated for imports originating in Canada as of August 16, 2020 (85 FR 49921). Canada's exemption from the additional 232 duties was restored as of effective Sept. 1, 2020 but subject to monthly import quotas for the last four months of 2020 (85 FR 68709).

[25] Imports of aluminum articles originating in Argentina were exempted from the Section 232 duties as of March 23, 2018 (83 FR 13355, March 28, 2018), with the exemption continued as of May 1, 2018 (83 FR 20677, May 7, 2018), and subsequently continued but with import quotas as of as of June 1, 2018 (83 FR 25849, June 5, 2018). The composition of the quota product groups may not exactly match the product scope of this investigation. For 2020 annual and third-quarter 2020 Section 232 import quota limits for wrought aluminum (including aluminum foil) originating in Argentina, see the CBP quota bulletin, "QB 20-703 2020 Aluminum Absolute Quota 3rd Quarter for Argentina," July 30, 2020, available at https://www.cbp.gov/trade/quota/bulletins/qb-20-703-2020-aluminum-absolute-quota-3rd-quarter-argentina-0.

[26] Imports of aluminum articles (including subject aluminum foil) originating in Brazil was exempted from the Section 232 duties as of March 23, 2018 (83 FR 13355, March 28, 2018). Although the exemption for Brazil was continued as of May 1, 2018 (83 FR 20677, May 7, 2018), it was subsequently not continued as of June 1, 2018 (83 FR 25849, June 5, 2018).

[27] Imports of aluminum articles originating in Korea and the European Union member countries ("EU countries") were exempted from the Section 232 duties as of March 23, 2018 (83 FR 13355, March 28, 2018). The exemption for Korea was not continued as of May 1, 2018 (83 FR 20677, May 7, 2018). Although the exemptions for the EU countries were continued as of May 1, 2018 (83 FR 20677, May 7, 2018), they were subsequently not continued as of June 1, 2018 (83 FR 25849, June 5, 2018).

[28] *HTSUS (2020) Revision 25,* USITC Publication 5133, October 2020, pp. 76-18, 99-III-13 – 99-III-15, 99-III-233 – 99-III-234.

Section 301 tariff treatment

Nonsubject aluminum foil originating in China is subject to an additional 7.5 percent[29] *ad valorem* duty under Section 301 of the Trade Act of 1974, as amended ("Trade Act"), effective September 21, 2019.[30] See also U.S. note 20(s) in subchapter II of HTS chapter 99.[31]

The product[32]

Description and applications

Aluminum foil is a thin wrought[33] aluminum product that is produced via a rolling process. The subject product is aluminum foil having a thickness of 0.2 mm or less, in reels exceeding 25 pounds, regardless of width. Also, it is made from an aluminum alloy that contains between 92 and 99 percent aluminum.[34] Aluminum foil is commonly produced using 1XXX,[35] 3XXX,[36] and 8XXX[37] series alloys. Aluminum foil can be produced to meet the requirements of various international standard specifications, including ASTM International Standard B-479.[38]

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[29] Section 301 of the *Trade Act of 1974*, as amended (19 U.S.C. § 2411) authorizes the Office of the United States Trade Representative ("USTR"), at the direction of the President, to take appropriate action to respond to a foreign country's unfair trade practices.

[30] Aluminum foil is among the products included in the USTR's first list to the fourth enumeration ("List 1 to Tranche 4") of products originating in China that became subject to an additional 10 percent ad valorem Section 301 duty (Annexes A and B to 84 FR 43304), as of September 1, 2019 (84 FR 43304, August 20, 2019), which was subsequently raised to 15 percent ad valorem while retaining the same effective date (84 FR 45821, August 30, 2019). As of February 14, 2020, the 15 percent duty rate was reduced to its current rate of 7.5 percent ad valorem for the products enumerated on List 1 to Tranche 4 (85 FR 3741, January 22, 2020).

[31] *HTSUS (2020) Revision 25,* USITC Publication 5133, October 2020, pp. 76-18, 99-III-82 – 99-III-84, 99-III-94, 99-III-237.

[32] Unless otherwise noted, information presented in this section is based on *Aluminum Foil from China, Inv. Nos. 701-TA-570 and 731-TA-1346 (Final),* USITC Publication 4771, April 2018, I-10 – 1-20.

[33] Wrought aluminum consists of aluminum products that are rolled, drawn, extruded, or otherwise mechanically formed of aluminum or aluminum alloys.

[34] Petition, Vol. 1, p.8.

[35] 1XXX series contains 99 percent or more aluminum by weight. This is considered commercially pure by industry standards.

[36] The main alloying metal in 3XXX series aluminum is manganese.

[37] 8XXX series alloys include metals such as lithium, tin, nickel, and titanium.

[38] Petition, Vol. 1, p. 7. Importers claim that customers often have their own raw material specifications that go beyond the standards set by associations such as ASTM. Conference Transcript, p. 183 (Kiesow).

Among the major chemical and physical properties of aluminum, the alloy type, level of thickness, surface finish, temper, and width all play an important role in meeting the specifications of end users. Table I-1 presents information on aluminum foil by alloy series, properties, and end uses.

Table I-1

Series	Alloying metal	Properties	End uses
1XXX	Pure Aluminum	Commercially pure (99 percent or more Al by weight), non-heat-treatable, low strength, excellent formability, high thermal and electrical conductivity, high corrosion resistance, highly reflective	Aircraft frames, fuel filters, electric power grid lines, radiator tubing, lighting reflectors, decorative components, food packaging trays
3XXX	Manganese	Non-heat-treatable, medium strength, good formability, good corrosion resistance	Storage tanks, beverage cans, home appliances, heat exchangers, pressure vessels, siding, gutters
8XXX	Other elements, including lithium (Li), nickel (Ni), tin (Sn), and titanium (Ti)	Heat-treatable (Al-Li alloys), very high strength, low density	Aircraft and aerospace structures, foil, heat exchangers (air conditioning)

Note: Not all 1XXX, 3XXX, and 8XXX series alloy are subject to these investigations. The properties and end uses described above may include product that is out of the scope of these investigations.

Source: Aluminum Association, "Aluminum Alloys 101", https://www.aluminum.org/aluminum-advantage/infographic-gallery/aluminum-alloys-101, (retrieved October 22, 2020).; ASM International, "Aluminum and Aluminum Alloys Subject Guide", https://www.asminternational.org/aluminum/subject-guide, (retrieved October 22, 2020). Havrilla, David, "Joining Aluminum With Laser", *The Welder,* July 12, 2013, https://www.thefabricator.com/thewelder/article/laserwelding/joining-aluminum-with-laser. *Aluminum: Competitive Conditions Affecting the U.S. Industry, Inv. No. 332-557*, USITC Publication 4703, June 2017, p. 530-31.

Aluminum foil is produced and imported in a variety of gauges, or levels of thickness, and is commonly denominated in inches, millimeters, and microns.[39] The major categories of aluminum foil by thickness include:

Ultra-thin. -- Aluminum foil less than 0.000315 inch (8 microns) in thickness.[40]
Thin. -- Aluminum foil greater than or equal to 0.000315 inch (8 microns) and less than 0.00039 inch (10 microns) in thickness.[41]
Standard. -- Aluminum foil greater than or equal to 0.00039 inch (10 microns) and less than or equal to 0.001 inch (25 microns) in thickness.[42]
Heavy. -- Aluminum foil greater than 0.001 inch (25 microns) in thickness and less than 0.00177 inch (45 microns) in thickness.[43]
Extra heavy. -- Aluminum foil greater than or equal to 0.00177 inch (45 microns) in thickness.[44]

The scope of these investigations currently excludes "aluminum foil that is backed with paper, paperboard, plastics, or similar backing materials of the aluminum foil, as well as etched capacitor foil and aluminum foil that is cut to shape."

[39] Microns are commonly referred to as micrometers and represent one thousandth of a millimeter, or one millionth of a meter.

[40] Ultra-thin aluminum foil is primarily used as flexible packaging for food, medical device, pharmaceutical, and health care industries.

[41] The thin category generally corresponds to aluminum foil used in flexible packaging.

[42] The standard aluminum foil category generally corresponds to aluminum foil used for production of household foil products, though some household foil products are produced using a heavier gauge.

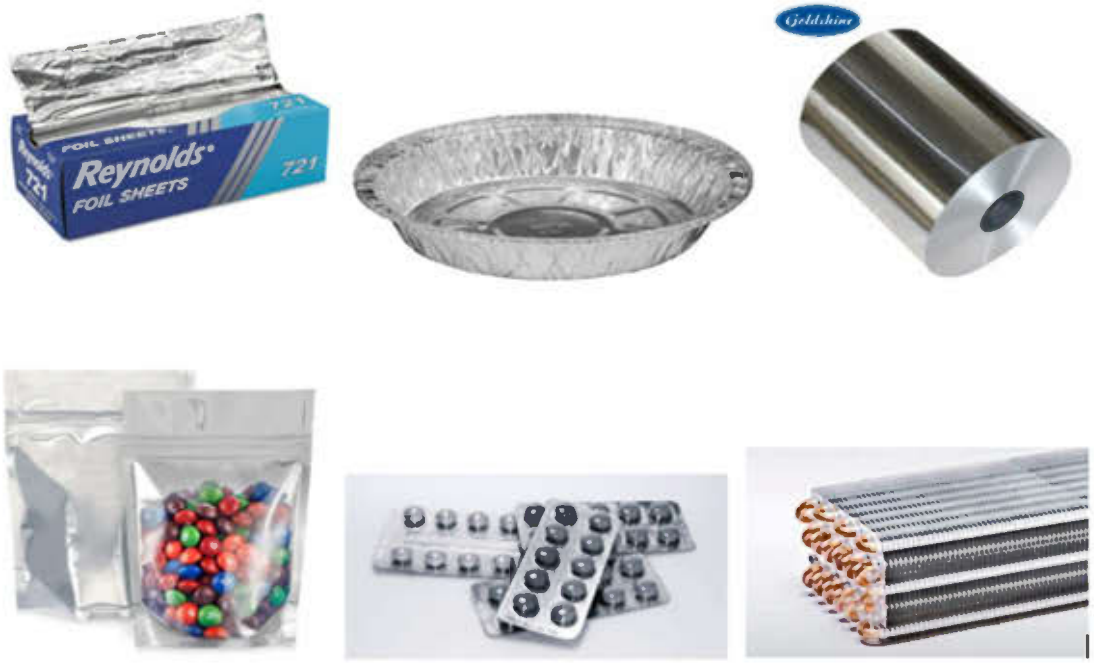
[43] Heavy duty and extra heavy duty aluminum foil are also used in household applications because they provide extra strength and tear resistance for baking, grilling and storage applications.; U.S. Packaging and Wrapping LLC, "Thickness of Aluminum Foil," http://www.uspackagingandwrapping.com/blog/Thickness-of-Aluminum-Foil.html, (retrieved November 4, 2017).

[44] The extra heavy duty aluminum foil category is used in some packaging applications but it also includes certain fin stock.

Aluminum foil is used extensively in food and pharmaceutical packaging because it provides protection against light, oxygen, moisture, and bacteria. It is also used in industrial applications such as thermal insulation, cables, and electronics where properties such as heat reflectivity and barrier protection are desired.[45] Common products that use aluminum foil include pie pans, food and candy wrappers, and household foil, among others. Figure I-1 presents images of some common aluminum foil products.

[45] Aluminum Association, "Foil and Packaging," http://www.aluminum.org/product-markets/foil-packaging, (retrieved October 22, 2020).

Figure I-1
Aluminum foil: Images of aluminum foil products



Images from left to right (top): Reynolds™ Foodservice Foil, pie pan, foil coil in jumbo roll.

Source: Office Supply, https://www.officesupply.com/cleaning-breakroom/breakroom-supplies/food-service-supplies/foil-wraps/reynolds-wrap-interfolded-aluminum-foil-sheets-silver/p600744.html?ref=pla&utm_source=google&utm_medium=cpc&adpos=&scid=scplp600744&sc_intid=600744&gclid=Cj0KCQjw28T8BRDbARIsAEOMBczi2DJ3IjQGAlXkZ1PQKG946kXxqSDW2MupYmLA89Md6PKYPDyVhKEaAsR6EALw_wcB, (retrieved October 22, 2020); Foil-Pans, https://www.foil-pans.com/collections/7-round-pans/products/handi-foil-6-5-8-round-slim-foil-take-out-pan-500-cs, (retrieved October 22, 2020); Alibaba, https://www.alibaba.com/product-detail/8011-Aluminium-Foil-Raw-Material-Jumbo_60650799535.html, (retrieved October 22, 2020).

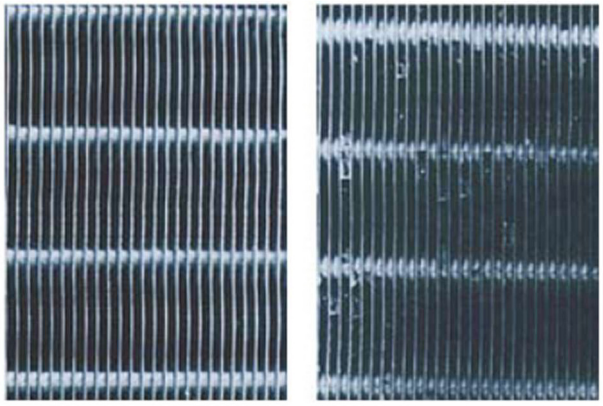
Images from left to right (bottom): Stand-up barrier pouches, pharmaceutical packaging, fin stock in heat exchanger.

Source: Uline, https://www.uline.com/Product/Detail/S-19167SILB/Plastic-Retail-Food-Bags/Stand-Up-Barrier-Pouches-4-x-6-x-2-Silver-Back?pricode=WZ749&gadtype=pla&id=S-19167SILB&gclid=CJ_x0ZuBn9MCFdiPswod-msDUw&gclsrc=aw.ds, (retrieved October 22, 2020); Hydro, https://www.hydro.com/en/products-and-services/rolled-products/rolled-products-for-packaging/plain-foil-for-medical-and-pharmaceutical-packaging/, (retrieved October 22, 2020); Elval, https://www.elval.com/en/markets-heating-ventilation-air-contitioning-hvac-heat-exchangers, (retrieved October 22, 2020).

Fin stock

Fin stock is used in a variety of applications, including heating, ventilation and air conditioning (HVAC), and other heat transfer products where properties such as light weight, corrosion resistance, and formability are desired. Certain fin stock is primarily produced using 1XXX, 3XXX, and 7XXX[46] series alloys and produced to a variety of gauges;[47] however some certain fin stock is produced using 8XXX series alloys as well.[48] Figure I-2 presents an example of fin stock. For fin stock, a coating material is applied in order to further improve corrosion resistance and operating efficiency in applications such as cooling equipment (air conditioners).[49]

Figure I-2
Certain fin stock: Pre-coated fin stock and fin stock with no treatment (from left to right)



Source: Kobe Steel, Ltd., "Pre-coated Aluminum Fin Stock for Heat Exchangers," http://www.kobelco.co.jp/english/products/almi/precoat-aluminum-fin.html, (retrieved October 22, 2020).

[46] Zinc is the primary alloying agent in 7XXX series alloys, as well as small quantities of magnesium, copper, or chromium. 7XXX series alloys are high strength and heat-treatable, and are often used in the aircraft industry.; Aluminum Association, "Aluminum Alloys 101", https://www.aluminum.org/aluminum-advantage/infographic-gallery/aluminum-alloys-101, (retrieved October 22, 2020).

[47] Almetals, Inc., "Fin Stock Suppliers," https://www.almetals.com/metals/fin-stock.aspx, (retrieved October 22, 2020).

[48] Haomei, "Bare Aluminum Fin Stock," http://aluminiumfinstock.com/bare-aluminium-fin-stock.html (retrieved October 22, 2020).

[49] Haomei, "Hydrophilic Aluminum Fin Stock," http://aluminiumfinstock.com/hydrophilic-aluminium-fin-stock.html (retrieved October 22, 2020).

Manufacturing processes

The manufacturing processes for aluminum foil are summarized below. In general, there are three distinct stages that include: (1) melting and refining aluminum, (2) casting aluminum into semi-finished forms, and (3) rolling semi-finished forms into flat rolled products such as aluminum foil.

Melting and refining

Aluminum is produced using either the primary or the secondary smelting process. Inputs for the primary smelting process are derived from aluminum-containing ore (bauxite) that is first mined then refined into aluminum oxide (alumina) in the Bayer process. In the Hall-Héroult electrolytic smelting process, the aluminum oxide is then smelted to remove oxygen and produce molten aluminum metal. The molten aluminum is then alloyed with different metals to enhance certain properties and qualities. During the secondary smelting process, aluminum scrap (both old[50] and new[51]) is smelted and alloyed, producing molten aluminum. Some producers use a combination of primary and secondary sources to produce molten aluminum. The desired metallurgical characteristics (e.g., hardness, strength, resistance to corrosion) of aluminum are determined prior to the casting stage.

Casting

Following the production of molten aluminum with the desired properties, the molten aluminum is then cast into a semi-finished form that can enter the rolling process. The most common casting methods used during the production of aluminum foil include continuous casting and direct chill casting. Direct chill casting requires more energy than continuous casting.

Continuous casting

During the continuous casting process, molten aluminum is transferred to a holding hearth where it is stored at the correct level of purity and temperature until it is ready to be fed into a casting unit. As the molten aluminum is fed into the casting unit, it flows between water-cooled rollers[52] and emerges as a continuous solid strip of aluminum (figure I-3). The strip of

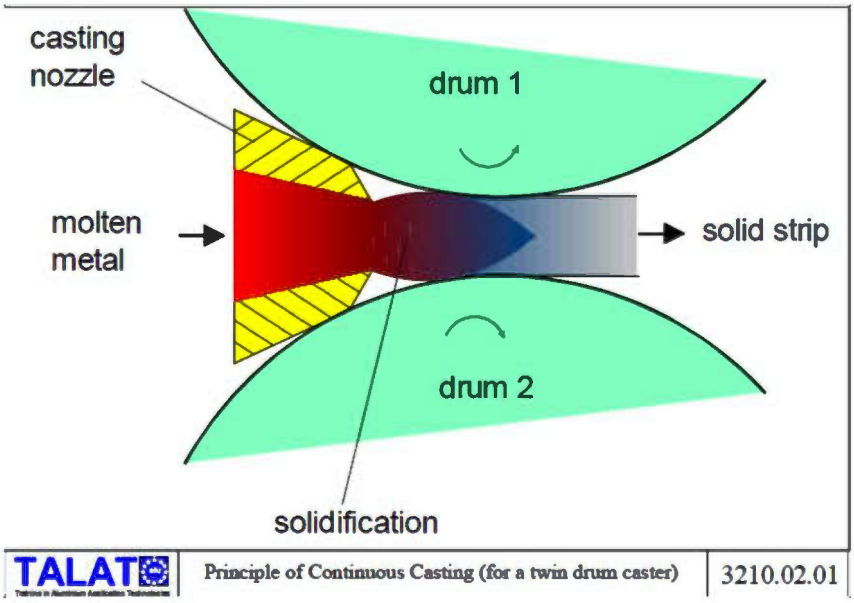
[50] Old scrap is post-consumer material derived from various end uses such as manufactured products and construction materials.

[51] New scrap is generated during the manufacturing of various aluminum products, and often takes the form of shavings and trimmings.

[52] The water-cooled rollers are labeled 'drum 1' and 'drum 2' in Figure I-3.

aluminum is fed into a combination stand where it is cut into designated lengths by shears before it is wound into a coil of foil stock (figure I-4).[53] Strips produced during this process can be between 3 and 20 mm (0.11811 and 0.787402 inches) in thickness.[54] The foil stock is then transferred to a cold rolling mill where it is then further reduced in thickness to produce different gauges of aluminum foil.

Figure I-3
Aluminum foil: Casting molten aluminum into solid strip (continuous casting process)

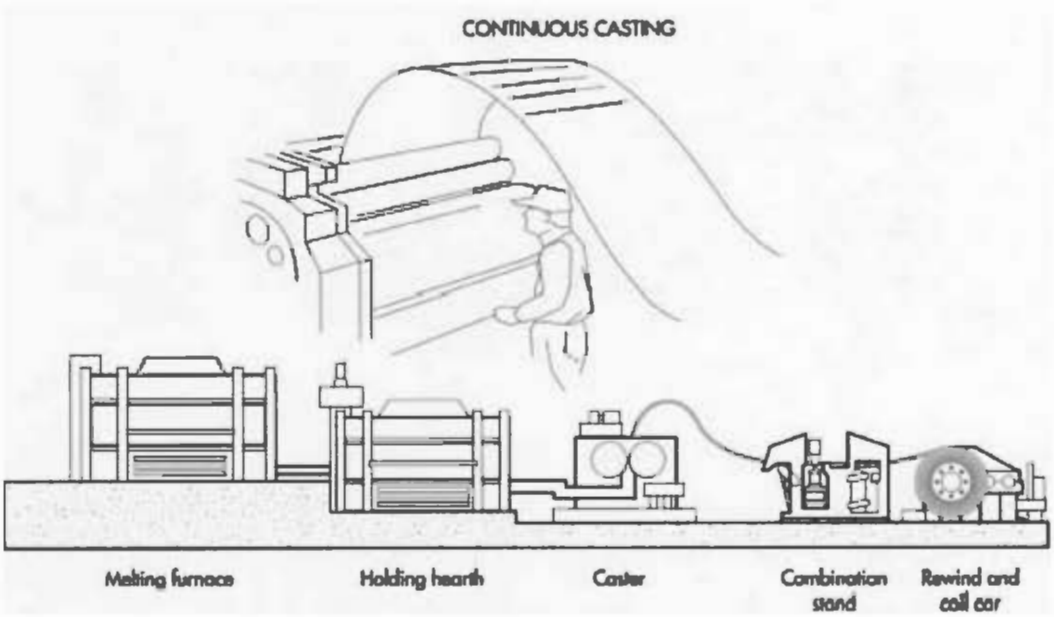


Source: Catrin Kammer, European Aluminum Association, "TALAT Lecture 3210, Continuous Casting of Aluminum", 1999, 4.

[53] How Products are Made, "Aluminum Foil: Smelting," http://www.madehow.com/Volume-1/Aluminum-Foil.html (retrieved October 22, 2020).

[54] Catrin Kammer, European Aluminum Association, "TALAT Lecture 3210, Continuous Casting of Aluminum," 1999, p. 3.

Figure I-4
Aluminum foil: Continuous casting process



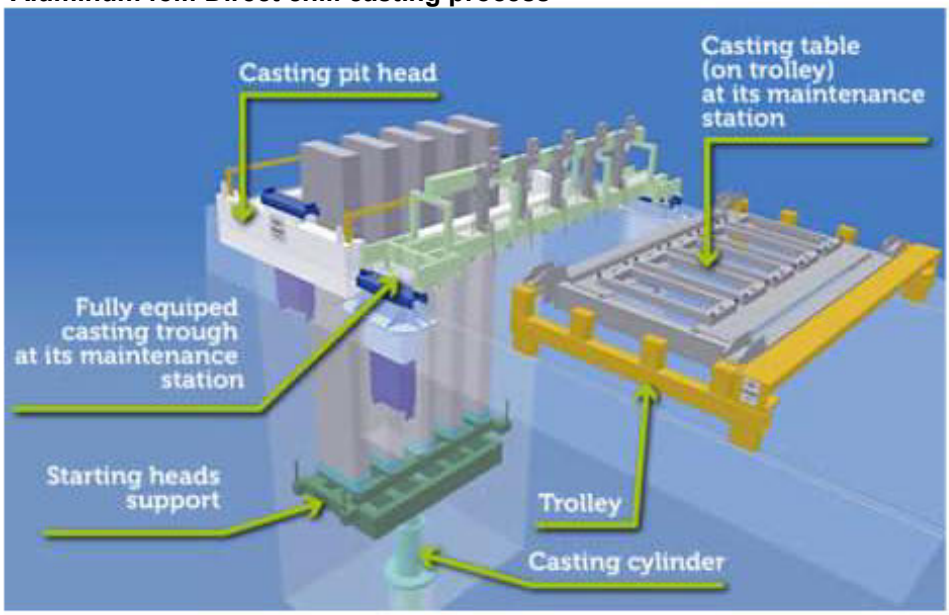
Source: http://www.madehow.com/Volume-1/Aluminum-Foil.html, (retrieved October 22, 2020).

Direct chill casting

Another method of casting used in the production of aluminum foil is direct chill casting. During this process, molten aluminum is transferred to a holding hearth where it is stored at the correct level of purity and temperature until it is ready to be fed into a casting unit with a mold. As the molten aluminum flows into in the casting unit, cold water is pumped around the base of the mold. This cools the molten aluminum, solidifying it into the shape of the mold, producing a semi-finished product known as slab or sheet ingot (figure I-5). These semi-finished products are then removed from the casting unit and undergo a process known as scalping[55] before they are cooled to room temperature and transferred to a hot rolling mill for further processing.

[55] Scalping removes irregularities or undesirable chemical compositions from the surface of the ingot.

Figure I-5
Aluminum foil: Direct chill casting process



Source: Novelis PAE, https://novelispae.com/dc-casting-machine/, (retrieved October 22, 2020).

Rolling process

Semi-finished forms of aluminum derived from the continuous casting and direct chill casting processes are reduced in thickness in a rolling mill. Hot rolling and cold rolling are two different methods by which semi-finished forms of aluminum are reduced in thickness between rollers. The major difference between these methods is how the input (foil stock in coils, slabs, sheet ingot) is treated before it is reduced.

Slabs and sheet ingots

Slabs or sheet ingots are re-heated, or annealed, to approximately 500°C before they make successive passes through a hot-rolling mill line where steel rollers reduce the slab or sheet ingot to a desired gauge, usually between 4 and 6 mm (0.15748 and 0.23622 inches).[56] The sheet of aluminum produced during this process is then coiled and cooled to room temperature before it is sent to a cold-rolling mill for further processing. Once it arrives at the cold-rolling mill, the coil is then unrolled into a continuous sheet, or web, that is then fed into the cold-rolling mill line where it makes successive passes through a series of work rolls (figure I-6) that are paired with backup rolls that further reduce the foil sheet's gauge by rotating in

[56] Roy Woodward, European Aluminum Association, "TALAT Lecture 1301, The Rolling of Aluminum: the Process and the Product," 1994, p. 6.

opposite directions.[57] Rolling oils or rolling lubricants are used to control friction between the rollers and the foil, and to cool the rollers. During the cold-rolling process, the aluminum foil must be annealed, or heat treated in order to enhance its workability. This can occur between passes on the cold-rolling mill line or after a final gauge has been produced. Cold-rolling two coils at the same time, a process known as doubling, is used to avoid breakage that may occur as the foil is reduced in thickness.[58] This process is used to produce thinner gauges of aluminum foil. Doubling the foil sheet produces two natural finishes, bright and matte.[59] As the two layers of aluminum foil are separated, they are coiled into large rolls of foil stock that are trimmed and slitted with circular and razor-like knives into rectangular pieces. Trimming refers to cutting the edges of the foil, while slitting involves making one or more cuts along the width of the master coil in order to produce coils with a narrower width. For certain fabricating and converting operations, webs that have been broken during rolling must be joined back together or spliced. Common types of splices for joining webs of Certain Aluminum Foil include ultrasonic, heat-sealing tape, pressure-sealing tape, and electric welded. The ultrasonic splice uses a solid-state weld—made with an ultrasonic transducer—in the overlapped metal.[60] Once inspected and packed, the finished rolls of aluminum foil are then shipped to customers for various end uses.

Foil stock

The manufacturing process for rolling foil stock produced from continuous casting differs from semi-finished forms derived from the direct chill casting process. Unlike slabs or sheet ingots, foil stock produced using continuous casting technology does not require the annealing stage in the hot-rolling process since this is achieved during the continuous casting phase.[61] For this reason, continuous casting has lower processing, investment, operating, and energy costs when compared to direct chill casting and hot-rolling of slabs or sheet ingots.[62]

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[57] Petition, Vol. 1, p. 8.

[58] Aluminum Association, "Foil and Packaging," http://www.aluminum.org/product-markets/foilpackaging, (retrieved October 23, 2020).

[59] The bright finish is produced when the foil comes into contact with the rollers, while the matte finish is produced when the two sheets come into contact with each other.

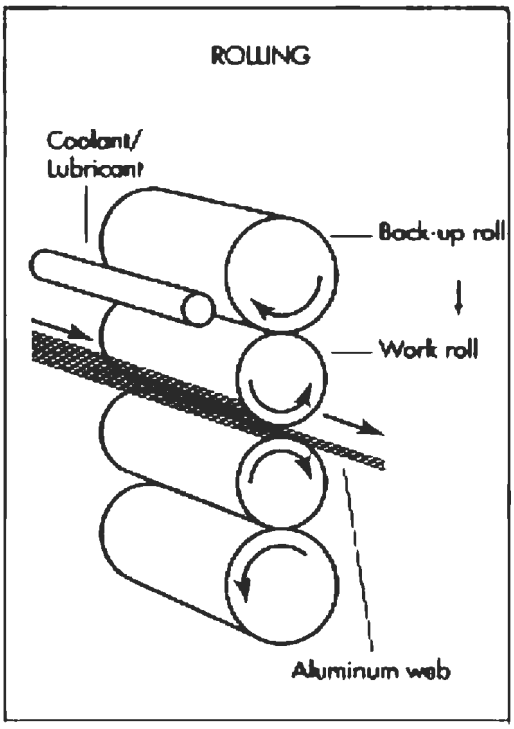
[60] Petition, Vol. 1, p. 9.

[61] How Products are Made, "Aluminum Foil: Smelting," http://www.madehow.com/Volume-1/Aluminum-Foil.html, (retrieved March 23, 2017).

[62] Catrin Kammer, European Aluminum Association, "TALAT Lecture 3210, Continuous Casting of Aluminum," 1999, p. 4.

Following the continuous casting process, the foil stock is cooled down to room temperature before it is sent directly to a cold-rolling mill rather than a hot rolling mill.[63]

Figure I-6
Aluminum foil: Rolling aluminum foil stock



Source: http://www.madehow.com/Volume-1/Aluminum-Foil.html, (retrieved October 22, 2020).

Finishing

Following the rolling process, aluminum foil can be coated with a wide variety of materials to enhance its appearance or to provide greater protection. Aluminum foil can also be laminated to other products such as paper and plastic, however aluminum foil that is backed with paper, paperboard, plastics, or similar backing materials is excluded from the scope of these investigations.

[63] Following the continuous casting process, the foil stock is rolled into a coil and then transferred to a cold rolling mill where it is unrolled and fed into a cold rolling mill line. The production process from this point is similar to that of cold rolling for foil stock produced from direct chill casting and the subsequent hot rolling process.

Domestic like product issues

Petitioners contend that the domestic like product in these investigations should mirror the scope definition of the subject merchandise and should be defined as all certain aluminum foil. Petitioners assert that such a determination would be consistent with the domestic like product definition adopted by the Commission in its recent investigations involving aluminum foil from China.[64] Therefore, petitioners contend that there should be a single domestic like product coextensive with the scope of these investigations.[65]

Respondents Rusal Sayanal, JSC Ural Foil, and Rusal Armenal (collectively, "Rusal") contend that, based on the six-factor analysis of domestic like products,[66] household and container foils constitute a separate like product as compared to industrial and converter foils. Respondents Rusal argue that there are different physical characteristics and uses between household foil and container foil and that of industrial/converter foil; there are different channels of distribution between the categories; they are not interchangeable or easily switched during production; and have different price structures. For these reasons, the Rusal respondents propose that the Commission find two separate domestic like products: 1) household/container and 2) industrial/converter foil.[67]

U.S. producers and U.S. importers of subject merchandise were asked to respond to questions on comparison of domestically produced ultra-thin and fin stock aluminum foil to all other domestically produced in-scope foil. The questions on comparability of ultra-thin and fin-stock aluminum were in Part V-1 of the U.S. producers' questionnaires and in Part IV-1 of the U.S. importers' questionnaires. The narrative responses to these questions are presented in Appendix D of the staff report.

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[64] Petition Vol I, p. 13; Petitioners' postconference brief, pp. 4-6. See also *Aluminum Foil from China, Inv. Nos. 701-TA-570 and 731-TA-1346 (Final),* USITC Publication 4771, April 2018, pp. 10-16.

[65] Ibid.

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

[67] Postconference brief of Rusal Respondents, pp. 1-7.

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

U.S. market characteristics

Aluminum foil is made from aluminum alloy that generally contains between 92 and 99 percent aluminum. Aluminum foil is usually between 0.00017 and 0.00787 inches thick and is produced in many widths and strengths. Aluminum foil provides a barrier to light, oxygen, moisture, and bacteria. Aluminum foil is used for food and pharmaceutical packaging, thermal insulation for the construction industry, electric coils for transformers, capacitors for radios and televisions, and insulation for storage tanks.

Apparent U.S. consumption decreased in terms of quantity while increasing in terms of value. Overall, apparent U.S. consumption in terms of quantity in 2019 was *** percent low than in 2017. Apparent U.S. consumption in terms of value in 2019 was *** percent higher than in 2017.

Firms were asked if the imposition of tariffs or other restrictions on imported steel and aluminum products associated with section 232 had an impact on the aluminum foil market in the United States (table II-1). U.S. producers' responses on the impact of section 232 tariffs on price were mixed.

The majority of importers reported that section 232 tariffs had no impact on the supply of U.S.-produced and imported aluminum foil, and increased the price of aluminum foil. Importers had mixed responses to the impact of section 232 tariffs on the overall demand in the market for aluminum foil.

Table II-1
Aluminum foil: Impact of 232 tariffs on U.S. producers and importers

Item	Increase	No change	Decrease	Fluctuate
Supply of U.S. produced aluminum foil--				
U.S. producers	---	1	---	1
Importers	4	15	5	4
Supply of imported aluminum foil.--				
U.S. producers	1	1	---	---
Importers	5	15	3	3
Prices of aluminum foil.--				
U.S. producers	1	---	1	---
Importers	20	2	1	4
Overall demand in the market for aluminum foil.--				
U.S. producers	---	1	1	---
Importers	6	11	2	4

Channels of distribution

U.S. producers sold aluminum foil through three main channels: consumer packaging/ converters, household use/spoolers, and industrial applications, as shown in table II-2. Importers of aluminum foil from Armenia sold the vast majority of aluminum foil to household use/spoolers and the remainder to distributors and industrial applications. Importers of aluminum foil from Brazil sold the largest portion of aluminum foil to household use/spoolers. The second largest share of aluminum foil imported from Brazil shifted from industrial applications in 2017 to consumer packaging in 2019. Importers of aluminum foil from Oman sold the vast majority of aluminum foil to industrial applications. The channels of distribution for aluminum foil from Russia fluctuated between distributors, consumer packaging/converters, and household use/spoolers. Importers of aluminum foil from Turkey sold the majority of aluminum foil to household use/spoolers from 2017 to 2019, although the share sold to industrial applications increased throughout the period.

Table II-2
Aluminum foil: U.S. producers' and importers' U.S. shipments, by sources and channels of distribution, 2017-19, January to June 2019, and January to June 2020

* * * * * * *

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

Geographic distribution

U.S. producers reported selling aluminum foil to all regions in the contiguous United States (table II-3). Importers reported selling Brazilian aluminum foil to all regions of the contiguous United States. Importers reported selling aluminum foil from Turkey exclusively to the Northeast region of the United States. Importers reported selling aluminum foil from Oman to the Southeast, Central Southwest, and Pacific Coast regions of the United States.

For U.S. producers, *** percent of sales were within 100 miles of their production facility, *** percent were between 101 and 1,000 miles, and *** percent were over 1,000 miles. Importers sold *** percent within 100 miles of their U.S. point of shipment, *** percent between 101 and 1,000 miles, and *** percent over 1,000 miles.

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

Region	U.S. producers	Armenia	Brazil	Oman	Russia	Turkey	Subject U.S. importers
Northeast	4	---	2	---	---	3	5
Midwest	4	---	4	---	---	---	4
Southeast	4	---	3	2	---	---	5
Central Southwest	4	---	4	1	---	---	5
Mountains	3	---	2	---	---	---	2
Pacific Coast	4	---	1	2	---	---	3
Other[1]	---	---	1	---	---	---	1
All regions (except Other)	3	---	1	---	---	---	1
Reporting firms	4	---	5	4	---	3	11

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

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

Supply and demand considerations

U.S. supply

Table II-4 provides a summary of the supply factors regarding aluminum foil from U.S. producers and from subject countries. U.S. producers' total reported production capacity was nearly *** percent greater than the production capacity of all of the subject countries combined in 2019 and just over *** times the total production capacity reported by the largest subject country (***) in the same year.

Table II-4
Aluminum foil: Supply factors that affect the ability to increase shipments to the U.S. market

Item	Capacity (short tons)		Capacity utilization (percent)		Inventories as a ratio to total shipments (percent)		Shipments by market in 2019 (percent)		Able to shift to alternate products
	2017	2019	2017	2019	2017	2019	Home market shipments	Exports to non-U.S. markets	No. of firms reporting "yes"
United States	***	***	***	***	***	***	***	***	1 of 5
Armenia	***	***	***	***	***	***	***	***	1 of 1
Brazil	***	***	***	***	***	***	***	***	2 of 3
Oman	***	***	***	***	***	***	***	***	0 of 1
Russia	***	***	***	***	***	***	***	***	2 of 2
Turkey	***	***	***	***	***	***	***	***	1 of 3
Subject sources	***	***	***	***	***	***	***	***	6 of 10

Note: Responding U.S. producers accounted for over 75 percent of U.S. production of aluminum foil in 2019. Responding foreign producer/exporter firms accounted for over 75 percent of U.S. imports of aluminum foil from Armenia, Brazil, Oman, Russia, and Turkey during 2019. For additional data on the number of responding firms and their share of U.S production and of U.S. imports from each subject country, please refer to Part I, "Summary Data and Data Sources."

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

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

Domestic production

Based on available information, U.S. producers of aluminum foil have the ability to respond to changes in demand with small-to-moderate changes in the quantity of shipments of U.S.-produced aluminum foil to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of some unused capacity and low-to-moderate inventory levels. Factors mitigating responsiveness of supply include the limited ability to divert shipments from other markets and the limited ability to shift production away from producing other products to aluminum foil.

U.S producers increased capacity while capacity utilization declined from 2017 to 2019. U.S. producers' inventories relative to total shipments increased slightly, by over *** from 2017 to 2019. Exports of U.S. produced aluminum foil remained at or below *** percent of total shipments throughout the period. The majority of U.S. producers (4 of 5) reported that they were unable to switch production from other products to aluminum foil. The sole U.S. producer who reported being able to switch production to or from other goods

reported being able to produce aluminum coil in sheet gauges on the same equipment as aluminum foil.

Subject imports from Armenia

Based on available information, the producer of aluminum foil from Armenia has the ability to respond to changes in demand with small changes in the quantity of shipments of aluminum foil to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of some unused capacity, the ability to shift shipments from alternate markets, and the ability to shift production to or from alternate products. Factors mitigating the responsiveness of supply include low inventory levels and the size of Armenian production capacity relative to the production capacity of the domestic industry.

Armenian production capacity decreased slightly from 2017 to 2019. Armenian total reported production capacity was less than *** percent of the production capacity reported by U.S. producers in 2019. Although Armenian capacity utilization decreased from 2017 to 2019, Armenian production capacity utilization remained high throughout the period and exceeded the U.S. producers' capacity utilization rates by over *** percentage points in 2019. Armenian producers' inventories relative to total shipments increased by under *** from 2017 to 2019. The Armenian producer reported selling *** percent of shipments to export markets other than the United States in 2019. The responding Armenian producer, Rusal, reported that it could switch production from other products to aluminum foil. The Armenian producer reportedly can produce aluminum strip (over 200 microns) on the same equipment used to produce aluminum foil. *** reported that expanding production outside of its current range would require 2 to 3 years of investment.

Subject imports from Brazil

Based on available information, producers of aluminum foil from Brazil have the ability to respond to changes in demand with small-to-moderate changes in the quantity of shipments of aluminum foil to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of some unused capacity, the ability to shift shipments from alternate markets to the U.S. market, low-to-moderate inventory levels, and the ability to shift production to or from alternate products. The relative size of the Brazilian producers' production capacity mitigates the responsiveness of supply.

Brazilian production capacity remained constant from 2017 to 2019. Brazilian total reported production capacity was slightly over *** percent of the production capacity reported by U.S. producers in 2019. Although Brazilian capacity utilization decreased from 2017

to 2019, Brazilian production capacity utilization remained high throughout the period and exceeded the U.S. industry's capacity utilization rates by approximately *** percentage points in 2019. Brazilian producers' inventories increased by over *** from 2017 to 2019. Brazilian producers reported selling over half of their commercial shipments to their home market and just under *** percent of their commercial shipments to export markets other than the United States in 2019. The majority of responding Brazilian producers (2 of 3) reported that they could switch production from other products to aluminum foil. Brazilian producers reportedly can produce aluminum foil with a thickness that exceeds 0.2 mm on the same equipment as in-scope aluminum foil. Brazilian producers *** and *** reported that they each had one mill that produced out of scope aluminum foil because this out of scope aluminum foil is a niche product with limited demand.

Subject imports from Oman

Based on available information, the responding producer of aluminum foil from Oman has the ability to respond to changes in demand with small changes in the quantity of shipments of aluminum foil to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of some unused capacity and moderate inventory levels. Factors mitigating the responsiveness of supply include a limited ability to shift shipments from alternate markets, the ability to shift production to or from alternate products, and the size of Omani production capacity relative to the production capacity of the domestic industry.

Omani production capacity remained constant from 2017 to 2019. Total reported production capacity was less than *** percent of the production capacity reported by U.S. producers in 2019. Omani capacity utilization increased dramatically from 2017 to 2019 and exceeded U.S production capacity utilization by nearly *** percentage points in 2019. The Omani producer's inventories increased from 2017 to 2019. The Omani producer reported selling just over *** percent of commercial shipments to their home market and markets other than the United States. The responding Omani producer reported that it was unable to shift production to or from other goods to aluminum foil.

Subject imports from Russia

Based on available information, producers of aluminum foil from Russia have the ability to respond to changes in demand with small-to-moderate changes in the quantity of shipments of aluminum foil to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity, the ability to shift shipments from alternate markets to the U.S. market, low-to-moderate inventory levels, and the ability to

shift production to or from alternate products. The relative size of the Russian producers' production capacity mitigates the responsiveness of supply.

Russian production capacity increased from 2017 to 2019. Total reported Russian production capacity was less than *** of the production capacity reported by U.S. producers in 2019. Russian capacity utilization decreased from 2017 to 2019 but remained at a moderate level throughout the period. The ratio of Russian producers' inventory levels relative to total shipments increased by over *** percentage points from 2017 to 2019. Russian producers reported selling just under *** of their commercial shipments to their home market and under *** percent to markets other than the United States. Both responding Russian producers reported that they could switch production from other products to aluminum foil. Russian producers reported that they could produce aluminum strip and aluminum foil with thickness ranging from 200 microns to 249 microns.

Subject imports from Turkey

Based on available information, producers of aluminum foil from Turkey have the ability to respond to changes in demand with small-to-moderate changes in the quantity of shipments of aluminum foil to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of some unused capacity, the ability to shift shipments from alternate markets to the U.S. market, low-to-moderate inventory levels, and the ability to shift production to or from alternate products. The relative size of the Turkish producers' production capacity mitigates the responsiveness of supply.

Turkish production capacity and production increased, increasing capacity utilization rates from 2017 to 2019. Total reported Turkish production capacity was just under *** of reported U.S. production capacity. Turkish producers' inventory levels relative to total shipments increased by just under *** percentage points from 2017 to 2019. Turkish producers' shipments to their home market and exports to non-U.S. markets accounted for over *** percent of commercial shipments in 2019. One Turkish producer reported that it could produce other products on the same equipment used to produce aluminum foil. This firm, ***, reported that it can produce aluminum foil up to 500 microns thick on the same equipment as aluminum foil and that production efficiency was related to the thickness of the product being manufactured. *** reported that production efficiency decreased as the thickness of the product being manufactured decreased.

Imports from nonsubject sources

Nonsubject imports accounted for 44.3 percent of total U.S. imports in 2019. The largest sources of nonsubject imports in 2019 were China, Germany, and South Korea. Combined, these countries accounted for 49.2 percent of nonsubject imports in 2019.

Supply constraints

The majority of U.S. producers (4 of 5) and importers (18 of 26) reported no supply constraints. U.S. producer *** reported that it had not been able to fulfill spot orders or other orders that were not forecasted by its customers. Importers ***, ***, and *** reported that domestic producers were unable to meet their demand for aluminum foil. Importer *** reported that the threat of tariffs had caused supply constraints. Importer *** reported that it experiences supply constraints during specific months (May- August) due to the seasonal nature of the HVAC business.

U.S. demand

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

End uses and cost share

U.S. demand for aluminum foil depends on the demand for a wide variety of U.S.-produced downstream products. Reported end uses include food and beverage containers, heat exchangers, flexible duct, metal packaging, and HVAC systems. Aluminum foil also is used in aerospace and automotive production. Aluminum foil can be a small or large share of the cost of the end-use product in which it is used, depending on the product. Reported cost shares of aluminum foil were as high as 100 percent for food and beverage containers, and as low as 2 percent of use in aerospace production.

Business cycles

Four of five U.S. producers and 14 of 32 importers indicated that the market was subject to business cycles or conditions of competition. Specifically, aluminum foil that is used in the construction industry faces high periods of demand in the spring and summer when the weather permits construction. Demand for aluminum foil used in food packaging peaks around certain holidays, such as Christmas, Easter, and the Fourth of July.

Demand trends

All U.S producers and a majority of importers reported an increase in U.S. demand for aluminum foil since January 1, 2017 (table II-5).

Table II-5
Aluminum foil: 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	5	---	---	---
Importers	14	7	---	6
Demand outside the United States				
U.S. producers	3	---	---	1
Importers	8	7	1	7

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

Substitute products

All U.S. producers and the majority of importers reported that there were no substitutes. Importer *** reported that flexible packaging was a substitute for aluminum foil.

Substitutability issues

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

Lead times

U.S. producers reported that *** percent of their commercial shipments were produced-to-order, with lead times averaging *** days. Importers reported that the majority of their commercial shipments were from U.S. inventories and the remainder were produced to order. Importers reported *** percent of commercial shipments were from inventories with lead times averaging *** days and *** percent of commercial shipments were produced to orders with lead times averaging *** days.

Factors affecting purchasing decisions

Purchasers responding to lost sales lost revenue allegations[1] were asked to identify the main purchasing factors their firm considered in their purchasing decisions for aluminum foil. All responding purchasers (11 of 11) reported that quality was a major purchasing factor, the majority of responding purchasers (6 of 11) reported that price was a major purchasing factor, and (5 of 11) reported that availability was a major purchasing factor. Other factors reported by firms was on time delivery (2 firms), technical specifications (1 firm), and fair trade practices (1 firms).

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

Item	1st	2nd	3rd	Total
	Number of firms (number)			
Quality	7	2	2	11
Price / Cost	2	2	3	6
Availability / Supply	1	4	---	5
All other factors	1	3	6	NA

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

Comparison of U.S.-produced and imported aluminum foil

In order to determine whether U.S.-produced aluminum foil can generally be used in the same applications as imports from subject countries, U.S. producers and importers were asked whether the products can always, frequently, sometimes, or never be used interchangeably. As shown in table II-7, all U.S. producers reported that aluminum foil from the United States, Armenia, Brazil, Oman, Russia, and Turkey are always or frequently interchangeable. The majority of importers reported that aluminum foil from the United States, Armenia, Brazil, Oman, Russia, and Turkey are always or frequently interchangeable with the exception of aluminum foil from the United States and Brazil, where half of responding importers reported that aluminum foil was always or frequently interchangeable and half reported it was sometimes or never interchangeable. The majority of importers reported that aluminum foil from the United States and other countries are sometimes or never interchangeable. Importer *** reported that U.S. producers either can't or won't produce aluminum foil made of the

[1] This information is compiled from responses by purchasers identified by Petitioners or other U.S. producers to the lost sales lost revenue allegations. See Part V for additional information.

alloys, in the width, or unique properties they require. Importer *** reported that Brazil produces ultra-thin gauge aluminum in ultra-wide width which is unavailable from U.S. producers. Importer *** reported that U.S. producers do not produce household foil, except for small quantities produced by Gränges. Importer *** reported that the quality of U.S. produced thin gauge aluminum foil is poor.

Table II-7
Aluminum foil: Interchangeability between aluminum foil produced in the United States and in other countries, by country pair

Country pair	U.S. producers				U.S. importers			
	A	F	S	N	A	F	S	N
United States vs. Armenia	5	---	---	---	5	2	1	---
United States vs. Brazil	5	---	---	---	5	3	5	3
United States vs. Oman	5	---	---	---	4	2	2	---
United States vs. Russia	5	---	---	---	5	1	2	1
United States vs. Turkey	5	---	---	---	8	4	3	1
Armenia vs. Brazil	5	---	---	---	5	1	---	---
Armenia vs. Oman	4	1	---	---	4	---	---	---
Armenia vs. Russia	5	---	---	---	6	---	---	---
Armenia vs. Turkey	5	---	---	---	5	1	---	---
Brazil vs. Oman	4	1	---	---	4	---	---	---
Brazil vs. Russia	5	---	---	---	5	2	1	---
Brazil vs. Turkey	5	---	---	---	5	2	1	---
Oman vs. Russia	4	1	---	---	4	---	---	---
Oman vs. Turkey	4	1	---	---	4	---	---	---
Russia vs. Turkey	5	---	---	---	5	2	1	---
United States vs. Other	5	---	---	---	6	3	8	3
Armenia vs. Other	5	---	---	---	5	1	---	---
Brazil vs. Other	5	---	---	---	5	5	4	---
Oman vs. Other	5	---	---	---	4	---	---	---
Russia vs. Other	5	---	---	---	5	2	1	---
Turkey vs. Other	5	---	---	---	6	3	1	---

Note: A=Always, F=Frequently, S=Sometimes, N=Never.
Source: Compiled from data submitted in response to Commission questionnaires.

In addition, U.S. producers and importers were asked to assess how often differences other than price were significant in sales of aluminum foil from the United States, subject, or nonsubject countries. All responding U.S. producers reported that factors other than price are never significant when comparing aluminum foil from the United States, Armenia, Brazil, Oman, Russia, and Turkey, while importers' responses were mixed among all country pairs. Importer *** reported that the ability of an aluminum foil producer to meet technical specifications is the most significant factor. Importer *** reported that a producer delivering the required volume of aluminum foil, at the required quality, on time are the most significant factors.

Table II-8
Aluminum foil: Significance of differences other than price between aluminum foil produced in the United States and in other countries, by country pair

Country pair	U.S. producers				U.S. importers			
	A	F	S	N	A	F	S	N
United States vs. Armenia	---	---	---	5	2	---	4	2
United States vs. Brazil	---	---	---	5	6	2	2	2
United States vs. Oman	---	---	---	5	3	1	2	2
United States vs. Russia	---	---	---	5	2	---	2	2
United States vs. Turkey	---	---	---	5	4	3	3	3
Armenia vs. Brazil	---	---	---	5	---	1	1	3
Armenia vs. Oman	---	---	---	5	---	---	1	3
Armenia vs. Russia	---	---	---	5	---	1	1	4
Armenia vs. Turkey	---	---	---	5	---	1	1	4
Brazil vs. Oman	---	---	---	5	---	---	1	3
Brazil vs. Russia	---	---	---	5	---	1	1	3
Brazil vs. Turkey	---	---	---	5	---	1	1	3
Oman vs. Russia	---	---	---	5	---	---	1	3
Oman vs. Turkey	---	---	---	5	---	---	1	3
Russia vs. Turkey	---	---	---	5	---	1	1	5
United States vs. Other	---	---	---	5	9	3	3	2
Armenia vs. Other	---	---	---	5	1	1	1	4
Brazil vs. Other	---	---	---	5	2	3	2	3
Oman vs. Other	---	---	---	5	1	---	1	3
Russia vs. Other	---	---	---	5	1	1	2	3
Turkey vs. Other	---	---	---	5	3	1	1	3

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

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

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

The Commission analyzes a number of factors in making injury determinations (see 19 U.S.C. §§ 1677(7)(B) and 1677(7)(C)). Information on the 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 five firms that accounted for *** percent of U.S. production of aluminum foil during 2019.

U.S. producers

The Commission issued a U.S. producer questionnaire to six firms based on information contained in the petition. Five firms provided usable data on their operations.[1] Staff believes that these responses represent the vast majority of U.S. production of aluminum foil.

Table III-1 lists U.S. producers of aluminum foil, their production locations, positions on the petition, and shares of total production during 2019.

[1] Petitioners estimate that total U.S. production was *** pounds of aluminum foil in 2019 Petition, Vol. 1, p. 5 and Exh. GEN-1. The five responding U.S. producers reported production of *** pounds of aluminum foil in 2019.

The petition listed two additional firms, *** believed to produce aluminum foil but these firms did not provide a questionnaire response. The petitioners estimated that *** produced *** pounds and that *** produced *** pounds in 2019, which together account for *** percent of the petitioners' estimate total U.S. production. Petition, Vol. 1, p. 5 and Exh. GEN-1. In spite of repeated attempts, staff was unable to contact ***.

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

Firm	Position on petition	Production location(s)	Share of production (percent)
Aleris	Petitioner	Clayton, NJ	***
Gränges	Petitioner	Huntingdon, TN Salisbury, NC Newport, AR	***
JW Aluminum	Petitioner	Goose Creek, SC St. Louis, MO Russellville, AR Williamsport, PA	***
Novelis	Petitioner	Terre Haute, IN Fairmont, WV Clayton, NJ Buckhannon, WV Oswego, NY Russellville, KY	***
Reynolds	***	Louisville, KY	***
Total			***

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

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

Table III-2
Aluminum foil: U.S. producers' ownership, related and/or affiliated firms

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

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

As indicated in table III-2, two U.S. producers (***)[2] are related to foreign producers of the subject merchandise and *** U.S. producer is related to U.S. importers of the subject merchandise. In addition, as discussed in greater detail below, one U.S. producer, ***, directly imports the subject merchandise[3] and is also purchaser the subject merchandise from U.S. importers.

[2] ***.

[3] ***. U.S. producer questionnaire responses, part II. See also table III-9 for more information.

Below is an overview of important industry events related to aluminum foil industry since January 1, 2017.

Table III-3
Aluminum foil: Important industry events since January 1, 2017

Year	Company	Description of Event
2017	Gränges	**Expansion:** Gränges announced that it will invest $110 million to expand its aluminum rolling operations in Huntingdon, Tennessee to meet growing demand for light gauge foil and heat exchangers for automotive and HVAC applications. The expansion is expected to create 85 permanent positions.[1]
2018	Gränges	**Expansion:** Gränges announced a $26 million expansion of its plant in Newport, Arkansas[2] to focus on production of light gauge aluminum foil.[3]
	***	***.
2019	Gränges	**Reopening:** Gränges reopened its foil rolling operations at its plant in Newport, Arkansas, following its expansion project that began in 2018. Expansion continues through 2020 as the project's third rolling mill is expected to be completed in 2021.[4]
2020	JW Aluminum	**Closure:** Following an announcement in January 2020, JW Aluminum closed its St. Louis, MO plant in May 2020. The plant produced aluminum foil for sale to converters.[5]
	JW Aluminum	**Closure:** In September 2020, JW Aluminum announced it would be closing its Williamsport, Pennsylvania facility, effective January 2021.[6] This facility focused on the production of foil products for aerospace, building and construction, automotive, transportation, and general distribution.[7]
	Novelis	**Acquisition:** Novelis completed acquisition of Aleris Corporation in April.[8] Novelis gained rolling mills in Uhrichville, Ohio, and Richmond, Virginia, and casting and finishing facilities in Davenport, Iowa.[9] The company is required to divest its newly acquired rolling mill in Lewisport, Kentucky in order to meet regulatory conditions of the merger.
Not Specified	***	***.
Not specified	***	***.

[1] *Aluminum Foil From China, Inv. Nos.701-TA-570 and 731-TA-1346 (Final)*, Pub 4771, April 2018, p. III-3.
[2] Gränges, "Granges to restart production in Newport, Arkansas – investment of USD 26 million,", May 3, 2018, https://www.granges.com/media/press-releases/2018/granges-to-restart-production-in-newport-arkansas--investment-of-usd.
[3] The facility in Newport produced aluminum foil for consumer applications until it was idled by its previous owner, Noranda in 2015. The facility was subsequently acquired by Gränges in 2016 as part of its acquisition in 2016. Some surface treatment business was restarted upon acquisition, while its foil production remained idle until 2019.
[4] S&P Global, "Granges Restarts upgrades, output at two US aluminum plants in Q3 on demand rebound: company," October 22, 2020, https://www.spglobal.com/platts/en/market-insights/latest-news/metals/102220-grnges-restarts-upgrades-output-at-two-us-aluminum-plants-in-q3-on-demand-rebound-company.
[5] JW Aluminum, JW Aluminum Announces the Closure of its Plant in St. Louis, Missouri," January 21, 2020. http://www.jwaluminum.com/news-1.
[6] JW Aluminum, "JW Aluminum Announces the Closure of its Plant in Williamsport, PA," September 2, 2020. http://www.jwaluminum.com/news-1-0-0.
[7] JW Aluminum, "Locations," (retrieved November 3, 2020), http://www.jwaluminum.com/locations.
[8] Novelis, "Novelis Completes Acquisition of Aleris," April 14, 2020, https://novelis.com/novelis-completes-acquisition-of-aleris/.

[9] Recycling Today, "DOJ sues to stop Novelis purchase of Aleris," September 5, 2019, https://www.recyclingtoday.com/article/department-justice-lawsuit-novelis-acquisition-aleris/.

Note: Brackets indicate business proprietary information revealed in questionnaires for which no public source was found.

Source: Various company websites, news articles, conference transcript, and *Aluminum Foil From China, Inv. Nos.701-TA-570 and 731-TA-1346 (Final)*, Pub 4771, April 2018, p. III-3.

Table III-4 presents U.S. producers' reported changes in operations since January 1, 2017.

Table III-4
Aluminum foil: U.S. producers' reported changes in operations, since January 1, 2017

Item / Firm	Reported changed in operations
Plant openings:	
***	***.
Plant closings:	
***	***.
Expansions:	
***	***.
***	***.
Acquisitions:	
***	***.
Prolonged shutdowns or curtailments:	
***	***.
***	***.

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

U.S. production, capacity, and capacity utilization

Table III-5 and figure III-1 present U.S. producers' production, capacity, and capacity utilization. U.S. producers' capacity increased from 2017 to 2019 by 5.6 percent and was lower by 1.2 percent in January to June 2020 compared to the same period in 2019. Production peaked in 2018, increasing from 2017 to 2018 by 2.8 percent and then decreasing from 2018 to 2019 by *** percent.[4] Production was also lower in January to June 2020 compared to the same interim period in 2019. Aggregate capacity utilization rates ranged from a peak of 88.7 percent in 2018 to a low of 74.4 percent during January-June 2020.[5]

[4] ***.

[5] ***. U.S. producer questionnaire responses, II-5.

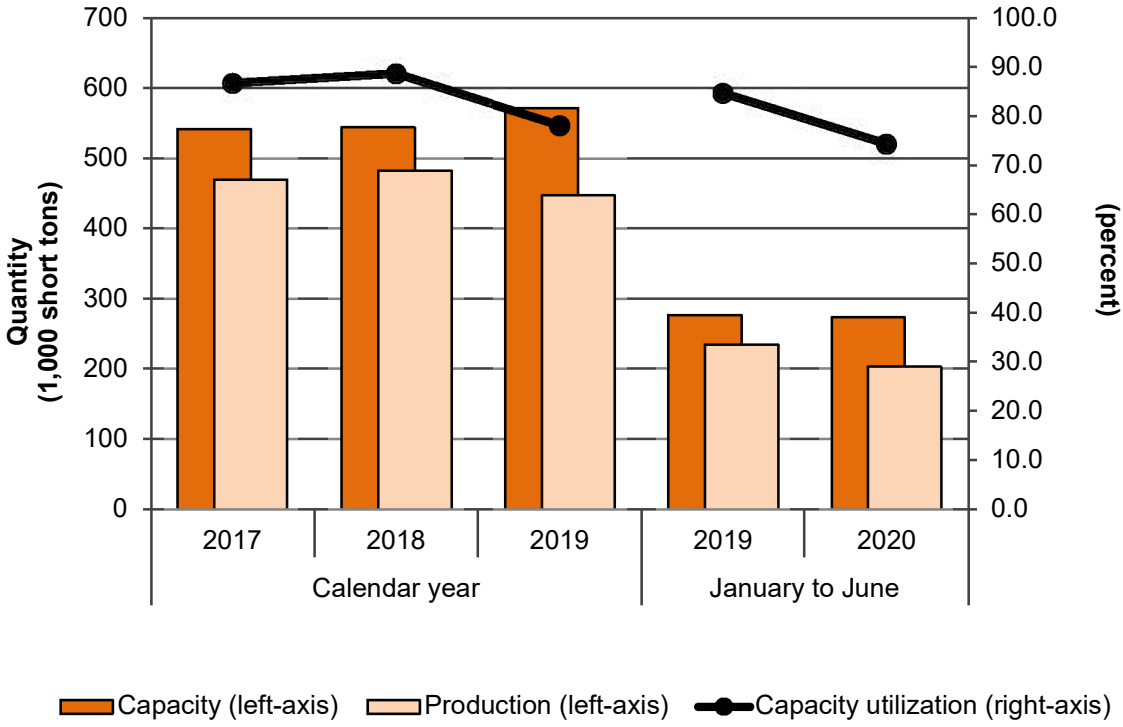
Table III-5
Aluminum foil: U.S. producers' capacity, production, and capacity utilization, 2017-19, January to June 2019, and January to June 2020

Item	Calendar year			January to June	
	2017	2018	2019	2019	2020
	Capacity (short tons)				
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	541,692	544,180	572,057	276,343	273,015
	Production (short tons)				
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	469,677	482,607	447,204	234,120	203,025
	Capacity utilization (percent)				
Aleris	***	***	***	***	***
Gränges[1]	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	86.7	88.7	78.2	84.7	74.4
	Share of production (percent)				
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	100.0	100.0	100.0	100.0	100.0

[1] ***. Email from ***.

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

Figure III-1
Aluminum foil: U.S. producers' capacity, production, and capacity utilization, 2017-19, January to June 2019, and January to June 2020



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

Alternative products

As shown in table III-6, aluminum foil accounted for approximately three-quarters of the products produced on the same machinery by U.S. producers during 2017 through June 2020. Three firms (***) reported producing aluminum sheet and *** reported producing other products such as auto fin products (bare and clad), truck/trailer sheet or container products which have a gauge higher than .2mm on the same machinery used by U.S. producers to produce aluminum foil.

Table III-6
Aluminum foil: U.S. producers' overall capacity and production on the same equipment as subject production, 2017-19, January to June 2019, and January to June 2020

Item	Calendar year			January to June	
	2017	2018	2019	2019	2020
	Quantity (short tons)				
Overall capacity	711,431	716,431	745,931	360,465	357,965
Production: Aluminum foil	469,677	482,607	447,204	234,120	203,025
Out-of-scope production: Aluminum sheet	***	***	***	***	***
Aluminum plate	***	***	***	***	***
Other products	***	***	***	***	***
Out-of-scope production	163,454	171,806	163,493	80,214	74,260
Total production on same machinery	633,131	654,413	610,697	314,334	277,285
	Ratios and shares (percent)				
Overall capacity utilization	89.0	91.3	81.9	87.2	77.5
Share of production: Aluminum foil	74.2	73.7	73.2	74.5	73.2
Out-of-scope production: Aluminum sheet	***	***	***	***	***
Aluminum plate	***	***	***	***	***
Other products	***	***	***	***	***
Out-of-scope production	25.8	26.3	26.8	25.5	26.8
Total production on same machinery	100.0	100.0	100.0	100.0	100.0

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

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

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

Table III-7 presents U.S. producers' U.S. shipments, export shipments, and total shipments. Between 2017 and 2019, the quantity of U.S. producers' U.S. shipments decreased by 4.6 percent but increased by 3.8 percent by value. During the same period, U.S. producers' U.S. shipments' unit values increased by 8.8 percent. The quantity and value of export shipments experienced a decrease of 10.9 percent and 7.1 percent respectively, during 2017-19, while the export shipments' unit values were up by 4.4 percent. U.S. producers *** reported exporting to Canada and Mexico during 2017-19.

Table III-7
Aluminum foil: U.S. producers' U.S. shipments, export shipments, and total shipments, 2017-19, January to June 2019, and January to June 2020

Item	Calendar year			January to June	
	2017	2018	2019	2019	2020
	Quantity (short tons)				
Commercial U.S. shipments	***	***	***	***	***
Internal consumption	***	***	***	***	***
U.S. shipments	440,551	453,607	420,313	221,766	199,037
Export shipments	27,913	26,469	24,859	12,529	10,156
Total shipments	468,464	480,076	445,172	234,295	209,193
	Value (1,000 dollars)				
Commercial U.S. shipments	***	***	***	***	***
Internal consumption	***	***	***	***	***
U.S. shipments	1,327,870	1,580,263	1,378,587	740,505	600,313
Export shipments	85,606	92,280	79,566	40,803	30,072
Total shipments	1,413,476	1,672,543	1,458,153	781,308	630,385
	Unit value (dollars per short ton)				
Commercial U.S. shipments	***	***	***	***	***
Internal consumption	***	***	***	***	***
U.S. shipments	3,014	3,484	3,280	3,339	3,016
Export shipments	3,067	3,486	3,201	3,257	2,961
Total shipments	3,017	3,484	3,275	3,335	3,013
	Share of quantity (percent)				
Commercial U.S. shipments	***	***	***	***	***
Internal consumption	***	***	***	***	***
U.S. shipments	94.0	94.5	94.4	94.7	95.1
Export shipments	6.0	5.5	5.6	5.3	4.9
Total shipments	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)				
Commercial U.S. shipments	***	***	***	***	***
Internal consumption	***	***	***	***	***
U.S. shipments	93.9	94.5	94.5	94.8	95.2
Export shipments	6.1	5.5	5.5	5.2	4.8
Total shipments	100.0	100.0	100.0	100.0	100.0

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

U.S. producers' inventories

Table III-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**.** In 2019, U.S. producers' end-of-period inventories, as a ratio of U.S. production, U.S. shipments, and total shipments were 8.6 percent, 9.1 percent, and 8.6 percent, respectively. All inventory ratios increased during 2017-19 and either remained the same or were higher in January to June 2020 compared to the same period in 2019.

Table III-8
Aluminum foil: U.S. producers' inventories, 2017-19, January to June 2019, and January to June 2020

Item	Calendar year			January to June	
	2017	2018	2019	2019	2020
	Quantity (short tons)				
U.S. producers' end-of-period inventories	33,707	36,238	38,268	36,062	32,101
	Ratio (percent)				
Ratio of inventories to.--					
U.S. production	7.2	7.5	8.6	7.7	7.9
U.S. shipments	7.7	8.0	9.1	8.1	8.1
Total shipments	7.2	7.5	8.6	7.7	7.7

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

U.S. producers' imports and purchases

U.S. producers' imports and purchases of aluminum foil are presented in table III-9. Of the five responding U.S. producers of aluminum foil, two firms *** reported importing aluminum foil during the period for which data were collected.

***, the largest known U.S. producer, reported decreasing import volumes from its affiliates in China and Sweden between 2018 and 2019, and those imports were equivalent to *** percent in 2018 and *** percent in 2019 of domestic production. Import quantities were also lower in January-June 2020 than in January-June 2019. The third largest U.S. producer, ***, also reported decreasing volumes of aluminum foil from all import sources, equivalent to *** percent of its U.S. production in 2017, *** percent in 2018, and *** percent in 2019. However, *** import quantities from all sources were higher in January-June 2020 than in January-June 2019.

*** was the only firm to report purchases of aluminum foil, *** short tons in 2018, *** short tons in 2019, and *** shorts tons in January-June 2020 from Turkey from U.S. importers.[6]

[6] ***. U.S. producer questionnaire response, II-14.

Table III-9
Aluminum foil: U.S. producers' U.S. imports, 2017-19, January to June 2019, and January to June 2020

Item	Calendar year			January to June	
	2017	2018	2019	2019	2020
	Quantity (short tons)				
***	***	***	***	***	***
***	***	***	***	***	***
	Ratio (percent)				
***	***	***	***	***	***
	Narrative				
***	***				
	Quantity (short tons)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
	Ratio (percent)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
	Narrative				
***	***				

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

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

U.S. employment, wages, and productivity

Table III-10 shows U.S. producers' employment-related data. In aggregate, the number of production and related workers (PRWs), total hours worked, hourly wages, wages paid, and unit labor costs increased between 2017 and 2019, while hours worked per PRW, and productivity experienced a decline during the same period. PRWs, total hours worked, wages paid, and productivity were lower in January to June 2020 compared to January to June 2019.

Table III-10
Aluminum foil: U.S. producers' employment related data, 2017-19, January to June 2019, and January to June 2020

Item	Calendar year			January to June	
	2017	2018	2019	2019	2020
Production and related workers (PRWs) (number)	1,453	1,514	1,526	1,553	1,367
Total hours worked (1,000 hours)	3,103	3,208	3,244	2,112	1,860
Hours worked per PRW (hours)	2,136	2,119	2,126	1,360	1,361
Wages paid ($1,000)	105,844	113,404	114,390	57,915	52,742
Hourly wages (dollars per hour)	$34.11	$35.35	$35.26	$27.42	$28.36
Productivity (short tons per 1000 hours)	151.4	150.4	137.9	110.9	109.2
Unit labor costs (dollars per short ton)	$225	$235	$256	$247	$260

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

Captive consumption

Section 771(7)(C)(iv) of the Act states that–[7]

> *If domestic producers internally transfer significant production of the domestic like product for the production of a downstream article and sell significant production of the domestic like product in the merchant market, and the Commission finds that–*
>
> *(I) the domestic like product produced that is internally transferred for processing into that downstream article does not enter the merchant market for the domestic like product,*
>
> *(II) the domestic like product is the predominant material input in the production of that downstream article, and*
>
> *then the Commission, in determining market share and the factors affecting financial performance . . ., shall focus primarily on the merchant market for the domestic like product.*

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

Transfers and sales

As reported in table III-7 above, internal consumption accounted for between *** and *** of U.S. producers' U.S. shipments of aluminum foil during 2017 to June 2020. *** accounted for all of U.S. producers' internal consumption. ***.[8]

First statutory criterion in captive consumption

The first requirement for application of the captive consumption provision is that the domestic like product that is internally transferred for processing into that downstream article not enter the merchant market for the domestic like product. ***.

Second statutory criterion in captive consumption

The second criterion of the captive consumption provision concerns whether the domestic like product is the predominant material input in the production of the downstream article that is captively produced. With respect to the downstream articles resulting from captive production, aluminum foil reportedly comprises *** percent of the finished cost of household foil and interleaved foil sheets.[9]

[8] U.S. producer questionnaire response, II-16.
[9] U.S. producer questionnaire response, II-17.

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

U.S. importers

The Commission issued importer questionnaires to 102 firms believed to be importers of subject aluminum foil, as well as to all U.S. producers of aluminum foil.[1] Usable questionnaire responses were received from 40 companies.[2] These firms' imports of aluminum foil represent the following percentages of aluminum foil imports from the subject countries and all other sources in 2019 under the primary statistical reporting numbers 7607.11.3000, 7607.11.6090, 7607.11.9030, 7607.11.9060, 7607.11.9090 and 7607.19.6000:

[1] The Commission issued questionnaires to those firms identified in the petition, along with firms that, based on a review of data provided by U.S. Customs and Border Protection ("Customs"), may have accounted for more than one percent of total imports under HTS subheadings 7607.11.3000, 7607.11.6090, 7607.11.9030, 7607.11.9060, 7607.11.9090 and 7607.19.6000 in 2019.

On January 1, 2019, HTSUS statistical subheading 7607.11.6000 was subdivided into two new statistical subheadings – 7607.11.6010 and 7607.11.6090. HTSUS statistical subheading 7607.11.6010 covers "Aluminum foil . . . of a thickness . . . not exceeding 0.2 mm: Not backed: Rolled but not further worked: Of a thickness not exceeding 0.15 mm: Of a thickness exceeding 0.01 mm: Boxed aluminum foil weighing not more than 11.3 kg.," which is not subject merchandise. Imports properly classified under the former are nonsubject merchandise because they weigh less than 25 pounds. The Petitioners claim that all imports entered under HTSUS statistical subheadings 7607.11.6010 from all countries (including the subject countries) other than China during the period of these investigations are subject merchandise that has been misclassified. Therefore, Petitioners state that, for its import volume analysis, the Commission should rely on official import statistics including the out-of-scope HTS subheading 7607.11.6010 — but should exclude imports from China classified under 7607.11.6010. Petition, Vol 1, pp. 10-11 and Petitioners' postconference brief, p. 20. However, as previously noted in Part I and in this section of the report, the Commission is relying on U.S. importer questionnaire responses for its import volume analysis.

[2] The following firms certified they have not imported aluminum foil during the preliminary phase of these investigations: ***.

Armenia: approximately *** percent

Brazil: approximately *** percent

Oman: approximately *** percent

Russia: approximately *** percent

Turkey: *** percent

Subject sources: approximately *** percent

All other sources: *** percent

Table IV-1 lists all responding U.S. importers of aluminum foil from Armenia, Brazil, Oman, Russia, and Turkey and other sources, their locations, and their shares of U.S. imports, in 2019.

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

Firm	Headquarters	Share of imports by source (percent)							
		Armenia	Brazil	Oman	Russia	Turkey	Subject sources	Nonsubject sources	All import sources
AA Metals	Orlando, FL	***	***	***	***	***	***	***	***
AKG	Mebane, NC	***	***	***	***	***	***	***	***
All Foils	Strongsville, OH	***	***	***	***	***	***	***	***
Bemis	Neenah, WI	***	***	***	***	***	***	***	***
Berry Global	Evansville, IN	***	***	***	***	***	***	***	***
Berwick Offray	Berwick, PA	***	***	***	***	***	***	***	***
Commodity Foil	Richmond, VA	***	***	***	***	***	***	***	***
Custom Laminating	Mt Bethel, PA	***	***	***	***	***	***	***	***
D&W	Wood Dale, IL	***	***	***	***	***	***	***	***
Durable Packaging	Wheeling, IL	***	***	***	***	***	***	***	***
Global Foils	Isle of Palms, SC	***	***	***	***	***	***	***	***
Goodman	Waller, TX	***	***	***	***	***	***	***	***
Granges	Franklin, TN	***	***	***	***	***	***	***	***
Handi-Foil	Wheeling, IL	***	***	***	***	***	***	***	***
Johns Manville	Denver, CO	***	***	***	***	***	***	***	***
Kataman	St Louis, MO	***	***	***	***	***	***	***	***
Kelvion	Catoosa, OK	***	***	***	***	***	***	***	***
Lamtec	Mount Bethel, PA	***	***	***	***	***	***	***	***
LLFlex	Louisville, KY	***	***	***	***	***	***	***	***
MAHLE Behr	Troy, MI	***	***	***	***	***	***	***	***
Manakin	Manakin-Sabot, VA	***	***	***	***	***	***	***	***

Table continued.

Table IV-1--Continued
Aluminum foil: U.S. importers, their headquarters, and share of total imports by source, 2019

Firm	Headquarters	Share of imports by source (percent)							
		Armenia	Brazil	Oman	Russia	Turkey	Subject sources	Nonsubject sources	All import sources
Medalco	South Hadley, MA	***	***	***	***	***	***	***	***
Midwest Metals	Louisville, KY	***	***	***	***	***	***	***	***
New Process	Houston, TX	***	***	***	***	***	***	***	***
Novolex	Charlotte, NC	***	***	***	***	***	***	***	***
Now Plastics	East Longmeadow, MA	***	***	***	***	***	***	***	***
OARC	Sohar, Oman	***	***	***	***	***	***	***	***
ProAmpac	Cincinnati, OH	***	***	***	***	***	***	***	***
Reynolds	Lake Forest, IL	***	***	***	***	***	***	***	***
Rocore Holdings	Indianapolis, IN	***	***	***	***	***	***	***	***
Sinobec	Pompano Beach, FL	***	***	***	***	***	***	***	***
Smart USA	Bay Shore, NY	***	***	***	***	***	***	***	***
Tekni-Plex	Wayne, PA	***	***	***	***	***	***	***	***
Tetra Pak	Denton, TX	***	***	***	***	***	***	***	***
Transcontinental	Elgin, IL	***	***	***	***	***	***	***	***
Trinidad Benham	Denver, CO	***	***	***	***	***	***	***	***
Valeo	Troy, MI	***	***	***	***	***	***	***	***
Western Plastics	Calhoun, GA	***	***	***	***	***	***	***	***
Winter-Wolff	Jericho, NY	***	***	***	***	***	***	***	***
Wolfgang Decibel	Charleston, SC	***	***	***	***	***	***	***	***
Total		***	***	***	***	***	***	***	***

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

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

U.S. imports

Table IV-2 and figure IV-1 present data for U.S. imports of aluminum foil from Armenia, Brazil, Oman, Russia, and Turkey and all other sources.

The quantity of U.S. imports of subject aluminum foil increased from 47,668 short tons to 91,355 short tons between 2017 and 2019, but was 10,134 short tons lower in January-June 2020, compared to January-June 2019. By quantity, U.S. imports of aluminum foil from nonsubject sources experienced downward trends during 2017-19, and were lower in interim 2020, compared to interim 2019. By share of quantity, U.S. imports of aluminum foil from subject sources accounted for 55.7 percent of all import sources, while nonsubject imports accounted for 44.3 percent of all import sources in 2019. *** had the largest share of aluminum foil imports among the subject countries, followed by ***.

By value, U.S. imports of aluminum foil from subject sources increased during 2017-19 and were lower in January-June 2020 than in January-June 2019. The value of imports of aluminum foil from nonsubject sources fluctuated and was also lower in interim 2020 compared to the interim period in the previous year.

The average unit values of imports from subject sources increased from $2,832 to $3,338 per short ton between 2017 and 2018 and then decreased to $3,082 in 2019. Subject average unit values were higher in January-June 2020 than in January-June 2019. Average unit values of nonsubject sources also fluctuated during 2017-19, and ended lower in interim 2020 than in interim 2019.

The ratio of subject aluminum foil imports to U.S. production increased during 2017-19 and was equivalent to 20.4 percent of U.S. production in 2019. The ratio of subject imports of aluminum foil to U.S. production ended lower in interim 2020 than the same period in the previous year. The ratio of nonsubject aluminum foil imports to U.S. production decreased during 2017-19 and was equivalent to 16.2 percent of U.S. production in 2019.

Table IV-2
Aluminum foil: U.S. imports, by source, 2017-19, January to June 2019, and January to June 2020

Item	Calendar year			January to June	
	2017	2018	2019	2019	2020
	Quantity (short tons)				
U.S. imports from.--					
Armenia	***	***	***	***	***
Brazil	***	***	***	***	***
Oman	***	***	***	***	***
Russia	***	***	***	***	***
Turkey	***	***	***	***	***
Subject sources	47,668	75,061	91,355	49,633	39,499
Nonsubject sources	99,099	78,535	72,659	37,418	32,056
All import sources	146,767	153,596	164,014	87,051	71,555
	Value (1,000 dollars)				
U.S. imports from.--					
Armenia	***	***	***	***	***
Brazil	***	***	***	***	***
Oman	***	***	***	***	***
Russia	***	***	***	***	***
Turkey	***	***	***	***	***
Subject sources	134,974	250,549	281,546	158,142	131,445
Nonsubject sources	274,942	291,533	248,511	150,643	99,797
All import sources	409,916	542,082	530,057	308,785	231,242
	Unit value (dollars per short ton)				
U.S. imports from.--					
Armenia	***	***	***	***	***
Brazil	***	***	***	***	***
Oman	***	***	***	***	***
Russia	***	***	***	***	***
Turkey	***	***	***	***	***
Subject sources	2,832	3,338	3,082	3,186	3,328
Nonsubject sources	2,774	3,712	3,420	4,026	3,113
All import sources	2,793	3,529	3,232	3,547	3,232

Table continued.

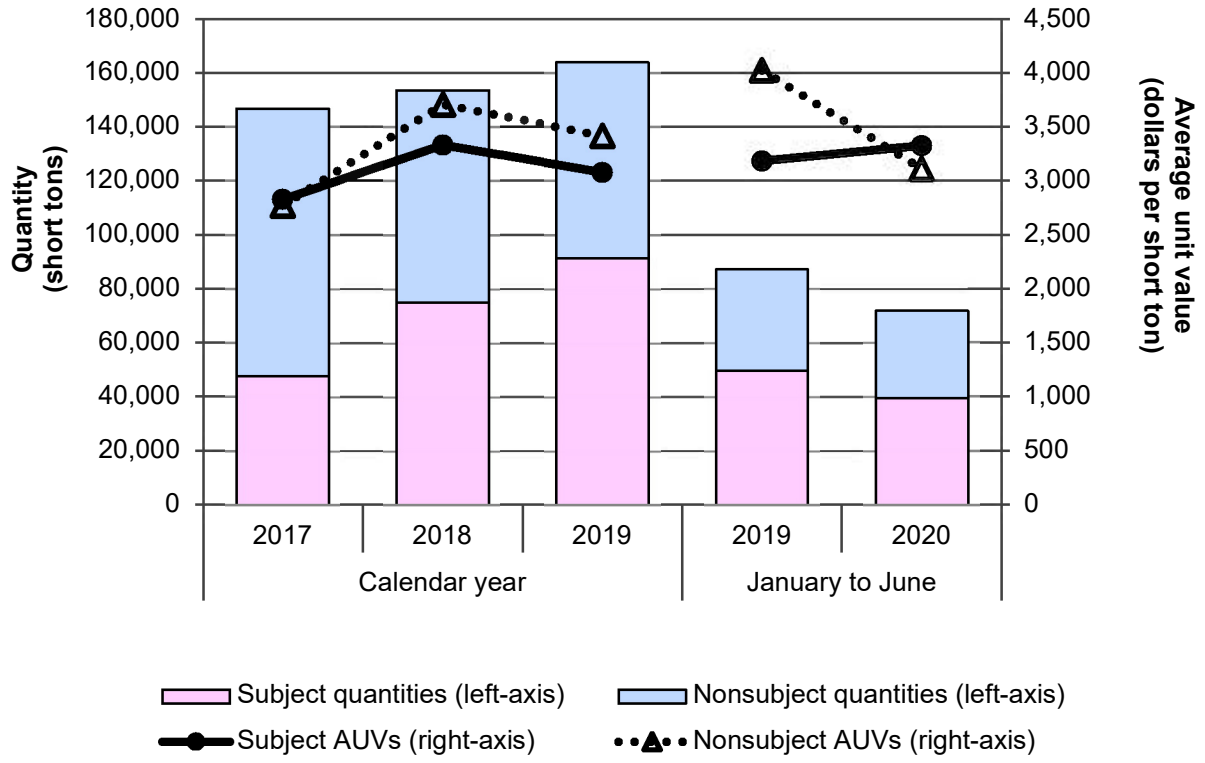
Table IV-2--Continued
Aluminum foil: U.S. imports, by source, 2017-19, January to June 2019, and January to June 2020

Item	Calendar year			January to June	
	2017	2018	2019	2019	2020
	Share of quantity (percent)				
U.S. imports from.--					
Armenia	***	***	***	***	***
Brazil	***	***	***	***	***
Oman	***	***	***	***	***
Russia	***	***	***	***	***
Turkey	***	***	***	***	***
Subject sources	32.5	48.9	55.7	57.0	55.2
Nonsubject sources	67.5	51.1	44.3	43.0	44.8
All import sources	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)				
U.S. imports from.--					
Armenia	***	***	***	***	***
Brazil	***	***	***	***	***
Oman	***	***	***	***	***
Russia	***	***	***	***	***
Turkey	***	***	***	***	***
Subject sources	32.9	46.2	53.1	51.2	56.8
Nonsubject sources	67.1	53.8	46.9	48.8	43.2
All import sources	100.0	100.0	100.0	100.0	100.0
	Ratio to U.S. production				
U.S. imports from.--					
Armenia	***	***	***	***	***
Brazil	***	***	***	***	***
Oman	***	***	***	***	***
Russia	***	***	***	***	***
Turkey	***	***	***	***	***
Subject sources	10.1	15.6	20.4	21.2	19.5
Nonsubject sources	21.1	16.3	16.2	16.0	15.8
All import sources	31.2	31.8	36.7	37.2	35.2

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

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

Figure IV-1
Aluminum foil: U.S. import quantities and average unit values, 2017-19, January to June 2019, and January to June 2020



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

Negligibility

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.[3] Negligible imports are generally defined in the Act, as amended, as imports from a 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] Table IV-3 presents the shares of total U.S. imports, by quantity, attributable to each subject country during September 2019 through August 2020.

Table IV-3
Aluminum foil: U.S. imports in the twelve month period preceding the filing of the petition, September 2019 through August 2020

Item	September 2019 through August 2020	
	Quantity (short tons)	Share quantity (percent)
U.S. imports from.--		
Armenia	***	***
Brazil	***	***
Oman	***	***
Russia	***	***
Turkey	***	***
Subject sources	70,844	46.9
Nonsubject sources	80,063	53.1
All import sources	150,907	100.0

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

[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)).

Cumulation considerations

In assessing whether imports should be cumulated, the Commission determines whether U.S. imports from the subject countries compete with each other and with the domestic like product and has generally considered four factors: (1) fungibility, (2) presence of sales or offers to sell in the same geographical markets, (3) common or similar channels of distribution, and (4) simultaneous presence in the market. Information regarding channels of distribution, market areas, and interchangeability appear in Part II. Additional information concerning fungibility, geographical markets, and simultaneous presence in the market is presented below.

Fungibility

Table IV-4 and figure IV-2 present data on U.S. producers' and U.S. importers' U.S. shipments by thickness in 2019. During 2019, *** percent of U.S. producers' U.S. shipments were of extra-heavy aluminum foil while *** percent were of standard foil. Over half (*** percent) of U.S. importers' U.S. shipments from subject sources in 2019 were of standard aluminum foil and *** percent of extra-heavy gauge. U.S. importers' U.S. shipments of nonsubject aluminum foil were predominantly ultra-thin *** percent, while *** percent of U.S. importers' U.S. shipments were of extra-heavy.

In 2019, standard foil accounted for the vast majority of U.S. shipments by importers of aluminum foil from Armenia, Brazil, and Russia while extra-heavy foil accounted for the majority of U.S. shipments by importers of Oman, and extra-heavy and standard foil comprised the majority of U.S. shipments by importers from Turkey.

Table IV-5 presents data on U.S. producers' and U.S. importers' U.S. shipments by type in 2019. All other aluminum foil accounted for *** percent of U.S. producers' U.S. shipments in 2019 while *** percent were comprised of fin stock. In 2019, all other aluminum foil accounted for the vast majority (*** percent) of U.S. importers' U.S. shipments from subject sources and fin stock accounted for *** percent. There were *** U.S. importers' U.S. shipments of fin stock in 2019 from Armenia or Russia.

Table IV-4
Aluminum foil: U.S. producers' and U.S. importers' U.S. shipments by thickness, 2019

Item	Ultra-thin	Thin	Standard	Heavy	Extra-heavy	All types
	Quantity (short tons)					
U.S. producers' U.S. shipments	***	***	***	***	***	***
U.S. importers' U.S. shipments from.--						
Armenia	***	***	***	***	***	***
Brazil	***	***	***	***	***	***
Oman	***	***	***	***	***	***
Russia	***	***	***	***	***	***
Turkey	***	***	***	***	***	***
Subject sources	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***
All import sources	***	***	***	***	***	***
Combined U.S. shipments	***	***	***	***	***	***
	Share across (percent)					
U.S. producers' U.S. shipments	***	***	***	***	***	***
U.S. importers' U.S. shipments from.--						
Armenia	***	***	***	***	***	***
Brazil	***	***	***	***	***	***
Oman	***	***	***	***	***	***
Russia	***	***	***	***	***	***
Turkey	***	***	***	***	***	***
Subject sources	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***
All import sources	***	***	***	***	***	***
Combined U.S. shipments	***	***	***	***	***	***
	Share down (percent)					
U.S. producers' U.S. shipments	***	***	***	***	***	***
U.S. importers' U.S. shipments from.--						
Armenia	***	***	***	***	***	***
Brazil	***	***	***	***	***	***
Oman	***	***	***	***	***	***
Russia	***	***	***	***	***	***
Turkey	***	***	***	***	***	***
Subject sources	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***
All import sources	***	***	***	***	***	***
Combined U.S. shipments	***	***	***	***	***	***

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

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

Figure IV-2
Aluminum foil: U.S. producers' and U.S. importers' U.S. shipments by thickness, 2019

* * * * * * *

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

Table IV-5
Aluminum foil: U.S. producers' and U.S. importers' U.S. shipments by type, 2019

Item	Fin stock	All other aluminum foil	All aluminum foil
	Quantity (short tons)		
U.S. producers' U.S. shipments	***	***	***
U.S. importers' U.S. shipments from.--			
Armenia	***	***	***
Brazil	***	***	***
Oman	***	***	***
Russia	***	***	***
Turkey	***	***	***
Subject sources	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
Combined U.S. shipments	***	***	***
	Share across (percent)		
U.S. producers' U.S. shipments	***	***	***
U.S. importers' U.S. shipments from.--			
Armenia	***	***	***
Brazil	***	***	***
Oman	***	***	***
Russia	***	***	***
Turkey	***	***	***
Subject sources	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
Combined U.S. shipments	***	***	***
	Share down (percent)		
U.S. producers' U.S. shipments	***	***	***
U.S. importers' U.S. shipments from.--			
Armenia	***	***	***
Brazil	***	***	***
Oman	***	***	***
Russia	***	***	***
Turkey	***	***	***
Subject sources	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
Combined U.S. shipments	***	***	***

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

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

Figure IV-3
Aluminum foil: U.S. producers' and U.S. importers' U.S. shipments by product type, 2019

* * * * * * *

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

Geographical markets

Aluminum foil produced in and imported into the United States is shipped nationwide. Table IV-6 presents U.S. import quantities of aluminum foil by source and border of entry during 2019. In 2019, U.S. import statistics for the primary HTS statistical reporting numbers for aluminum foil (7607.11.3000, 7607.11.6090, 7607.11.9030, 7607.11.9060, 7607.11.9090 and 7607.19.6000) show that the vast majority of imports from Armenia, Brazil, and Russia entered through the eastern region in 2019. The Southern border of entry accounted for the largest share of total imports from Oman, and the Northern and Eastern borders accounted for the largest share of total imports from Turkey.

Table IV-6
Aluminum foil: U.S. imports by border of entry, 2019

Item	Border of entry				
	East	North	South	West	All borders
	Quantity (short tons)				
U.S. imports from.--					
Armenia	6,194	279	---	---	6,473
Brazil	12,394	3,226	1,233	---	16,853
Oman	20	---	18,155	22	18,197
Russia	12,413	1,807	---	---	14,220
Turkey	8,129	17,109	956	4	26,198
Subject sources	39,150	22,421	20,344	26	81,941
Nonsubject sources	54,390	46,466	10,587	14,633	126,076
All import sources	93,540	68,887	30,931	14,659	208,017
	Share across (percent)				
U.S. imports from.--					
Armenia	95.7	4.3	---	---	100.0
Brazil	73.5	19.1	7.3	---	100.0
Oman	0.1	---	99.8	0.1	100.0
Russia	87.3	12.7	---	---	100.0
Turkey	31.0	65.3	3.6	0.0	100.0
Subject sources	47.8	27.4	24.8	0.0	100.0
Nonsubject sources	43.1	36.9	8.4	11.6	100.0
All import sources	45.0	33.1	14.9	7.0	100.0
	Share down (percent)				
U.S. imports from.--					
Armenia	6.6	0.4	---	---	3.1
Brazil	13.2	4.7	4.0	---	8.1
Oman	0.0	---	58.7	0.2	8.7
Russia	13.3	2.6	---	---	6.8
Turkey	8.7	24.8	3.1	0.0	12.6
Subject sources	41.9	32.5	65.8	0.2	39.4
Nonsubject sources	58.1	67.5	34.2	99.8	60.6
All import sources	100.0	100.0	100.0	100.0	100.0

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

Source: Official U.S. import statistics using HTS statistical reporting numbers 7607.11.3000, 7607.11.6090, 7607.11.9030, 7607.11.9060, 7607.11.9090 and 7607.19.6000, accessed October 20, 2020.

Presence in the market

Table IV-7 presents monthly official U.S. import statistics for subject countries and nonsubject sources. The monthly import statistics indicate that U.S. imports of aluminum foil from subject sources combined were present in each month during January 2017 through August 2020. During January 2017 through August 2020, imports of aluminum foil from Armenia were present in 33 of the 44 months, and imports of aluminum foil from Brazil were present in 37 of the 44 months. U.S. imports of aluminum foil from Oman were present in 22 of the 44 instances. U.S. imports of aluminum foil from Russia and Turkey were present in 39 and 38, respectively of the 44 months.

Table IV-7
Aluminum foil: U.S. imports by month, January 2017 through August 2020

U.S. imports	Armenia	Brazil	Oman	Russia	Turkey	Subject sources	Nonsubject sources	All import sources
	Quantity (short tons)							
2017.--								
January	---	20	---	2	33	54	8,583	8,637
February	15	45	---	44	---	104	7,773	7,877
March	30	---	---	4	---	35	8,963	8,998
April	14	---	---	63	---	77	8,887	8,964
May	14	---	---	22	---	36	9,945	9,981
June	29	310	---	80	---	420	11,647	12,067
July	98	---	---	211	---	309	11,561	11,870
August	29	---	---	83	11	124	5,604	5,728
September	---	28	---	39	8	75	6,861	6,936
October	22	---	---	43	10	75	7,797	7,871
November	31	7	---	0	176	214	4,994	5,209
December	46	---	---	1	78	126	4,420	4,546
2018.--								
January	102	22	---	159	46	328	7,649	7,977
February	14	38	2	24	234	313	6,692	7,005
March	166	109	---	167	155	597	9,591	10,188
April	102	231	---	58	272	662	9,115	9,777
May	---	307	---	3	244	555	8,004	8,559
June	---	144	---	4	338	485	8,724	9,209
July	---	654	---	79	61	794	10,262	11,056
August	---	427	---	6	283	716	10,168	10,884
September	45	617	---	---	495	1,157	9,025	10,182
October	14	894	---	120	282	1,310	10,078	11,388
November	---	456	579	---	272	1,307	8,218	9,525
December	---	838	---	---	101	939	8,434	9,373

Table continued.

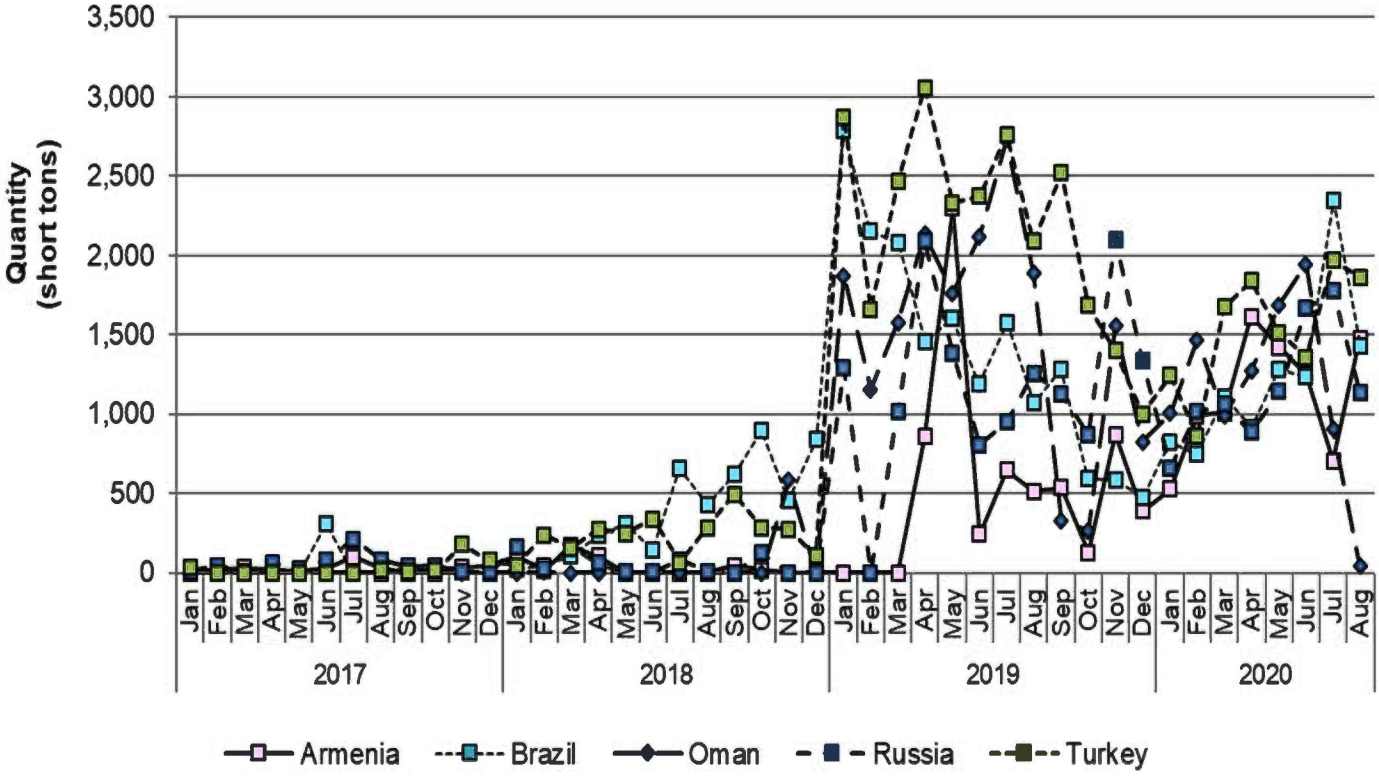
Table IV-7--Continued
Aluminum foil: U.S. imports by month, January 2017 through August 2020

U.S. imports	Armenia	Brazil	Oman	Russia	Turkey	Subject Sources	Nonsub. Sources	All import sources
	Quantity (short tons)							
2019.-- January	---	2,791	1,872	1,288	2,871	8,823	12,531	21,354
February	---	2,150	1,157	---	1,662	4,969	10,592	15,561
March	---	2,080	1,576	1,016	2,462	7,133	12,254	19,387
April	857	1,455	2,133	2,088	3,055	9,587	11,980	21,567
May	2,297	1,603	1,760	1,383	2,330	9,373	10,881	20,254
June	241	1,192	2,120	807	2,372	6,733	9,925	16,657
July	646	1,579	2,730	951	2,762	8,668	9,893	18,561
August	514	1,069	1,884	1,256	2,087	6,809	10,516	17,325
September	535	1,280	322	1,121	2,519	5,777	8,982	14,759
October	124	597	266	871	1,681	3,539	9,607	13,146
November	871	584	1,553	2,101	1,399	6,509	9,109	15,618
December	386	475	823	1,340	998	4,021	9,806	13,827
2020.-- January	528	824	1,004	658	1,242	4,256	9,718	13,974
February	989	749	1,469	1,014	861	5,082	8,254	13,336
March	1,009	1,108	991	1,063	1,673	5,844	10,925	16,769
April	1,612	916	1,268	886	1,840	6,522	10,216	16,738
May	1,421	1,278	1,688	1,140	1,514	7,041	10,146	17,187
June	1,253	1,239	1,945	1,665	1,358	7,459	11,223	18,682
July	705	2,343	904	1,780	1,970	7,702	11,753	19,455
August	1,477	1,432	41	1,135	1,862	5,947	12,004	17,952

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

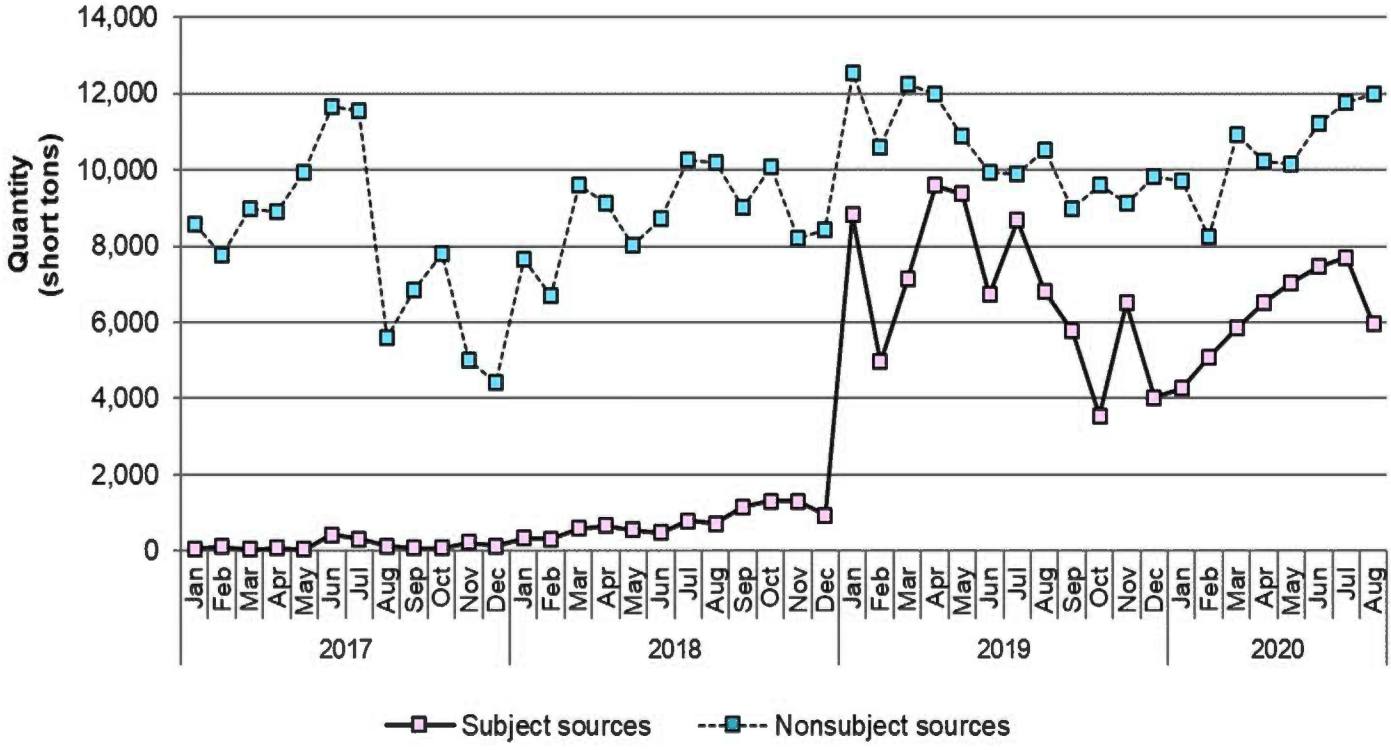
Source: Official U.S. import statistics using HTS statistical reporting numbers 7607.11.3000, 7607.11.6090, 7607.11.9030, 7607.11.9060, 7607.11.9090 and 7607.19.6000, accessed October 20, 2020.

Figure IV-4
Aluminum foil: U.S. imports from individual subject sources, by month, January 2017 through August 2020



Source: Official U.S. import statistics using HTS statistical reporting numbers 7607.11.3000, 7607.11.6090, 7607.11.9030, 7607.11.9060, 7607.11.9090 and 7607.19.6000, accessed October 20, 2020.

Figure IV-5
Aluminum foil: U.S. imports from aggregated subject and nonsubject sources, by month, January 2017 through August 2020



Source: Official U.S. import statistics using HTS statistical reporting numbers 7607.11.3000, 7607.11.6090, 7607.11.9030, 7607.11.9060, 7607.11.9090 and 7607.19.6000, accessed October 20, 2020.

Apparent U.S. consumption

Table IV-8 presents data on apparent U.S. consumption and U.S. market shares for aluminum foil.

Table IV-8
Aluminum foil: Apparent U.S. consumption, total market, 2017-19, January to June 2019, and January to June 2020

Item	Calendar year			January to June	
	2017	2018	2019	2019	2020
	Quantity (short tons)				
U.S. producers' U.S. shipments	440,551	453,607	420,313	221,766	199,037
U.S. importers' U.S. shipments of imports from.--					
Armenia	***	***	***	***	***
Brazil	***	***	***	***	***
Oman	***	***	***	***	***
Russia	***	***	***	***	***
Turkey	***	***	***	***	***
Subject sources	40,853	74,978	86,399	44,556	34,446
Nonsubject sources	119,643	74,196	71,982	33,308	39,644
All import sources	160,496	149,174	158,381	77,864	74,090
Apparent U.S. consumption	601,047	602,781	578,694	299,630	273,127
	Value (1,000 dollars)				
U.S. producers' U.S. shipments	1,327,870	1,580,263	1,378,587	740,505	600,313
U.S. importers' U.S. shipments of imports from.--					
Armenia	***	***	***	***	***
Brazil	***	***	***	***	***
Oman	***	***	***	***	***
Russia	***	***	***	***	***
Turkey	***	***	***	***	***
Subject sources	108,965	248,917	267,043	140,640	113,338
Nonsubject sources	301,379	268,316	265,593	147,043	129,796
All import sources	410,344	517,233	532,636	287,683	243,134
Apparent U.S. consumption	1,738,214	2,097,496	1,911,223	1,028,188	843,447

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

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

U.S. market shares

U.S. market share data are presented in table IV-9. By quantity, the share of U.S. producers' U.S. shipments of aluminum foil decreased between from 73.3 percent in 2017 to 72.6 percent in 2019, and were lower in January-June 2020 compared to January-June 2019. In contrast, U.S. importers' U.S. shipments of aluminum foil from subject sources steadily increased by quantity from 6.8 percent in 2017 to 14.9 percent in 2019, and were lower in January-June 2020, compared to January-June 2019. By value, U.S. shipments of aluminum foil from all import sources rose overall during 2017-19 and were higher in interim 2020 than in interim 2019.

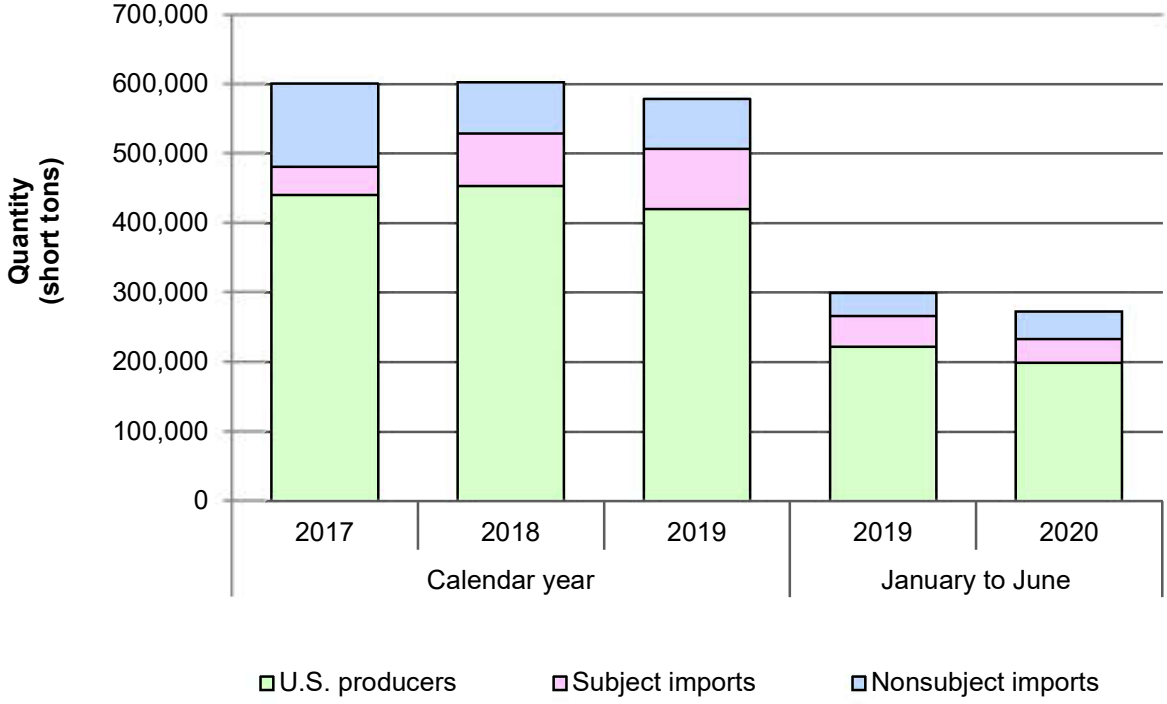
Table IV-9
Aluminum foil: Market shares, total market, 2017-19, January to June 2019, and January to June 2020

Item	Calendar year			January to June	
	2017	2018	2019	2019	2020
	Quantity (short tons)				
Apparent U.S. consumption	601,047	602,781	578,694	299,630	273,127
	Share of quantity (percent)				
U.S. producers' U.S. shipments	73.3	75.3	72.6	74.0	72.9
U.S. importers' U.S. shipments of imports from.--					
Armenia	***	***	***	***	***
Brazil	***	***	***	***	***
Oman	***	***	***	***	***
Russia	***	***	***	***	***
Turkey	***	***	***	***	***
Subject sources	6.8	12.4	14.9	14.9	12.6
Nonsubject sources	19.9	12.3	12.4	11.1	14.5
All import sources	26.7	24.7	27.4	26.0	27.1
	Value (1,000 dollars)				
Apparent U.S. consumption	1,738,214	2,097,496	1,911,223	1,028,188	843,447
	Share of value (percent)				
U.S. producers' U.S. shipments	76.4	75.3	72.1	72.0	71.2
U.S. importers' U.S. shipments of imports from.--					
Armenia	***	***	***	***	***
Brazil	***	***	***	***	***
Oman	***	***	***	***	***
Russia	***	***	***	***	***
Turkey	***	***	***	***	***
Subject sources	6.3	11.9	14.0	13.7	13.4
Nonsubject sources	17.3	12.8	13.9	14.3	15.4
All import sources	23.6	24.7	27.9	28.0	28.8

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

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

Figure IV-6
Aluminum foil: Apparent U.S. consumption, total market, 2017-19, January to June 2019, and January to June 2020



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

Table IV-10
Aluminum foil: Apparent U.S. consumption, merchant market, 2017-19, January to June 2019, and January to June 2020

Item	Calendar year			January to June	
	2017	2018	2019	2019	2020
	Quantity (short tons)				
U.S. producers' commercial U.S. shipments	***	***	***	***	***
U.S. importers' U.S. shipments of imports from.--					
Armenia	***	***	***	***	***
Brazil	***	***	***	***	***
Oman	***	***	***	***	***
Russia	***	***	***	***	***
Turkey	***	***	***	***	***
Subject sources	40,853	74,978	86,399	44,556	34,446
Nonsubject sources	119,643	74,196	71,982	33,308	39,644
All import sources	160,496	149,174	158,381	77,864	74,090
Apparent U.S. consumption	***	***	***	***	***
	Value (1,000 dollars)				
U.S. producers' commercial U.S. shipments	***	***	***	***	***
U.S. importers' U.S. shipments of imports from.--					
Armenia	***	***	***	***	***
Brazil	***	***	***	***	***
Oman	***	***	***	***	***
Russia	***	***	***	***	***
Turkey	***	***	***	***	***
Subject sources	108,965	248,917	267,043	140,640	113,338
Nonsubject sources	301,379	268,316	265,593	147,043	129,796
All import sources	410,344	517,233	532,636	287,683	243,134
Apparent U.S. consumption	***	***	***	***	***

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

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

By quantity, the merchant market share of U.S. producers' U.S. shipments of aluminum foil decreased between from *** percent in 2017 to *** percent in 2019, and were lower in January-June 2020 compared to January-June 2019. In contrast, U.S. importers' U.S. shipments of aluminum foil from subject sources steadily increased by quantity from *** percent in 2017 to *** percent in 2019, but were lower in January-June 2020, compared to January-June 2019. By value, U.S. shipments of aluminum foil from all import sources increased overall during 2017-19 and were higher in interim 2020 than in interim 2019.

Table IV-11
Aluminum foil: Market shares, merchant market, 2017-19, January to June 2019, and January to June 2020

Item	Calendar year			January to June	
	2017	2018	2019	2019	2020
	Quantity (short tons)				
Apparent U.S. consumption	***	***	***	***	***
	Share of quantity (percent)				
U.S. producers' commercial U.S. shipments	***	***	***	***	***
U.S. importers' U.S. shipments of imports from.--					
Armenia	***	***	***	***	***
Brazil	***	***	***	***	***
Oman	***	***	***	***	***
Russia	***	***	***	***	***
Turkey	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
	Value (1,000 dollars)				
Apparent U.S. consumption	***	***	***	***	***
	Share of value (percent)				
U.S. producers' commercial U.S. shipments	***	***	***	***	***
U.S. importers' U.S. shipments of imports from.--					
Armenia	***	***	***	***	***
Brazil	***	***	***	***	***
Oman	***	***	***	***	***
Russia	***	***	***	***	***
Turkey	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***

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

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

Figure IV-7
Aluminum foil: Apparent U.S. consumption, merchant market, 2017-19, January to June 2019, and January to June 2020

* * * * * * *

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

Part V: Pricing data

Factors affecting prices

Raw material costs

Aluminum foil is primarily made of re-roll stock, primary aluminum, and secondary aluminum. Raw material costs are the largest component of the total costs of goods sold ("COGS) for aluminum foil, accounting for between *** and *** percent during 2017 to 2019 (see part VI). The majority of U.S. producers (4 of 5) reported that raw material prices fluctuated during the period of investigation. U.S. producer *** reported that raw material prices had fluctuated along with the global demand for aluminum. The majority of importers reported that raw material prices increased (13 of 27) or fluctuated (10 of 27). Importers ***, ***, ***, and *** reported that additional duties on aluminum from China had increased raw material prices.

Transportation costs to the U.S. market

Transportation costs for aluminum foil shipped from subject countries to the United States averaged 5.2 percent for Armenia, Brazil, Oman, Russia, and Turkey during 2019. Transportation costs ranged from 2.7 percent for aluminum foil from Brazil to 8.2 percent for aluminum foil from Oman. These estimates were derived from official import data and represent the transportation and other charges on imports.[1]

U.S. inland transportation costs

All responding U.S. producers and importers reported that they typically arrange transportation to their customers. Most U.S. producers reported that their U.S. inland transportation costs ranged from 1.8 to 3.0 percent while most importers reported costs of 2.0 to 5.0 percent.

[1] The estimated transportation costs were obtained by subtracting the customs value from the c.i.f. value of the imports for 2019 and then dividing by the customs value based on the HTS subheading 7607.11.3000.

Pricing practices

Pricing methods

U.S. producers reported setting prices on a transaction-by-transaction basis and through contracts. Importers reported using transaction-by-transaction methods, contracts, set price lists, and other methods to set prices (table V-1). Other methods include quarterly adjustments.

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

Method	U.S. producers	Importers
Transaction-by-transaction	4	12
Contract	4	7
Set price list	---	1
Other	---	5
Responding firms	4	19

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

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

U.S. producers reported selling the vast majority of their aluminum foil through long-term contracts, while importers reported selling slightly over *** of their aluminum foil in spot sales and the remainder through long-term contracts (table V-2).

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

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

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

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

Half of responding U.S. producers (2 of 4) reported renegotiating prices for annual and long-term contracts. U.S. producers reported that the duration of long-term contracts ranged from 2 to 3 years. All responding U.S. producers (4 of 4) reported fixing price and quantity and indexing prices to raw materials for annual contracts. The majority of responding U.S. producers (3 of 4) reported fixing price and quantity and indexing pricing to raw material costs for long-term contracts. U.S. producers reported indexing to Platt's Midwest premium and the London Metal Exchange in annual and long-term contracts.

One importer, ***, reported renegotiating prices and fixing quantities for long-term contracts. *** reported that long-term contracts typically last 2 years.

Sales terms and discounts

All U.S. producers and half of importers typically quote prices on a delivered basis. U.S producers reported offering quantity discounts (2 firms) and total volume discounts (1 firm). Importers reported offering quantity discounts (2 firms), total volume discounts (3 firms), and other discounts (3 firms).

Price factors

Aluminum foil prices are largely determined by three factors: the LME, the Platt's Midwest premium, and the conversion price.[2] The LME is the market determined raw material price (figure V-1). As shown in figure V-1, the LME price of high-grade aluminum increased from January 2017 until May 2018, at which point it decreased until January 2020.

The Platt's Midwest premium is a daily premium added to the LME price applicable to U.S. producers of primary unwrought aluminum (figure V-2). The Platt's Midwest premium price increased sharply between December 2017 and April 2018, at which point it decreased until June 2020. The conversion price is a charge added to the LME price and Platt's Midwest premium that incorporates the production costs and profits from operations. Conversion prices are the sole pricing element determined by the producer. Conversion prices on average increased from 2017 to 2019 (Table V-3). Conversion prices reportedly vary significantly by gauge.[3]

[2] Conf. Tr. at 72 (Thomas); *Aluminum Foil from China, Investigation Nos. 701-TA-570 and 731-TA-1346 (Final)*, USITC Publication 4771, May 2018 at V-1, F-3.

[3] Petitioners' postconference brief at Exh. 12.

Figure V-1
Aluminum foil: average LME by month January 2017- June 2020

* * * * * * *

Source: ***.

Figure V-2
Aluminum foil: Average Midwest pricing premium, by month, January 2017- June 2020

* * * * * *

Source: ***.

Table V-3
Aluminum foil: U.S. producers' reported conversion rates 2017-19, January-June 2019, and January – June 2020.

* * * * * * *

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

Price data

The Commission requested U.S. producers and importers provide quarterly data for the total quantity and f.o.b. value of the following aluminum foil products shipped to unrelated U.S. customers from January 2017 to June 2020.

Product 1 -- Aluminum in the 8XXX series, standard tempers, 0.002-0.0039 inch thickness width 6-40", mill finish.

Product 2.-- Aluminum in the 8XXX series, standard tempers, 0.004-0.0078 inch thickness width 6-40", mill finish.

Product 3.-- Aluminum in the 8XXX series, standard tempers, 0.003-0.0078 inch thickness width 6-40", mill finish.

Product 4.-- Aluminum in the 8XXX series, standard tempers, 0.0016-0.0032 inch thickness width 6-40", mill finish.

Four U.S. producers and five importers provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.[4] Pricing data reported by these firms accounted for approximately *** percent of U.S. producers' commercial shipments of aluminum foil and *** percent of U.S. commercial

[4] 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.

shipments of imports from Oman and Turkey in 2019.[5] Pricing products from Oman made up *** percent of U.S. commercial shipments from Oman in 2019. Pricing products from Turkey made up *** percent of commercial shipments from Turkey in 2019. No pricing data was reported by importers of aluminum foil from Armenia, Brazil or Russia. No pricing data was reported for product 2 from any subject country.

Price data for products 1-4 are presented in tables V-4 to V-7 and figures V-3 to V-6.

[5] Pricing coverage is based on U.S. shipments reported in questionnaires.

Table V-4
Aluminum foil: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 and margins of underselling/(overselling), by quarter, January 2017 through June 2020

* * * * * * *

Note: Product 1: Aluminum in the 8XXX series, standard tempers, 0.002-0.0039 inch thickness width 6-40", mill finish.

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

Table V-5
Aluminum foil: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 and margins of underselling/(overselling), by quarter, January 2017 through June 2020

Period	United States		Armenia			Brazil		
	Price (dollars per pound)	Quantity (pounds)	Price (dollars per pound)	Quantity (pounds)	Margin (percent)	Price (dollars per pound)	Quantity (pounds)	Margin (percent)
2017:								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2018:								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2019:								
Jan.-Mar.	1.49	5,237,349	***	***	***	***	***	***
Apr.-Jun.	1.45	6,795,846	***	***	***	***	***	***
Jul.-Sep.	1.42	7,438,108	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2020:								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***

Period	Oman			Russia			Turkey		
	Price (dollars per pound)	Quantity (pounds)	Margin (percent)	Price (dollars per pound)	Quantity (pounds)	Margin (percent)	Price (dollars per pound)	Quantity (pounds)	Margin (percent)
2017:									
Jan.-Mar.	***	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***	***
2018:									
Jan.-Mar.	***	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***	***
2019:									
Jan.-Mar.	***	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***	***
2020:									
Jan.-Mar.	***	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***	***

Note: Product 2: Aluminum in the 8XXX series, standard tempers, 0.004-0.0078 inch thickness width 6-40”, mill finish.

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

Table V-6
Aluminum foil: Weighted-average f.o.b. prices and quantities of domestic and imported product 3 and margins of underselling/(overselling), by quarter, January 2017 through June 2020

Period	United States		Armenia			Brazil		
	Price (dollars per pound)	Quantity (pounds)	Price (dollars per pound)	Quantity (pounds)	Margin (percent)	Price (dollars per pound)	Quantity (pounds)	Margin (percent)
2017:								
Jan.-Mar.	1.33	44,920,328	***	***	***	***	***	***
Apr.-Jun.	1.48	57,028,013	***	***	***	***	***	***
Jul.-Sep.	1.47	51,923,915	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2018:								
Jan.-Mar.	1.62	45,361,746	***	***	***	***	***	***
Apr.-Jun.	1.72	48,318,321	***	***	***	***	***	***
Jul.-Sep.	1.74	45,968,010	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2019:								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2020:								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***

Period	Oman			Russia			Turkey		
	Price (dollars per pound)	Quantity (pounds)	Margin (percent)	Price (dollars per pound)	Quantity (pounds)	Margin (percent)	Price (dollars per pound)	Quantity (pounds)	Margin (percent)
2017:									
Jan.-Mar.	***	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***	***
2018:									
Jan.-Mar.	***	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***	***
2019:									
Jan.-Mar.	***	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***	***
2020:									
Jan.-Mar.	***	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***	***

Note: Product 3: Aluminum in the 8XXX series, standard tempers, 0.003-0.0078 inch thickness width 6-40", mill finish.

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

Table V-7
Aluminum foil: Weighted-average f.o.b. prices and quantities of domestic and imported product 4 and margins of underselling/(overselling), by quarter, January 2017 through June 2020

* * * * * * *

Note: Product 4: Aluminum in the 8XXX series, standard tempers, 0.0016-0.0032 inch thickness width 6-40", mill finish.

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

Figure V-3
Aluminum foil: Weighted-average prices and quantities of domestic and imported product 1, by quarter, January 2017 through June 2020

* * * * * * *

Product 1: Aluminum in the 8XXX series, standard tempers, 0.002-0.0039 inch thickness width 6-40”, mill finish.

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

Figure V-4
Aluminum foil: Weighted-average prices and quantities of domestic and imported product 2, by quarter, January 2017 through June 2020

* * * * * * *

Product 2: Aluminum in the 8XXX series, standard tempers, 0.004-0.0078 inch thickness width 6-40”, mill finish.

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

Figure V-5
Aluminum foil: Weighted-average prices and quantities of domestic and imported product 3, by quarter, January 2017 through June 2020

* * * * * * *

Product 3: Aluminum in the 8XXX series, standard tempers, 0.003-0.0078 inch thickness width 6-40", mill finish.

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

Figure V-6
Aluminum foil: Weighted-average prices and quantities of domestic and imported product 4, by quarter, January 2017 through June 2020

* * * * * * *

Product 4: Aluminum in the 8XXX series, standard tempers, 0.0016-0.0032 inch thickness width 6-40”, mill finish.

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

Import purchase cost data

The Commission also requested that importers provide quarterly purchase cost data for imports for their own use or for retail sale. Ten importers provided usable purchase cost data of the requested products, although not all firms reported purchase costs for all products for all quarters.[6] Purchase cost data reported by these firms accounted for approximately *** percent of U.S. shipments of subject imports from Armenia, Brazil, and Turkey in 2019.[7] Purchase cost data accounted for approximately *** percent of U.S. subject imports from Armenia, *** percent of U.S. subject imports from Brazil, and *** percent of U.S. subject imports from Turkey.

Landed duty paid purchase cost data for products 1,2, and 4 are presented in tables V-8 to V-10 and figures V-7 to V-9 along with U.S. producers' sales price.[8] No purchase cost data was reported by importers of aluminum foil form Russia. No purchase cost data was reported for product 3 from any subject country.

Importers reporting import purchase cost data were asked to provide additional information regarding the costs and benefits of importing aluminum foil directly**.** Twelve of 21 importers reported that they compared costs of importing to the cost of purchasing from a U.S. producer in determining whether to import aluminum foil, and seven importers compare costs to purchasing from an importer.

Four of 12 importers reported that they incurred additional costs beyond landed duty-paid costs by importing aluminum foil directly rather than purchasing from a U.S. producer or U.S. importer. Of these, three importers estimated the total additional cost incurred; estimates ranged from 1 to 10 percent compared to the landed-duty paid value. Firms were also asked to identify specific additional costs they incurred as a result of importing aluminum foil. Reported costs include additional freight and transportation costs, warehouse expenses, storage costs, and higher financing costs.

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[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] Staff did not request purchase cost data of imports from Oman.

[8] LDP import value does not include any potential additional costs that a purchaser may incur by importing rather than purchasing from another importer or U.S. producer. Price-cost differentials are based on LDP import values whereas margins of underselling/overselling are based on importer sales prices.

Importers reported that the benefits of importing aluminum foil directly were access to grades of aluminum foil that are otherwise unavailable in the U.S. market, such as 8806 alloy, and lower prices for aluminum foil.

Nine of 12 responding importers reported that the cost of importing themselves was less than the cost of purchasing from a U.S. producer or importer without including the additional costs associated with importing directly. Five of 11 responding importers reported that the cost of direct importing themselves was less than the cost of purchasing from a U.S. producer or importer when including the additional costs associated with importing directly. Four importers estimated that they saved between *** percent by importing aluminum foil themselves instead of purchasing from a U.S. producer and two importers estimated that they saved between *** percent instead of purchasing them from importers. Seven responding importers reported that they based these saving estimates on previous transactions, seven reported that they based them on market research, and three reported they estimated savings based on other methods. Other methods include comparing cost to requested pricing quotes.

Table V-8
Aluminum foil: Weighted-average f.o.b. prices, costs and quantities of domestic and imported product 1, and price-cost differentials, by quarter, January 2017 through June 2020

Period	United States		Armenia			Brazil		
	Price (dollars per pound)	Quantity (pounds)	Unit LDP value (dollars per pound)	Quantity (pounds)	Price / cost differential (percent)	Unit LDP value (dollars per pound)	Quantity (pounds)	Price / cost differential (percent)
2017:								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2018:								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2019:								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2020:								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***

Period	Russia			Turkey		
	Unit LDP value (dollars per pound)	Quantity (pounds)	Price / cost differential (percent)	Unit LDP value (dollars per pound)	Quantity (pounds)	Price / cost differential (percent)
2017:						
Jan.-Mar.	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***
2018:						
Jan.-Mar.	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***
Jul.-Sep.	***	***	***	1.97	534,588	***
Oct.-Dec.	***	***	***	***	***	***
2019:						
Jan.-Mar.	***	***	***	1.75	579,394	***
Apr.-Jun.	***	***	***	1.66	857,638	***
Jul.-Sep.	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***
2020:						
Jan.-Mar.	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***

Note: Product 1: Aluminum in the 8XXX series, standard tempers, 0.002-0.0039 inch thickness width 6-40", mill finish.

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

Table V-9
Aluminum foil: Weighted-average f.o.b. prices, costs and quantities of domestic and imported product 2, and price-cost differentials, by quarter, January 2017 through June 2020

Period	United States		Armenia			Brazil		
	Price (dollars per pound)	Quantity (pounds)	Unit LDP value (dollars per pound)	Quantity (pounds)	Price / cost differential (percent)	Unit LDP value (dollars per pound)	Quantity (pounds)	Price / cost differential (percent)
2017:								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2018:								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2019:								
Jan.-Mar.	1.49	5,237,349	***	***	***	***	***	***
Apr.-Jun.	1.45	6,795,846	***	***	***	***	***	***
Jul.-Sep.	1.42	7,438,108	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2020:								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***

Period	Russia			Turkey		
	Unit LDP value (dollars per pound)	Quantity (pounds)	Price / cost differential (percent)	Unit LDP value (dollars per pound)	Quantity (pounds)	Price / cost differential (percent)
2017:						
Jan.-Mar.	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***
2018:						
Jan.-Mar.	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***
2019:						
Jan.-Mar.	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***
2020:						
Jan.-Mar.	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***

Note: Product 2: Aluminum in the 8XXX series, standard tempers, 0.004-0.0078 inch thickness width 6-40", mill finish.
Source: Compiled from data submitted in response to Commission questionnaires.

Table V-10
Aluminum foil: Weighted-average f.o.b. prices, costs and quantities of domestic and imported product 4, and price-cost differentials, by quarter, January 2017 through June 2020

* * * * * * *

Product 4: Aluminum in the 8XXX series, standard tempers, 0.0016-0.0032 inch thickness width 6-40", mill finish.

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

Figure V-7
Aluminum foil: Weighted-average f.o.b. prices, unit LDP values and quantities of domestic and imported product 1, by quarter, January 2017 through June 2020

* * * * * * *

Note: Product 1: Aluminum in the 8XXX series, standard tempers, 0.002-0.0039 inch thickness width 6-40", mill finish.

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

Figure V-8
Aluminum foil: Weighted-average f.o.b. prices, unit LDP values and quantities of domestic and imported product 2, by quarter, January 2017 through June 2020

* * * * * * *

Note: Product 2: Aluminum in the 8XXX series, standard tempers, 0.004-0.0078 inch thickness width 6-40", mill finish.

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

Figure V-9
Aluminum foil: Weighted-average f.o.b. prices, unit LDP values and quantities of domestic and imported product 4, by quarter, January 2017 through June 2020

* * * * * * *

Product 4: Aluminum in the 8XXX series, standard tempers, 0.0016-0.0032 inch thickness width 6-40”, mill finish.

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

Price trends

In general, prices decreased from January 2017 to June 2020. Table V-11 summarizes the price trends, by country and by product. As shown in the table, domestic price decreases ranged from less than *** percent to *** percent while import price decreases ranged from *** to *** percent.

Indexed pricing data in figure V-10 presents the prices of products 1-4 sold by domestic producers. As shown in this figure, prices for domestic products increased from January 2017 until September 2018, when prices began to decrease throughout the remainder of the period.[9]

[9] The Commission received insufficient pricing data from importers to present a index of imported pricing products.

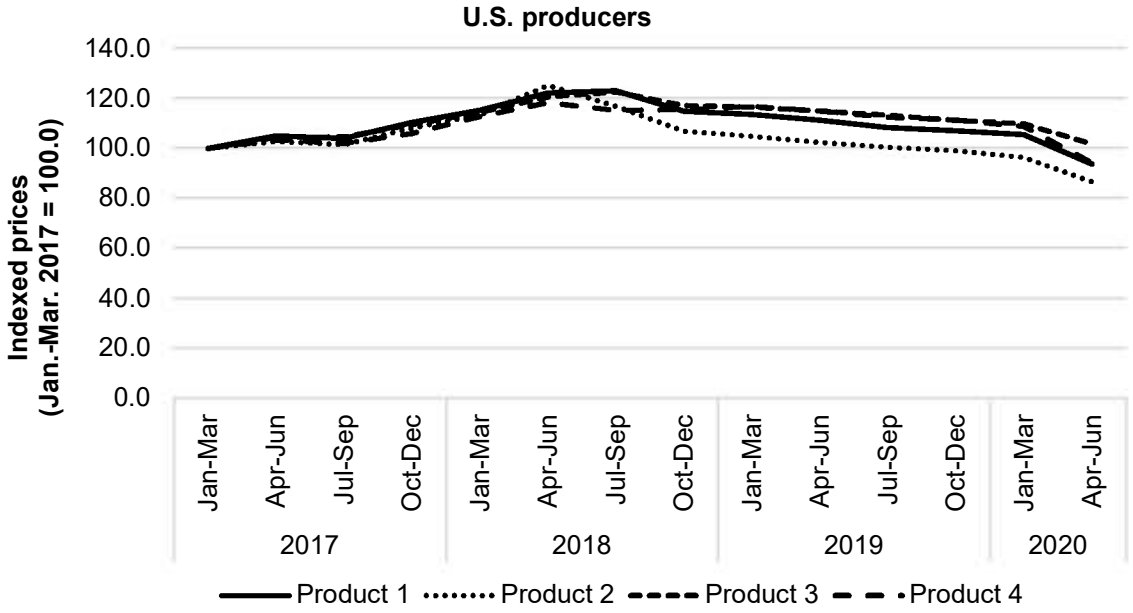
Table V-11
Aluminum foil: Number of quarters containing observations low price, high price, and change in price over period, by product and source, January 2017 through June 2020

* * * * * * *

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

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

Figure V-10
Aluminum foil: Indexed U.S. producer prices, January 2017 through June 2020



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

Price comparisons

As shown in table V-12, prices for product imported from Armenia, Brazil, Oman, Russia, and Turkey were below those for U.S.-produced product in *** of *** instances (*** million pounds); margins of underselling ranged from *** to *** percent. In the remaining *** instances (*** million pounds), prices for product from Armenia, Brazil, Oman, Russia, and Turkey were between *** and *** percent above prices for the domestic product.

Table V-12
Aluminum foil: Instances of underselling/overselling and the range and average of margins, by product, January 2017 through June 2020

Source	Underselling				
	Number of quarters	Quantity (pounds)	Average margin (percent)	Margin range (percent)	
				Min	Max
Product 1	***	***	***	***	***
Product 2	***	***	***	***	***
Product 3	***	***	***	***	***
Product 4	***	***	***	***	***
Total, underselling	***	***	***	***	***
Source	(Overselling)				
	Number of quarters	Quantity (pounds)	Average margin (percent)	Margin range (percent)	
				Min	Max
Product 1	***	***	***	***	***
Product 2	***	***	***	***	***
Product 3	***	***	***	***	***
Product 4	***	***	***	***	***
Total, overselling	***	***	***	***	***

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

As shown in table V-13, all of the reported instances of underselling (*** million pounds) were imports from ***. Half of instances of reported overselling were imports from *** (*** of ***) which accounted for *** percent of the volume of overselling.

Table V-13
Aluminum foil: Instances of underselling/overselling and the range and average of margins, by country, January 2017 through June 2020

Source	Underselling				
	Number of quarters	Quantity (pounds)	Average margin (percent)	Margin range (percent)	
				Min	Max
Armenia	---	---	---	---	---
Brazil	---	---	---	---	---
Oman	***	***	***	***	***
Russia	---	---	---	---	---
Turkey	---	---	---	---	---
Total	***	***	***	***	***
Source	**(Overselling)**				
	Number of quarters	**Quantity[1] (pounds)**	**Average margin (percent)**	**Margin range (percent)**	
				Min	**Max**
Armenia	***	***	***	***	***
Brazil	***	***	***	***	***
Oman	***	***	***	***	***
Russia	***	***	***	***	***
Turkey	***	***	***	***	***
Total	***	***	***	***	***

Note: 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.

As shown in table V-14, import purchase costs from Armenia, Brazil, and Turkey were below those for U.S.-produced product in 38 of 52 instances (43.1 million pounds); *** percent of underselling was product 4. Import purchase costs were from 0.4 to 27.8 percent below U.S. sales. In the remaining 14 of 52 quarterly comparisons (12.7 million pounds), import purchase costs for product from Armenia, Brazil, and Turkey were from 1.1 to 13.6 percent above prices for the domestic product.

Table V-14
Aluminum foil: Instances of lower/(higher) average unit purchase costs compared to U.S. prices and the range and average of price/cost differentials, by product, January 2017 through June 2020

	Unit purchase cost data lower than U.S. prices				
			Average price / cost differential (percent)	Price / cost differential range (percent)	
Source	Number of quarters	Quantity (pounds)		Min	Max
Product 1	***	***	***	***	***
Product 2	***	***	***	***	***
Product 3	***	***	***	***	***
Product 4	***	***	***	***	***
Total, lower	38	43,180,110	11.4	0.4	27.8
	(Unit purchase cost data higher than U.S. prices)				
			Average price / cost differential (percent)	Price / cost differential range (percent)	
Source	Number of quarters	Quantity (pounds)		Min	Max
Product 1	***	***	***	***	***
Product 2	***	***	***	***	***
Product 3	***	***	***	***	***
Product 4	***	***	***	***	***
Total, higher	14	12,761,409	(6.2)	(1.1)	(13.6)

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

As shown in table V-15, the majority of the reported instances of import purchase cost below U.S. sales price (*** percent) were imports from Brazil. The majority of import purchase costs above U.S. sales prices (***) were from Turkey.

Table V-15
Aluminum foil: Instances of lower/(higher) average unit purchase costs compared to U.S. prices and the range and average of price/cost differentials, by country, January 2017 through June 2020

Source	Unit purchase cost data lower than U.S. prices				
	Number of quarters	Quantity (pounds)	Average price / cost differential (percent)	Price / cost differential range (percent)	
				Min	Max
Armenia	***	***	***	***	***
Brazil	***	***	***	***	***
Russia	***	***	***	***	***
Turkey	***	***	***	***	***
Total, lower	38	43,180,110	11.4	0.4	27.8
Source	**(Unit purchase cost data higher than U.S. prices)**				
	Number of quarters	Quantity (pounds)	Average price / cost differential (percent)	Price / cost differential range (percent)	
				Min	Max
Armenia	***	***	***	***	***
Brazil	***	***	***	***	***
Russia	***	***	***	***	***
Turkey	***	***	***	***	***
Total, higher	14	12,761,409	(6.2)	(1.1)	(13.6)

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

Lost sales and lost revenue

The Commission requested that U.S. producers of aluminum foil report purchasers with which they experienced instances of lost sales or revenue due to competition from imports of aluminum foil from Armenia, Brazil, Oman, Russia, and Turkey. Of the four responding U.S. producers, all four reported that they had to reduce prices, two reported that they had rolled back announced price increases, and all four firms reported that they had lost sales. Three of the U.S. producers submitted lost sales or lost revenue allegations. The responding U.S. producers submitted 14 lost sale allegations and one lost revenue allegation for a total quantity of *** pounds.

Staff contacted 15 purchasers and received responses from 12 purchasers. Responding purchasers reported purchasing *** short tons of aluminum foil from January 2017 to December 2019 (table V-16). Responding purchasers purchased *** percent from U.S. producers, *** percent from Armenia, Brazil, Oman, Russia, and Turkey; and *** percent from "all other" countries.

Purchasers were asked about changes in their purchasing patterns from different sources since 2017. Purchaser responses to changes in their purchasing patterns from the United States were mixed. Purchasers who reported increased purchases from U.S. producers cited increased duties on aluminum foil from China and increased demand for downstream products as reasons for shifting their purchasing patterns. Six purchasers who reported decreased purchases from U.S. producers reported that U.S. producers lacked the production capacity or the required quality to meet their needs as reasons for shifting their purchasing patterns. Purchasers reported increasing or fluctuating purchases of aluminum foil from subject countries because they were unable to source aluminum foil from U.S. producers or shifted purchases to subject countries because of additional duties on Chinese aluminum foil.

Of the 12 responding purchasers, eight reported that, since 2017, they had purchased imported aluminum foil from Armenia, Brazil, Oman, Russia, or Turkey instead of U.S.-produced product. Six of these purchasers reported that subject import prices were lower than U.S.-produced product, and one of these purchasers reported that price was a primary reason for the decision to purchase imported product rather than U.S.-produced product. One purchaser estimated the quantity of aluminum foil from Armenia, Brazil, Oman, Russia, or Turkey purchased instead of domestic product to be *** short tons (table V-17). Purchasers identified the U.S. industry's inability to supply their demand as non-price reasons for

purchasing imported rather than U.S.-produced product. Purchasers provided written responses that are presented in appendix F.

Of the five responding purchasers, none reported that U.S. producers had reduced prices in order to compete with lower-priced imports from Armenia, Brazil, Oman, Russia, or Turkey; seven reported that they did not know.

Table V-16
Aluminum foil: U.S. purchasers' U.S. purchases and U.S. imports, 2017-19

* * * * * * *

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

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

Table V-17
Aluminum foil: Purchasers' responses to purchasing subject instead of domestic, by country

Source	Count of purchasers reporting subject instead of domestic	Count of purchasers reported that imports were priced lower	Count of purchasers reporting that price was a primary reason for shift	Quantity subject purchased (pounds)
Armenia	2	2	1	***
Brazil	4	3	1	***
Oman	1	1	---	***
Russia	3	2	1	***
Turkey	5	2	1	***
Any subject source	8	6	1	***

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

Part VI: Financial experience of U.S. producers

Background

The financial results presented in this section of the report reflect four U.S. producers whose operations primarily reflect commercial sales of aluminum foil and one producer, ***, which consumes all of its aluminum foil production. All U.S. producers reported financial data on a calendar year basis and four U.S. producers reported their financial results on the basis of generally accepted accounting principles ("GAAP").[1] [2] [3]

Commercial sales accounted for *** percent of net sales volume in 2019. The remainder consisted of internal consumption by ***.[4] Figure VI-1 presents each responding firm's share of the net sales quantity in 2019 for the total market.

[1] ***.

[2] ***.

[3] Aleris was acquired by Novelis in April 2020. Novelis, "Novelis Completes Acquisition of Aleris," April 14, 2020, https://novelis.com/novelis-completes-acquisition-of-aleris/. Due to the timing of the acquisition, separate questionnaire responses were provided for each company.

[4] *** U.S. producer questionnaire response, section II-16.

Figure VI-1
Aluminum foil: Share of net sales quantity, by firm, 2019

* * * * * * *

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

Operations on aluminum foil

Table VI-1 presents aggregated data on the U.S. producers' operations in relation to the total aluminum foil market (including commercial sales and internal consumption) over the period examined.[5] Table VI-2 presents corresponding changes in average unit values ("AUVs") for the total market data presented in table VI-1. Table VI-3 presents aggregated data on the U.S. producers' operations in relation to aluminum foil on the merchant market. This table includes revenue and cost data for commercial sales only. Table VI-4 presents the changes in average unit values ("AUVs") for the merchant market data presented in table VI-1. Table VI-5 presents selected company-specific financial data.

[5] The Commission's questionnaire instructs U.S. producers to value internal consumption and transfers to related firms at fair market value. ***. Email from ***, October 21, 2020.

Table VI-1
Aluminum foil: Results of total market operations of U.S. producers, 2017-19, January to June 2019, and January to June 2020

Item	Calendar year			January to June	
	2017	2018	2019	2019	2020
	Quantity (short tons)				
Commercial sales	***	***	***	***	***
Internal consumption	***	***	***	***	***
Total net sales	468,464	480,076	445,172	234,295	209,193
	Value (1,000 dollars)				
Commercial sales	***	***	***	***	***
Internal consumption	***	***	***	***	***
Total net sales	1,413,476	1,672,543	1,458,151	781,307	630,384
Cost of goods sold.-- Raw materials	960,978	1,175,867	985,143	531,009	409,906
Direct labor	108,573	117,715	116,111	58,535	52,636
Other factory costs	248,430	270,808	281,208	131,515	154,694
Total COGS	1,317,981	1,564,390	1,382,462	721,059	617,236
Gross profit	95,495	108,153	75,689	60,248	13,148
SG&A expense	48,537	55,912	56,871	29,229	27,872
Operating income or (loss)	46,958	52,241	18,818	31,019	(14,724)
Interest expense	***	***	***	***	***
All other expenses and (income)	***	***	***	***	***
Net income or (loss)	(5,934)	5,779	(33,461)	2,673	(40,213)
Depreciation/amortization	54,936	55,403	63,864	30,997	32,756
Cash flow	49,002	61,182	30,403	33,670	(7,457)
	Ratio to net sales (percent)				
Cost of goods sold.-- Raw materials	68.0	70.3	67.6	68.0	65.0
Direct labor	7.7	7.0	8.0	7.5	8.3
Other factory costs	17.6	16.2	19.3	16.8	24.5
Average COGS	93.2	93.5	94.8	92.3	97.9
Gross profit	6.8	6.5	5.2	7.7	2.1
SG&A expense	3.4	3.3	3.9	3.7	4.4
Operating income or (loss)	3.3	3.1	1.3	4.0	(2.3)
Net income or (loss)	(0.4)	0.3	(2.3)	0.3	(6.4)

Table continued on next page.

Table VI-1—Continued
Aluminum foil: Results of total market operations of U.S. producers, January to June 2019, and January to June 2020

Item	Calendar year			January to June	
	2017	2018	2019	2019	2020
	Ratio to total COGS (percent)				
Cost of goods sold.-- Raw materials	72.9	75.2	71.3	73.6	66.4
Direct labor	8.2	7.5	8.4	8.1	8.5
Other factory costs	18.8	17.3	20.3	18.2	25.1
Average COGS	100.0	100.0	100.0	100.0	100.0
	Unit value (dollars per short ton)				
Commercial sales	3,055	3,533	3,364	3,422	3,072
Internal consumption	2,877	3,300	2,946	2,996	2,810
Total net sales	3,017	3,484	3,275	3,335	3,013
Cost of goods sold.-- Raw materials	2,051	2,449	2,213	2,266	1,959
Direct labor	232	245	261	250	252
Other factory costs	530	564	632	561	739
Average COGS	2,813	3,259	3,105	3,078	2,951
Gross profit	204	225	170	257	63
SG&A expense	104	116	128	125	133
Operating income or (loss)	100	109	42	132	(70)
Net income or (loss)	(13)	12	(75)	11	(192)
	Number of firms reporting				
Operating losses	***	***	***	***	***
Net losses	***	***	***	***	***
Data	5	5	5	5	5

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

Table VI-2
Aluminum foil: Total market changes in AUVs between calendar years and partial year periods

Item	Between calendar years			Between partial year period
	2017-19	2017-18	2018-19	2019-20
	Change in AUVs (percent)			
Commercial sales	***	***	***	***
Internal consumption	***	***	***	***
Total net sales	▲8.6	▲15.5	▼(6.0)	▼(9.6)
Cost of goods sold.-- Raw materials	▲7.9	▲19.4	▼(9.7)	▼(13.5)
Direct labor	▲12.5	▲5.8	▲6.4	▲0.7
Other factory costs	▲19.1	▲6.4	▲12.0	▲31.7
Average COGS	▲10.4	▲15.8	▼(4.7)	▼(4.1)
	Change in AUVs (dollars per short ton)			
Commercial sales	***	***	***	***
Internal consumption	***	***	***	***
Total net sales	▲258	▲467	▼(208)	▼(321)
Cost of goods sold.-- Raw materials	▲162	▲398	▼(236)	▼(307)
Direct labor	▲29	▲13	▲16	▲2
Other factory costs	▲101	▲34	▲68	▲178
Average COGS	▲292	▲445	▼(153)	▼(127)
Gross profit	▼(34)	▲21	▼(55)	▼(194)
SG&A expense	▲24	▲13	▲11	▲9
Operating income or (loss)	▼(58)	▲9	▼(67)	▼(203)
Net income or (loss)	▼(63)	▲25	▼(87)	▼(204)

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

Table VI-3
Aluminum foil: Results of merchant market operations of U.S. producers, 2017-19, January to June 2019, and January to June 2020

Item	Calendar year			January to June	
	2017	2018	2019	2019	2020
	Quantity (short tons)				
Commercial sales	***	***	***	***	***
	Value (1,000 dollars)				
Commercial sales	***	***	***	***	***
Cost of goods sold.-- Raw materials	***	***	***	***	***
Direct labor	***	***	***	***	***
Other factory costs	***	***	***	***	***
Total COGS	***	***	***	***	***
Gross profit	***	***	***	***	***
SG&A expense	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***
Interest expense	***	***	***	***	***
All other expenses and (income), net	***	***	***	***	***
Net income or (loss)	***	***	***	***	***
Depreciation/amortization	***	***	***	***	***
Cash flow	***	***	***	***	***
	Ratio to net sales (percent)				
Cost of goods sold.-- Raw materials	***	***	***	***	***
Direct labor	***	***	***	***	***
Other factory costs	***	***	***	***	***
Average COGS	***	***	***	***	***
Gross profit	***	***	***	***	***
SG&A expense	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***
Net income or (loss)	***	***	***	***	***

Table continued on next page.

Table VI-3—Continued
Aluminum foil: Results of merchant market operations of U.S. producers, 2017-19, January to June 2019, and January to June 2020

Item	Calendar year			January to June	
	2017	2018	2019	2019	2020
	Ratio to total COGS (percent)				
Cost of goods sold.-- Raw materials	***	***	***	***	***
Direct labor	***	***	***	***	***
Other factory costs	***	***	***	***	***
Average COGS	***	***	***	***	***
	Unit value (dollars per short ton)				
Commercial sales	***	***	***	***	***
Cost of goods sold.-- Raw materials	***	***	***	***	***
Direct labor	***	***	***	***	***
Other factory costs	***	***	***	***	***
Average COGS	***	***	***	***	***
Gross profit	***	***	***	***	***
SG&A expense	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***
Net income or (loss)	***	***	***	***	***
	Number of firms reporting				
Operating losses	***	***	***	***	***
Net losses	***	***	***	***	***
Data	***	***	***	***	***

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

Table VI-4
Aluminum foil: Merchant market changes in AUVs between calendar years and partial year periods

Item	Between calendar years			Between partial year period
	2017-19	2017-18	2018-19	2019-20
	Change in AUVs (percent)			
Commercial sales	***	***	***	***
Cost of goods sold.-- Raw materials	***	***	***	***
Direct labor	***	***	***	***
Other factory costs	***	***	***	***
Average COGS	***	***	***	***
	Change in AUVs (dollars per short ton)			
Commercial sales	***	***	***	***
Cost of goods sold.-- Raw materials	***	***	***	***
Direct labor	***	***	***	***
Other factory costs	***	***	***	***
Average COGS	***	***	***	***
Gross profit	***	***	***	***
SG&A expense	***	***	***	***
Operating income or (loss)	***	***	***	***
Net income or (loss)	***	***	***	***

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

Table VI-5
Aluminum foil: Results of operations of U.S. producers, by firm, 2017-19, January to June 2019, and January to June 2020

Item	Calendar year			January to June	
	2017	2018	2019	2019	2020
	Total net sales (short tons)				
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Merchant market firms	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	468,464	480,076	445,172	234,295	209,193
	Total net sales (1,000 dollars)				
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Merchant market firms	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	1,413,476	1,672,543	1,458,151	781,307	630,384
	Cost of goods sold (1,000 dollars)				
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Merchant market firms	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	1,317,981	1,564,390	1,382,462	721,059	617,236
	Gross profit or (loss) (1,000 dollars)				
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Merchant market firms	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	95,495	108,153	75,689	60,248	13,148

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Table VI-5—Continued
Aluminum foil: Results of operations of U.S. producers, by firm, 2017-19, January to June 2019, and January to June 2020

Item	Calendar year			January to June	
	2017	2018	2019	2019	2020
	SG&A expenses (1,000 dollars)				
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Merchant market firms	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	48,537	55,912	56,871	29,229	27,872
	Operating income or (loss) (1,000 dollars)				
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Merchant market firms	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	46,958	52,241	18,818	31,019	(14,724)
	Net income or (loss) (1,000 dollars)				
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Merchant market firms	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	(5,934)	5,779	(33,461)	2,673	(40,213)
	COGS to net sales ratio (percent)				
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Merchant market firms	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	93.2	93.5	94.8	92.3	97.9

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Table VI-5—Continued
Aluminum foil: Results of operations of U.S. producers, by firm, 2017-19, January to June 2019, and January to June 2020

Item	Calendar year			January to June	
	2017	2018	2019	2019	2020
	Gross profit or (loss) to net sales ratio (1,000 dollars)				
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Merchant market firms	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	6.8	6.5	5.2	7.7	2.1
	SG&A expense to net sales ratio (percent)				
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Merchant market firms	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	3.4	3.3	3.9	3.7	4.4
	Operating profit or (loss) to net sales ratio (percent)				
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Merchant market firms	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	3.3	3.1	1.3	4.0	(2.3)
	Net income or (loss) to net sales ratio (percent)				
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Merchant market firms	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	(0.4)	0.3	(2.3)	0.3	(6.4)

Table continued on next page.

Table VI-5—Continued
Aluminum foil: Results of operations of U.S. producers, by firm, 2017-19, January to June 2019, and January to June 2020

Item	Calendar year			January to June	
	2017	2018	2019	2019	2020
	Unit net sales value (dollars per short ton)				
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Merchant market firms	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	3,017	3,484	3,275	3,335	3,013
	Unit raw materials (dollars per short ton)				
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Merchant market firms	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	2,051	2,449	2,213	2,266	1,959
	Unit direct labor (dollars per short ton)				
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Merchant market firms	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	232	245	261	250	252
	Unit other factory costs (dollars per short ton)				
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Merchant market firms	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	530	564	632	561	739
	Unit COGS (dollars per short ton)				
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Merchant market firms	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	2,813	3,259	3,105	3,078	2,951

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Table VI-5—Continued
Aluminum foil: Results of operations of U.S. producers, by firm, 2017-19, January to June 2019, and January to June 2020

Item	Calendar year			January to June	
	2017	2018	2019	2019	2020
	Unit gross profit or (loss) (dollars per short ton)				
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Merchant market firms	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	204	225	170	257	63
	Unit SG&A expenses (dollars per short ton)				
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Merchant market firms	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	104	116	128	125	133
	Unit operating income or (loss) (dollars per short ton)				
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Merchant market firms	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	100	109	42	132	(70)
	Unit net income or (loss) (dollars per short ton)				
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Merchant market firms	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	(13)	12	(75)	11	(192)

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

Net sales

As shown in table VI-1, net sales in the total market of aluminum foil consisted of commercial sales (*** percent in 2019, by quantity) and internal consumption (*** percent in 2019, by quantity). As mentioned previously in this section, ***. Total market net sales, by quantity, decreased irregularly from 468,464 short tons in 2017 to 445,172 short tons in 2019, and were lower in interim 2020 (209,193 short tons) than during the same period in 2019 (234,295 short tons). However, the value of total market net sales increased irregularly from $1.4 million in 2017 to $1.5 million in 2019, but was lower in interim 2020 than in interim 2019. The net sales AUV for the total market increased from $3,017 per short ton in 2017 to $3,275 per short ton in 2019, but was lower in interim 2020 ($3,013 per short ton) than in interim 2019 ($3,335 per short ton).[6]

Cost of goods sold and gross profit or loss

Raw materials accounted for the single largest component of overall COGS, accounting for between 66.4 and 75.2 percent in the total market. The ratio of raw material costs to net sales value decreased irregularly from 68.0 percent in 2017 to 67.6 percent in 2019, and was lower in interim 2020 than during interim 2019. The per-short ton cost of raw materials for the total market increased irregularly from $2,051 in 2017 to $2,213 in 2019, but was lower in interim 2020 than during the same period in 2019. Table VI-6 presents raw materials, by type.[7]

Table VI-6
Aluminum foil: Raw materials by type, 2019

Raw materials	Calendar year 2019		
	Value (1,000 dollars)	Unit value (dollars per short ton)	Share of value (percent)
Re-roll stock	549,568	1,235	55.8
Primary aluminum	***	***	***
Secondary aluminum	***	***	***
Other material inputs	***	***	***
Total, raw materials	985,143	2,213	100.0

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

[6] As shown in table VI-3, merchant market net sales, by quantity and value, had similar trends as the total market net sales.

[7] ***. *** U.S. producer questionnaire response at section III-7.

Direct labor was the smallest component of COGS, accounting for between 7.5 and 8.5 percent of total market COGS during the period examined. The per-short ton cost of direct labor increased from $232 in 2017 to $261 in 2019, and was slightly higher in interim 2020 compared to interim 2019.[8] [9]

Other factory costs, which are composed of both variable and fixed facility overhead costs, were the second largest component of total COGS, representing between 17.3 percent and 25.1 percent of total COGS in the total market during the period examined. On a per-unit basis, the total market's other factory costs increased from $530 per short ton in 2017 to $632 per short ton in 2019, and were higher in interim 2020 than in interim 2019.[10]

The COGS to sales ratio for the total market increased overall from 93.2 percent in 2017 to 94.8 percent in 2019 and was higher in interim 2020 compared to interim 2019. [11] In the total market, gross profit decreased irregularly from $95.5 million in 2017 to $75.7 million in 2019, and was notably lower in the first half of 2020 than during the same period in 2019.[12]

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[8] ***. Email from ***, October 21, 2020.

[9] ***. Email from ***, October 29, 2020.

[10] *** was responsible for the majority of the increase in other factory costs between 2017 and 2019, as well as the higher other factory costs in interim 2020 compared to interim 2019. The company reported that ***. Email from ***, October 20, 2020.

[11] As shown in table VI-3, the directional trends for the individual components of COGS in the merchant market were mostly similar to those of the total market. ***.

[12] For the merchant market, gross profit increased irregularly and was lower in interim 2020 compared to interim 2019.

SG&A expenses and operating income or loss

As shown in table VI-1, the total market's SG&A expense ratios (i.e., total SG&A expenses divided by total revenue) was between 3.3 and 4.4 percent during the period examined. [13] While *** of the companies reported an increase in their SG&A expenses between 2017 and 2019, ***.[14]

Operating income for the total market decreased irregularly from $47.0 million in 2017 to $18.8 million in 2019, and was lower in interim 2020 (a loss) than during interim 2019. The number of companies reporting operating losses increased from *** in 2017 and 2018 to *** in 2019. The number of companies reporting operating losses was higher in interim 2020 (*** companies) than in interim 2019, when *** companies reported operating losses.[15]

All other expenses and net income or loss

Classified below the operating income level are interest expense, and all other expenses or (income), which are usually allocated to the product line from high levels in the corporation. Combined interest and other expenses (net of other income) in the total market, decreased irregularly from $*** in 2017 to $*** in 2019, and were lower in interim 2020 than in interim 2019.[16]

By definition, items classified at this level in the income statement only affect net income or loss. Total market net income decreased irregularly from a loss of $5.9 million in 2017 to a loss of $33.5 million in 2019 and was lower in the first half of 2020 (a loss of $40.2 million) than in the same period in 2019 (a net income of $2.7 million).

[13] The merchant market's SG&A trends were similar to those of the total market.

[14] ***. Email from ***, October 20, 2020.

[15] As seen in table VI-3, the merchant market had the same directional trends in operating income as the total market. However, ***.

[16] ***.

Variance analysis

Variance analyses for the total operations of U.S. producers of aluminum foil is presented in table VI-7.[17] The information for this variance analysis is derived from table VI-1. Table VI-8 presents a variance analysis for the merchant market, which is derived from information in table VI-3.

Table VI-7
Aluminum foil: Variance analysis on the total market operations of U.S. producers, between calendar years and between partial year periods

Item	Between calendar years			Between partial year period
	2017-19	2017-18	2018-19	2019-20
	Value (1,000 dollars)			
Net sales:				
Price variance	114,953	224,031	(92,790)	(67,215)
Volume variance	(70,278)	35,036	(121,602)	(83,708)
Net sales variance	44,675	259,067	(214,392)	(150,923)
COGS:				
Cost variance	(130,011)	(213,740)	68,189	26,570
Volume variance	65,530	(32,669)	113,739	77,253
COGS variance	(64,481)	(246,409)	181,928	103,823
Gross profit variance	(19,806)	12,658	(32,464)	(47,100)
SG&A expenses:				
Cost/expense variance	(10,747)	(6,172)	(5,024)	(1,775)
Volume variance	2,413	(1,203)	4,065	3,132
Total SG&A expense variance	(8,334)	(7,375)	(959)	1,357
Operating income variance	(28,140)	5,283	(33,423)	(45,743)
Summarized (at the operating income level) as:				
Price variance	114,953	224,031	(92,790)	(67,215)
Net cost/expense variance	(140,758)	(219,912)	63,165	24,795
Net volume variance	(2,335)	1,164	(3,798)	(3,323)

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

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

Table VI-8
Aluminum foil: Variance analysis on the merchant market operations of U.S. producers, between calendar years and between partial year periods

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

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

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

Table VI-9 presents U.S. producers' capital expenditures, research and development ("R&D") expenses, total assets, and their operating return on assets ("ROA").[18] Total capital expenditures increased *** between 2017 and 2019, but were lower in interim 2020 compared to interim 2019. All of the responding U.S. producers reported an overall increase in their capital expenditures between 2017 and 2019, and *** firms reported lower capital expenditures in interim 2020 compared to interim 2019. However, changes in capital expenditures were largely attributable to ***. The company reported that the majority of its increase in capital expenditures between 2017 and 2019 was from ***. R&D expenses, which were reported by ***, increased from 2017 to 2019, and were higher in interim 2020 than in interim 2019. The increase in the industry's total assets was largely attributable to ***.[19] The company reported that the increase in its total assets was ***.[20]

Table VI-9
Aluminum foil: Capital expenditures, R&D expenses, total assets, and ROA of U.S. producers, 2017-19, January to June 2019, and January to June 2020

Item	Calendar year			January to June	
	2017	2018	2019	2019	2020
	Value (1,000 dollars)				
Capital expenditures	***	***	***	***	***
R&D expenses	***	***	***	***	***
Total assets	630,016	686,664	766,837		
	Operating return on assets (percent)				
ROA	7.5	7.6	2.5		

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

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

[19] U.S. producer questionnaire responses, section III-13.

[20] U.S. producer questionnaire responses, section III-12.

Capital and investment

The Commission requested U.S. producers of aluminum foil to describe any actual or potential negative effects of imports of aluminum foil from Armenia, Brazil, Oman, Russia, and Turkey on their firms' growth, investment, ability to raise capital, development and production efforts, or the scale of capital investments. Table VI-10 presents the number of firms reporting an impact in each category and table VI-11 provides the U.S. producers' narrative responses.

Table VI-10
Aluminum foil: Actual and anticipated negative effects of imports on investment, growth, and development, since January 1, 2017

Item	No	Yes
Negative effects on investment	0	5
Cancellation, postponement, or rejection of expansion projects		1
Denial or rejection of investment proposal		1
Reduction in the size of capital investments		2
Return on specific investments negatively impacted		3
Other		2
Negative effects on growth and development	1	4
Rejection of bank loans		0
Lowering of credit rating		0
Problem related to the issue of stocks or bonds		0
Ability to service debt		2
Other		3
Anticipated negative effects of imports	0	5

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

Table VI-11
Aluminum foil: Narratives relating to actual and anticipated negative effects of imports on investment, growth, and development, since January 1, 2017

Item / Firm	Narrative
Cancellation, postponement, or rejection of expansion projects:	
***	***
Denial or rejection of investment proposal:	
***	***
Reduction in the size of capital investments:	
***	***
***	***
Return on specific investments negatively impacted:	
***	***
***	***
***	***
Other negative effects on investments:	
***	***
***	***
Ability to service debt:	
***	***
***	***
Other effects on growth and development:	
***	***
***	***
***	***

Table continued on next page.

Table VI-11—Continued
Aluminum foil: Narratives relating to actual and anticipated negative effects of imports on investment, growth, and development, since January 1, 2017

Item / Firm	Narrative
Anticipated effects of imports:	
***	***
***	***
***	***
***	***
***	***

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

Part VII: Threat considerations and information on nonsubject countries

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

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

---

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

(VI) the potential for product-shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products,

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

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

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

Information on the 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.

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

The industry in Armenia

The Commission issued foreign producers' or exporters' questionnaires to one firm, Rusal Armenal Joint Stock Company ("Rusal Armenal") believed to produce and/or export aluminum foil from Armenia.[3] A usable response to the Commission's questionnaire was received from Rusal Armenal. Rusal Armenal is a wholly-owned subsidiary of RUSAL located in Yerevan, Armenia. The facility opened in 2000, and has been owned and operated by Russian aluminum producer RUSAL since 2003. The facility produces aluminum foil with a thickness between 0.007mm and 0.2 mm (0.000275 inches to 0.007874 inches) for the food, pharmaceutical, construction, and retail industries. Rusal Armenal employs 670 people, and has an annual production capacity of 40,000 tons.[4] ***[5] According to the company's website, the facility has plans to increase the output of light decorative foil and container foil. The company began producing foil for food containers in 2016. In 2019, construction was completed on two new cooling towers for rolling production and an air-water supply compressor which will reduce water consumption.[6]

Rusal Armenal's exports to the United States accounted for approximately *** of U.S. imports of aluminum foil from Armenia in 2019. According to estimates requested of the responding Armenia producer, the production of aluminum foil in Armenia reported in the questionnaire accounts for approximately *** percent of overall production of aluminum foil in Armenia. Table VII-1 presents information on the aluminum foil operations of the responding producer in Armenia.

[3] This firm was identified through a review of information submitted in the petition and contained in *** records.

[4] Rusal, "Armenal," https://rusal.ru/en/about/geography/armenal/ (retrieved October 26, 2020).

[5] ***, "Foil Capacity Outside of North America ('000 t)" (retrieved October 26, 2020).

[6] Rusal, "Armenal," https://rusal.ru/en/about/geography/armenal/ (retrieved October 26, 2020).

Table VII-1
Aluminum foil: Summary data on firms in Armenia, 2019

Firm	Production (short tons)	Share of reported production (percent)	Exports to the United States (short tons)	Share of reported exports to the United States (percent)	Total shipments (short tons)	Share of firm's total shipments exported to the United States (percent)
Rusal Armenal	***	***	***	***	***	***
All firms	***	***	***	***	***	***

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

Changes in operations

Producers in Armenia reported no operational or organizational changes since January 1, 2017.

Operations on aluminum foil

Table VII-2 presents information on the aluminum foil operations of the responding producer and exporter in Armenia.

Table VII-2
Aluminum foil: Data on industry in Armenia, 2017-19, January to June 2019, and January to June 2020 and projection calendar years 2020 and 2021

Item	Actual experience					Projections	
	Calendar year			January to June		Calendar year	
	2017	2018	2019	2019	2020	2020	2021
	Quantity (short tons)						
Capacity	***	***	***	***	***	***	***
Production	***	***	***	***	***	***	***
End-of-period inventories	***	***	***	***	***	***	***
Shipments:							
Home market shipments:							
Internal consumption/ transfers	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to:							
United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***

Table continued.

Table VII-2--Continued
Aluminum foil: Data on industry in Armenia, 2017-19, January to June 2019, and January to June 2020 and projection calendar years 2020 and 2021

Item	Actual experience					Projections	
	Calendar year			January to June		Calendar year	
	2017	2018	2019	2019	2020	2020	2021
	Ratios and shares (percent)						
Capacity utilization	***	***	***	***	***	***	***
Inventories/production	***	***	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***	***	***
Share of shipments:							
Home market shipments:							
Internal consumption/ transfers	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to:							
United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***

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

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

Alternative products

As shown in table VII-3, Rusal Armenal produced ***.[7]

Table VII-3
Aluminum foil: Overall capacity and production on the same equipment as in-scope production by producers in Armenia, 2017-19, January to June 2019, and January to June 2020

Item	Calendar year			January to June	
	2017	2018	2019	2019	2020
	Quantity (short tons)				
Overall capacity	***	***	***	***	***
Production: Aluminum foil	***	***	***	***	***
Out-of-scope production: Aluminum sheet	***	***	***	***	***
Aluminum plate	***	***	***	***	***
Other products	***	***	***	***	***
Out-of-scope production	***	***	***	***	***
Total production on same machinery	***	***	***	***	***
	Ratios and shares (percent)				
Overall capacity utilization	***	***	***	***	***
Share of production: Aluminum foil	***	***	***	***	***
Out-of-scope production: Aluminum sheet	***	***	***	***	***
Aluminum plate	***	***	***	***	***
Other products	***	***	***	***	***
Out-of-scope production	***	***	***	***	***
Total production on same machinery	***	***	***	***	***

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

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

Exports

According to GTA, the leading export markets for aluminum foil from Armenia are Germany, the United States, and Poland (table VII-4). During 2019, Germany was the top export market for aluminum foil from Armenia, accounting for 31.8 percent, followed by the United States, accounting for 29.7 percent by quantity.

[7] Rusal Armenal reported producing *** on the same equipment as in-scope aluminum foil. Foreign producer questionnaire response, II-3a.

Table VII-4
Aluminum foil: Exports from Armenia by destination market, 2017-19

Destination market	Calendar year		
	2017	2018	2019
	Quantity (short tons)		
United States	15,914	8,133	10,661
Germany	10,340	13,306	11,403
Poland	2,476	2,064	3,884
Netherlands	1,965	2,668	3,759
Italy	671	652	1,933
France	508	1,284	1,813
Austria	499	1,968	1,172
United Kingdom	980	578	543
Denmark	---	325	277
All other destination markets	1,546	227	457
All destination markets	34,899	31,206	35,903
	Value (1,000 dollars)		
United States	43,834	23,999	27,953
Germany	28,300	39,501	29,903
Poland	7,068	6,276	10,673
Netherlands	5,417	7,906	9,857
Italy	1,888	1,968	5,175
France	1,427	3,830	4,844
Austria	1,481	5,981	3,244
United Kingdom	2,703	1,704	1,429
Denmark	---	933	747
All other destination markets	4,256	695	1,250
All destination markets	96,374	92,792	95,076

Table continued.

Table VII-4--Continued
Aluminum foil: Exports from Armenia by destination market, 2017-19

Destination market	Calendar year		
	2017	2018	2019
	Unit value (dollars per short ton)		
United States	2,754	2,951	2,622
Germany	2,737	2,969	2,622
Poland	2,855	3,041	2,748
Netherlands	2,756	2,963	2,622
Italy	2,814	3,017	2,677
France	2,811	2,983	2,671
Austria	2,967	3,039	2,768
United Kingdom	2,758	2,946	2,630
Denmark	---	2,874	2,691
All other destination markets	2,754	3,054	2,734
All destination markets	2,762	2,974	2,648
	Share of quantity (percent)		
United States	45.6	26.1	29.7
Germany	29.6	42.6	31.8
Poland	7.1	6.6	10.8
Netherlands	5.6	8.5	10.5
Italy	1.9	2.1	5.4
France	1.5	4.1	5.1
Austria	1.4	6.3	3.3
United Kingdom	2.8	1.9	1.5
Denmark	---	1.0	0.8
All other destination markets	4.4	0.7	1.3
All destination markets	100.0	100.0	100.0

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

Source: Official exports statistics under HS subheading 7607.11 as reported by UN comtrade in the Global Trade Atlas database, accessed October 6, 2020.

The industry in Brazil

The Commission issued foreign producers' or exporters' questionnaires to seven firms believed to produce and/or export aluminum foil from Brazil.[8] Usable responses to the Commission's questionnaire were received from four firms: Bemis do Brasil Ind. E Com. De Embalagens, Ltda. ("Bemis do Brasil"),[9] Companhia Brasileira de Alumínio ("CBA"), CBA Itapissuma Ltda. (formerly known as Arconic Ind. e Com. de Metais Ltda., "CBA Itapissuma") and Westaflex Tubos Flexiveis Ltda. ("Westaflex").[10]

CBA acquired CBA Itapissuma Ltda. in January 2020.[11] ***.[12] CBA produces thin foil for flexible food packaging, offering foil as low as .006mm (0.000236 inches). CBA also produces coated foil for the food and pharmaceutical industries in thicknesses between 0.02 and 0.2mm (0.000079 and 0.007874 inches), and thick foil for heat exchangers, with thicknesses ranging between 0.05 and 0.25 mm (0.001969 and 0.009843 inches).[13] CBA is a fully integrated aluminum company, that is able to transform the raw material (bauxite) from its mines into primary aluminum, and further refined products such as foil.[14]

***.[15]

[8] These firms were identified through a review of information submitted in the petition and contained in *** records.

[9] Bemis do Brasil was acquired as part of Amcor's acquisition of Bemis in June 2020; Bemis, "About Us," http://www.bemis.com/ (retrieved October 27, 2020).

[10] ***.

[11] Foreign Producers'/Exporters Questionnaire, p. 8.

[12] ***, "Foil Capacity Outside of North America ('000 t)," (retrieved October 26, 2020).

[13] CBA, "Processed Products," https://cba.com.br/en/produtos/produtos-transformados/, (retrieved October 27, 2020).

[14] CBA, "Production Process," https://cba.com.br/en/aluminio/processo-produtivo/, (retrieved October 27, 2020).

[15] ***, "Foil Capacity Outside of North America ('000 t)," (retrieved October 26, 2020).

The responding Brazilian firms' exports to the United States accounted for approximately *** of U.S. imports of aluminum foil from Brazil in 2019. According to estimates requested of the responding Brazil producers, the production of aluminum foil in Brazil reported in questionnaires accounts for approximately *** percent of overall production of aluminum foil in Brazil. Table VII-5 presents information on the aluminum foil operations of the responding producers and exporters in Brazil.

Table VII-5
Aluminum foil: Summary data for producers in Brazil, 2019

Firm	Production (short tons)	Share of reported production (percent)	Exports to the United States (short tons)	Share of reported exports to the United States (percent)	Total shipments (short tons)	Share of firm's total shipments exported to the United States (percent)
Bemis do Brasil	***	***	***	***	***	***
CBA	***	***	***	***	***	***
CBA Itapissuma	***	***	***	***	***	***
Westaflex	***	***	***	***	***	***
All firms	***	***	***	***	***	***

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

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

Changes in operations

As presented in table VII-6 producers in Brazil reported several operational and organizational changes since January 1, 2017.

Table VII-6
Aluminum foil: Reported changes in operations by producers in Brazil, since January 1, 2017

Item / Firm	Reported changed in operations
Acquisitions:	
***	***
***	***
***	***
Prolonged shutdowns or curtailments:	
***	***

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

Operations on aluminum foil

Table VII-7 presents information on the aluminum foil operations of the responding producers and exporters in Brazil.

Table VII-7
Aluminum foil: Data on industry in Brazil, 2017-19, January to June 2019, and January to June 2020

Item	Actual experience					Projections	
	Calendar year			January to June		Calendar year	
	2017	2018	2019	2019	2020	2020	2021
	Quantity (short tons)						
Capacity	***	***	***	***	***	***	***
Production	***	***	***	***	***	***	***
End-of-period inventories	***	***	***	***	***	***	***
Shipments:							
Home market shipments:							
Internal consumption/ transfers	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to:							
United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
	Ratios and shares (percent)						
Capacity utilization	***	***	***	***	***	***	***
Inventories/production	***	***	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***	***	***
Share of shipments:							
Home market shipments:							
Internal consumption/ transfers	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to:							
United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
	Quantity (short tons)						
Resales exported to the United States	***	***	***	***	***	***	***
Total export to the United States	***	***	***	***	***	***	***
	Ratios and shares (percent)						
Share of total exports to the United States:							
Exported by producers	***	***	***	***	***	***	***
Exported by resellers	***	***	***	***	***	***	***
Adjusted share of total shipments exported to the United States	***	***	***	***	***	***	***

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

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

Alternative products

As shown in table VII-8, responding Brazil firms produced other products on the same equipment and machinery used to produce aluminum foil.

Table VII-8
Aluminum foil: Overall capacity and production on the same equipment as in-scope production, by producers in Brazil 2017-19, and January to June 2019 and January to June 2020

Item	Calendar year			January to June	
	2017	2018	2019	2019	2020
	Quantity (short tons)				
Overall capacity	***	***	***	***	***
Production: Aluminum foil	***	***	***	***	***
Out-of-scope production: Aluminum sheet	***	***	***	***	***
Aluminum plate	***	***	***	***	***
Other products	***	***	***	***	***
Out-of-scope production	***	***	***	***	***
Total production on same machinery	***	***	***	***	***
	Ratios and shares (percent)				
Overall capacity utilization	***	***	***	***	***
Share of production: Aluminum foil	***	***	***	***	***
Out-of-scope production: Aluminum sheet	***	***	***	***	***
Aluminum plate	***	***	***	***	***
Other products	***	***	***	***	***
Out-of-scope production	***	***	***	***	***
Total production on same machinery	***	***	***	***	***

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

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

Exports

According to GTA, the leading export markets for aluminum foil from Brazil are the United States, Argentina, and Mexico (table VII-9). During 2019, the United States accounted for 84.8 percent of exports, followed by Argentina, accounting for 9.2 percent.

Table VII-9
Aluminum foil: Exports from Brazil by destination market, 2017-19

Destination market	Calendar year		
	2017	2018	2019
	Quantity (short tons)		
United States	13,749	23,275	23,573
Argentina	3,790	2,262	2,555
Mexico	886	935	737
Paraguay	1,195	634	267
Chile	632	657	221
Colombia	1,522	847	183
Uruguay	163	122	103
Bolivia	88	57	56
Canada	19	23	46
All other destination markets	1,176	265	41
All destination markets	23,221	29,077	27,782
	Value (1,000 dollars)		
United States	38,665	75,303	71,852
Argentina	13,525	8,727	9,756
Mexico	2,535	3,022	2,274
Paraguay	9,695	2,317	948
Chile	2,100	2,197	779
Colombia	4,712	2,863	542
Uruguay	574	470	362
Bolivia	447	289	281
Canada	66	90	146
All other destination markets	3,136	1,023	316
All destination markets	75,457	96,301	87,257

Table continued.

Table VII-9--Continued
Aluminum foil: Exports from Brazil by destination market, 2017-19

Destination market	Calendar year		
	2017	2018	2019
	Unit value (dollars per short ton)		
United States	2,812	3,235	3,048
Argentina	3,568	3,858	3,818
Mexico	2,862	3,230	3,084
Paraguay	8,111	3,653	3,555
Chile	3,323	3,346	3,525
Colombia	3,096	3,380	2,969
Uruguay	3,527	3,852	3,508
Bolivia	5,067	5,122	5,027
Canada	3,420	3,876	3,207
All other destination markets	2,668	3,853	7,638
All destination markets	3,250	3,312	3,141
	Share of quantity (percent)		
United States	59.2	80.0	84.8
Argentina	16.3	7.8	9.2
Mexico	3.8	3.2	2.7
Paraguay	5.1	2.2	1.0
Chile	2.7	2.3	0.8
Colombia	6.6	2.9	0.7
Uruguay	0.7	0.4	0.4
Bolivia	0.4	0.2	0.2
Canada	0.1	0.1	0.2
All other destination markets	5.1	0.9	0.1
All destination markets	100.0	100.0	100.0

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

Source: Official exports statistics under HS subheading 7607.11 as reported by SECEX - Foreign Trade Secretariat in the Global Trade Atlas database, accessed October 6, 2020.

The industry in Oman

The Commission issued foreign producers' or exporters' questionnaires to one firm believed to produce and/or export aluminum foil from Oman.[16] A usable response to the Commission's questionnaire was received from Oman Aluminum Rolling Company LLC (OARC). OARC was established in 2011 as a green field aluminum rolling mill plant to produce flat rolled aluminum products. The total annual capacity of the plant is 140,000 metric tons (approximately 154,000 short tons) per year.[17] ***.[18] OARC produces fin stock for HVAC applications with thicknesses between 0.075 and 0.40 mm (0.002953 and 0.01575 inches).[19]

OARC's exports to the United States accounted for approximately *** percent of U.S. imports of aluminum foil from Oman in 2019. According to estimates requested of the responding Oman producer, the production of aluminum foil in Oman reported in the questionnaire accounts for approximately *** percent of overall production of aluminum foil in Oman. Table VII-10 presents information on the aluminum foil operations of the responding producer and exporter in Oman.

Table VII-10
Aluminum foil: Summary data for the producer in Oman, 2019

Firm	Production (short tons)	Share of reported production (percent)	Exports to the United States (short tons)	Share of reported exports to the United States (percent)	Total shipments (short tons)	Share of firm's total shipments exported to the United States (percent)
OARC	***	***	***	***	***	***
All firms	***	***	***	***	***	***

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

[16] This firm was identified through a review of information submitted in the petition and contained in *** records. No other producer from Oman was identified in the petition.

[17] OARC, "Corporate Overview," https://www.oman-arc.com/about-us/corporate-overview/ (retrieved October 27, 2020).

[18] ***, "Foil Capacity Outside of North America ('000 t)," (retrieved October 26, 2020).

[19] OARC, "Fin Stock," https://www.oman-arc.com/products/fin-stock/ (retrieved October 27, 2020).

Changes in operations

The producer in Oman did not report any operational or organizational change since January 1, 2017.

Operations on aluminum foil

Table VII-11 presents information on the aluminum foil operations of the responding producer and exporter in Oman.

Table VII-11
Aluminum foil: Data on industry in Oman, 2017-19, January to June 2019 and January to June 2020

Item	Actual experience					Projections	
	Calendar year			January to June		Calendar year	
	2017	2018	2019	2019	2020	2020	2021
	Quantity (short tons)						
Capacity	***	***	***	***	***	***	***
Production	***	***	***	***	***	***	***
End-of-period inventories	***	***	***	***	***	***	***
Shipments:							
Home market shipments:							
Internal consumption/ transfers	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to:							
United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
	Ratios and shares (percent)						
Capacity utilization	***	***	***	***	***	***	***
Inventories/production	***	***	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***	***	***
Share of shipments:							
Home market shipments:							
Internal consumption/ transfers	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to:							
United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***

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

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

Alternative products

As shown in table VII-12, the responding producer in Oman produced other products on the same equipment and machinery used to produce aluminum foil.[20]

Table VII-12
Aluminum foil: Overall capacity and production on the same equipment as in-scope production, by the producer in Oman, 2017-19, January to June 2019, and January to June 2020

Item	Calendar year			January to June	
	2017	2018	2019	2019	2020
	Quantity (short tons)				
Overall capacity	***	***	***	***	***
Production: Aluminum foil	***	***	***	***	***
Out-of-scope production: Aluminum sheet	***	***	***	***	***
Aluminum plate	***	***	***	***	***
Other products	***	***	***	***	***
Out-of-scope production	***	***	***	***	***
Total production on same machinery	***	***	***	***	***
	Ratios and shares (percent)				
Overall capacity utilization	***	***	***	***	***
Share of production: Aluminum foil	***	***	***	***	***
Out-of-scope production: Aluminum sheet	***	***	***	***	***
Aluminum plate	***	***	***	***	***
Other products	***	***	***	***	***
Out-of-scope production	***	***	***	***	***
Total production on same machinery	***	***	***	***	***

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

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

[20] OARC reported production of ***. Foreign producer questionnaire response, II-3a.

Exports

According to GTA constructed export data, the leading export markets for aluminum foil from Oman are the United States and Qatar (table VII-13). During 2019, the United States was the top export market for aluminum foil from Oman, accounting for approximately 100.0 percent of Oman's exports during that year.

Table VII-13
Aluminum foil: Exports from Oman by destination market, 2017-19

Destination market	Calendar year		
	2017	2018	2019
	Quantity (short tons)		
United States	---	8,882	18,197
Qatar	42	11	3
India	---	0	0
Jordan	29	---	0
Mexico	---	18	---
Netherlands	---	0	---
Yemen	---	5	---
Bahrain	---	0	---
United Arab Emirates	2	2	---
All destination markets	74	8,919	18,200
	Value (1,000 dollars)		
United States	---	24,463	48,149
Qatar	196	52	17
India	---	0	1
Jordan	82	---	1
Mexico	---	57	---
Netherlands	---	0	---
Yemen	---	9	---
Bahrain	---	0	---
United Arab Emirates	3	2	---
All destination markets	281	24,583	48,168

Table continued.

Table VII-13--Continued
Aluminum foil: Exports from Oman by destination market, 2017-19

Destination market	Calendar year		
	2017	2018	2019
	Unit value (dollars per short ton)		
United States	---	2,754	2,646
Qatar	4,648	4,579	6,492
India	---	3,636	3,474
Jordan	2,800	---	11,494
Mexico	---	3,112	---
Netherlands	---	4,000	---
Yemen	---	1,816	---
Bahrain	---	2,857	---
United Arab Emirates	1,330	1,099	---
All destination markets	3,817	2,756	2,647
	Share of quantity (percent)		
United States	---	99.6	100.0
Qatar	57.3	0.1	0.0
India	---	0.0	0.0
Jordan	39.8	---	0.0
Mexico	---	0.2	---
Netherlands	---	0.0	---
Yemen	---	---	---
Bahrain	---	0.0	---
United Arab Emirates	2.9	4.1	---
All destination markets	100.0	100.0	100.0

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

Source: Official imports statistics of imports from Oman (constructed export statistics for Oman) under HS subheading 7607.11 as reported by various statistical reporting authorities in the Global Trade Atlas database, accessed October 6, 2020.

The industry in Russia

The Commission issued foreign producers' or exporters' questionnaires to three firms believed to produce and/or export aluminum foil from Russia.[21] Usable responses to the Commission's questionnaire were received from two firms: Rusal Sayanal Joint Stock Company ("Rusal Sayanal"), and JSC Ural Foil ("Ural Foil"). Rusal Sayanal, a subsidiary of RUSAL, is the largest Russian manufacturer of foil and packaging for a wide range of uses, and produces foil with thicknesses from 5 to 240 microns (0.0002 to 0.00945 inches).[22] ***.[23]

Rusal Sayanal's and Ural Foil's exports to the United States accounted for approximately *** of U.S. imports of aluminum foil from Russia in 2019. According to estimates requested of the responding Russia producers, the production of aluminum foil in Russia reported in questionnaires accounts for approximately *** percent of overall production of aluminum foil in Russia. Table VII-14 presents information on the aluminum foil operations of the responding producers and exporters in Russia.

Table VII-14
Aluminum foil: Summary data for producers in Russia, 2019

Firm	Production (short tons)	Share of reported production (percent)	Exports to the United States (short tons)	Share of reported exports to the United States (percent)	Total shipments (short tons)	Share of firm's total shipments exported to the United States (percent)
Ural Foil	***	***	***	***	***	***
Rusal Sayanal	***	***	***	***	***	***
All firms	***	***	***	***	***	***

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

[21] These firms were identified through a review of information submitted in the petition and contained in *** records.

[22] Rusal, "Foil and Packaging," https://rusal.ru/clients/catalog/folga-i-upakovka/, (retrieved October 27, 2020).

[23] ***, "Foil Capacity Outside of North America ('000 t)," (retrieved October 26, 2020).

Changes in operations

As presented in table VII-15 producers in Russia reported several operational and organizational changes since January 1, 2017.

Table VII-15
Aluminum foil: Reported changes in operations by producers in Russia, since January 1, 2017

Item / Firm	Reported changed in operations
Revised labor agreements:	
***	***.

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

Operations on aluminum foil

Table VII-16 presents information on the aluminum foil operations of the responding producers and exporters in Russia.

Table VII-16
Aluminum foil: Data for producers in Russia, 2017-19, January to June 2019, and January to June 2020

Item	Actual experience					Projections	
	Calendar year			January to June		Calendar year	
	2017	2018	2019	2019	2020	2020	2021
	Quantity (short tons)						
Capacity	***	***	***	***	***	***	***
Production	***	***	***	***	***	***	***
End-of-period inventories	***	***	***	***	***	***	***
Shipments:							
Home market shipments:							
Internal consumption/ transfers	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to:							
United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
	Ratios and shares (percent)						
Capacity utilization	***	***	***	***	***	***	***
Inventories/production	***	***	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***	***	***
Share of shipments:							
Home market shipments:							
Internal consumption/ transfers	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to:							
United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***

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

Alternative products

As shown in table VII-17, responding Russia firms produced other products on the same equipment and machinery used to produce aluminum foil.[24]

Table VII-17
Aluminum foil: Overall capacity and production on the same equipment as in-scope production by producers in Russia, 2017-19, January to June 2019, and January to June 2020

Item	Calendar year			January to June	
	2017	2018	2019	2019	2020
	Quantity (short tons)				
Overall capacity	***	***	***	***	***
Production: Aluminum foil	***	***	***	***	***
Out-of-scope production: Aluminum sheet	***	***	***	***	***
Aluminum plate	***	***	***	***	***
Other products	***	***	***	***	***
Out-of-scope production	***	***	***	***	***
Total production on same machinery	***	***	***	***	***
	Ratios and shares (percent)				
Overall capacity utilization	***	***	***	***	***
Share of production: Aluminum foil	***	***	***	***	***
Out-of-scope production: Aluminum sheet	***	***	***	***	***
Aluminum plate	***	***	***	***	***
Other products	***	***	***	***	***
Out-of-scope production	***	***	***	***	***
Total production on same machinery	***	***	***	***	***

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

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

Exports

According to GTA, the leading export markets for aluminum foil from Russia are the United States, Belarus, and the Ukraine (table VII-18). During 2019, the United States accounted for 91.3 percent of exports by quantity, followed by Belarus, accounting for 2.0 percent.

[24] Rusal Sayanal reported producing ***. Out of scope production represented *** percent of all production on the same equipment in 2019.

Table VII-18
Aluminum foil: Exports from Russia by destination market, 2017-19

Destination market	Calendar year		
	2017	2018	2019
	Quantity (short tons)		
United States	18,474	13,937	23,687
Belarus	225	301	522
Ukraine	288	330	501
Germany	679	529	452
Kazakhstan	273	345	405
Italy	387	139	166
Poland	---	---	43
Mexico	0	---	36
Romania	39	38	19
All other destination markets	2,808	466	115
All destination markets	23,172	16,085	25,946
	Value (1,000 dollars)		
United States	44,734	40,145	60,013
Belarus	800	1,113	1,562
Ukraine	1,026	1,117	1,449
Germany	1,603	1,394	1,055
Kazakhstan	1,082	1,379	1,499
Italy	917	384	395
Poland	---	---	98
Mexico	0	---	92
Romania	102	110	47
All other destination markets	7,452	1,414	434
All destination markets	57,717	47,056	66,643

Table continued.

Table VII-18--Continued
Aluminum foil: Exports from Russia by destination market, 2017-19

Destination market	Calendar year		
	2017	2018	2019
	Unit value (dollars per short ton)		
United States	2,421	2,881	2,534
Belarus	3,556	3,695	2,989
Ukraine	3,568	3,388	2,895
Germany	2,363	2,635	2,332
Kazakhstan	3,958	3,993	3,707
Italy	2,371	2,758	2,377
Poland	---	---	2,272
Mexico	4,181	---	2,533
Romania	2,613	2,920	2,513
All other destination markets	2,654	3,032	3,775
All destination markets	2,491	2,925	2,569
	Share of quantity (percent)		
United States	79.7	86.6	91.3
Belarus	1.0	1.9	2.0
Ukraine	1.2	2.0	1.9
Germany	2.9	3.3	1.7
Kazakhstan	1.2	2.1	1.6
Italy	1.7	0.9	0.6
Poland	---	---	0.2
Mexico	0.0	---	0.1
Romania	0.2	0.2	0.1
All other destination markets	12.1	2.9	0.4
All destination markets	100.0	100.0	100.0

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. United States is shown at the top, all remaining top export destinations shown in descending order of 2018 data.

Source: Official exports statistics under HS subheading 7607.11 as reported by Customs Committee of Russia in the Global Trade Atlas database, accessed October 6, 2020.

The industry in Turkey

The Commission issued foreign producers' or exporters' questionnaires to 10 firms believed to produce and/or export aluminum foil from Turkey.[25] Usable responses to the Commission's questionnaires were received from three firms: ASAS Alüminyum Sanayi ve Ticaret A.S. ("ASAS Alüminyum"), Assan Alüminyum Sanayi ve Ticaret A.S. ("Assan Alüminyum"), and Panda Aluminyum A.S. ("Panda Aluminyum").[26]

ASAS Alüminyum was founded in Gebze, Turkey in 1990. The company produces a variety of aluminum products including billet, flat products, and foil. Its facilities produce 60,000 metric tons (approximately 66,000 short tons) of aluminum foil a year. The company employs 2,400 people and exports to more than 90 countries.[27]

Assan Alüminyum was established in 1988. Its production facilities, located in Istanbul and Kocaeli, produce aluminum coil, sheet, foil, fin stock, and prepainted aluminum products which are used in a variety of sectors including packaging, distribution, consumer durables, automotive, and HVAC. According to its website, the company is one of the three largest aluminum foil manufacturers in Europe, with an aluminum foil production capacity of 100,000 metric tons (approximately 110,000 short tons).[28] Foil products produced by Assan Alüminyum include flexible packaging, container foil, household foil, lid foil, cigarette foil, and pharmaceutical foil.[29]

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[25] These firms were identified through a review of information submitted in the petition and contained in *** records.

[26] Panda Aluminyum's foreign producer questionnaire response covered its sister company's (Seherli Dis Ticaret) establishment. ***. Foreign producer questionnaire response, I-2.

The petition also identified Besel Basim Sanayi Ve Ticaret A.Ş., Endipak Ambalaj Sanayi Ve Ticaret Ltd., Ilda Pack Ambalaj, Ispak Esnek Ambalaj, Kibar Dis Ticaret A.S., and PMS Metal Profil Aluminyum as potential foreign producers/exporters of aluminum foil, but these firms did not provide a foreign producer questionnaire response to the Commission. Petition, Exh. Gen-6.

[27] ASAS Alüminyum, "About Us," http://www.asastr.com/kurumsal/hakkimizda/, (retrieved October 27, 2020).

[28] Assan Alüminyum, "Assan Alüminyum," https://www.assanaluminyum.com/en/about-us/assan-aluminyum (retrieved October 27, 2020).

[29] Assan Alüminyum, "Packaging," https://www.assanaluminyum.com/en/sectors/packaging/flexible-packaging (retrieved October 27, 2020).

Panda Aluminyum, established in 2006, produces fin stock and a variety of aluminum foil products for packaging, consumer durables, automotive applications, cooling systems, and other industrial uses. The company's facilities, located in Ankara, employ 350 people. Panda Aluminyum exports to 60 countries.[30]

***[31]

Exports to the United States from the responding firms from Turkey accounted for approximately *** of U.S. imports of aluminum foil from Turkey in 2019. According to estimates requested of the responding Turkey producers, the production of aluminum foil in Turkey reported in questionnaires accounts for approximately *** percent of overall production of aluminum foil in Turkey. Table VII- 19 presents information on the aluminum foil operations of the responding producers and exporters in Turkey.

Table VII-19
Aluminum foil: Summary data for producers in Turkey, 2019

Firm	Production (short tons)	Share of reported production (percent)	Exports to the United States (short tons)	Share of reported exports to the United States (percent)	Total shipments (short tons)	Share of firm's total shipments exported to the United States (percent)
ASAS Alüminyum	***	***	***	***	***	***
Assan Alüminyum	***	***	***	***	***	***
Panda Aluminyum	***	***	***	***	***	***
All firms	***	***	***	***	***	***

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

[30] Panda Aluminyum, "About Us," https://www.pandaalu.com/tr/hakkimizda/ (retrieved October 27, 2020).

[31] ***, "Foil Capacity Outside of North America ('000 t)," (retrieved October 26, 2020).

Changes in operations

As presented in table VII-20 producers in Turkey reported several operational and organizational changes since January 1, 2017.

Table VII-20
Aluminum foil: Reported changes in operations by producers in Turkey, since January 1, 2017

Item / Firm	Reported changed in operations
Expansions:	
***	***
***	***
***	***

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

Operations on aluminum foil

Table VII-21 presents information on the aluminum foil operations of the responding producers and exporters in Turkey.

Table VII-21
Aluminum foil: Data for producers in Turkey, 2017-19, January to June 2019, and January to June 2020

Item	Actual experience					Projections	
	Calendar year			January to June		Calendar year	
	2017	2018	2019	2019	2020	2020	2021
	Quantity (short tons)						
Capacity	***	***	***	***	***	***	***
Production	***	***	***	***	***	***	***
End-of-period inventories	***	***	***	***	***	***	***
Shipments:							
Home market shipments:							
Internal consumption/ transfers	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to:							
United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
	Ratios and shares (percent)						
Capacity utilization	***	***	***	***	***	***	***
Inventories/production	***	***	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***	***	***
Share of shipments:							
Home market shipments:							
Internal consumption/ transfers	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to:							
United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***

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

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

Alternative products

As shown in table VII-22, responding firms in Turkey produced other products on the same equipment and machinery used to produce aluminum foil.[32]

Table VII-22
Aluminum foil: Overall capacity and production on the same equipment as in-scope production, 2017-19, January to June 2019, and January to June 2020

Item	Calendar year			January to June	
	2017	2018	2019	2019	2020
	Quantity (short tons)				
Overall capacity	***	***	***	***	***
Production: Aluminum foil	***	***	***	***	***
Out-of-scope production: Aluminum sheet	***	***	***	***	***
Aluminum plate	***	***	***	***	***
Other products	***	***	***	***	***
Out-of-scope production	***	***	***	***	***
Total production on same machinery	***	***	***	***	***
	Ratios and shares (percent)				
Overall capacity utilization	***	***	***	***	***
Share of production: Aluminum foil	***	***	***	***	***
Out-of-scope production: Aluminum sheet	***	***	***	***	***
Aluminum plate	***	***	***	***	***
Other products	***	***	***	***	***
Out-of-scope production	***	***	***	***	***
Total production on same machinery	***	***	***	***	***

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

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

Exports

According to GTA, the leading export markets for aluminum foil from Turkey are the United States and Poland (table VII-23). During 2019, the United States was the top export market for aluminum foil from Turkey, accounting for 25.5 percent, followed by Poland, accounting for 14.6 percent.

[32] In 2019, the responding firms from Turkey reported producing a small quantity of *** accounting for *** percent of the production using the same equipment with in-scope aluminum foil.

Table VII-23
Aluminum foil: Exports from Turkey by destination market, 2017-19

Destination market	Calendar year		
	2017	2018	2019
	Quantity (short tons)		
United States	5,843	23,131	32,065
Poland	15,484	19,069	18,336
Italy	12,758	16,102	16,216
United Kingdom	9,290	11,495	13,157
France	9,659	8,874	8,940
Netherlands	7,050	7,977	7,789
Germany	6,278	6,171	7,766
Spain	4,745	3,901	4,095
Denmark	2,985	2,357	2,241
All other destination markets	14,212	15,984	15,356
All destination markets	88,304	115,061	125,960
	Value (1,000 dollars)		
United States	15,567	67,242	81,024
Poland	44,019	56,816	49,648
Italy	35,550	47,035	42,363
United Kingdom	25,366	34,354	35,423
France	26,573	25,639	23,658
Netherlands	20,567	24,742	21,810
Germany	17,884	18,641	21,270
Spain	13,237	11,452	10,925
Denmark	8,261	7,105	5,973
All other destination markets	39,990	47,919	42,203
All destination markets	247,013	340,946	334,298

Table continued.

Table VII-23--Continued
Aluminum foil: Exports from Turkey by destination market, 2017-19

Destination market	Calendar year		
	2017	2018	2019
	Unit value (dollars per short ton)		
United States	2,664	2,907	2,527
Poland	2,843	2,980	2,708
Italy	2,786	2,921	2,612
United Kingdom	2,731	2,989	2,692
France	2,751	2,889	2,646
Netherlands	2,917	3,102	2,800
Germany	2,849	3,021	2,739
Spain	2,790	2,936	2,668
Denmark	2,767	3,014	2,665
All other destination markets	2,814	2,998	2,748
All destination markets	2,797	2,963	2,654
	Share of quantity (percent)		
United States	6.6	20.1	25.5
Poland	17.5	16.6	14.6
Italy	14.4	14.0	12.9
United Kingdom	10.5	10.0	10.4
France	10.9	7.7	7.1
Netherlands	8.0	6.9	6.2
Germany	7.1	5.4	6.2
Spain	5.4	3.4	3.3
Denmark	3.4	2.0	1.8
All other destination markets	16.1	13.9	12.2
All destination markets	100.0	100.0	100.0

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. United States is shown at the top, all remaining top export destinations shown in descending order of 2018 data.

Source: Official exports statistics under HS subheading 7607.11 as reported by State Institute of Statistics, Turkey in the Global Trade Atlas database, accessed October 6, 2020.

Subject countries combined

Table VII-24 presents summary data on aluminum foil operations of the reporting subject producers in the subject countries.

Table VII-24
Aluminum foil: Data on the industry in subject countries, 2017-19, January to June 2019, and January to June 2020

Item	Actual experience					Projections	
	Calendar year			January to June		Calendar year	
	2017	2018	2019	2019	2020	2020	2021
	Quantity (short tons)						
Capacity	***	***	***	***	***	***	***
Production	***	***	***	***	***	***	***
End-of-period inventories	***	***	***	***	***	***	***
Shipments:							
Home market shipments:							
Internal consumption/ transfers	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to:							
United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
	Ratios and shares (percent)						
Capacity utilization	***	***	***	***	***	***	***
Inventories/production	***	***	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***	***	***
Share of shipments:							
Home market shipments:							
Internal consumption/ transfers	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to:							
United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
	Quantity (short tons)						
Total shipments	***	***	***	***	***	***	***
Total export to the United States	***	***	***	***	***	***	***
	Ratios and shares (percent)						
Share of total exports to the United States:							
Exported by producers	***	***	***	***	***	***	***
Exported by resellers	***	***	***	***	***	***	***
Adjusted share of total shipments exported to the United States	***	***	***	***	***	***	***

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

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

U.S. inventories of imported merchandise

Table VII-25 presents data on U.S. importers' reported inventories of aluminum foil. U.S. importers' end-of-period inventories of imports from subject countries increased by *** percent from 2017 to 2019 and volumes were higher in January-June 2020 than in January-June 2019. Ten firms reported holding inventories in 2019, of which *** accounted for the majority of the increase in end-of-period inventories of imports from subject sources in 2019 (*** percent). The ratio of inventories from subject sources to U.S. shipments of imports was *** percent in 2019 and was higher by *** percentage points in January-June 2020 than in January-June 2019. U.S. importers' reported inventories of aluminum foil from nonsubject sources increased *** percent during 2017-19 while nine firms reported holding end-of-period inventories during that time.

Table VII-25
Aluminum foil: U.S. importers' inventories, 2017-19, January to June 2019, and January to June 2020

Item	Calendar year			January to June	
	2017	2018	2019	2019	2020
	Inventories (short tons); Ratios (percent)				
Imports from Armenia					
Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from Brazil:					
Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from Oman:					
Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from Russia:					
Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from Turkey:					
Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from subject sources:					
Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from nonsubject sources:					
Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from all import sources:					
Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***

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

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

U.S. importers' outstanding orders

The Commission requested importers to indicate whether they imported or arranged for the importation of aluminum foil from Armenia, Brazil, Oman, Russia, and Turkey after June 31, 2020.

Table VII-26
Aluminum foil: Arranged imports, July 2020 through June 2021

Item	Period				
	Jul-Sept 2020	Oct-Dec 2020	Jan-Mar 2021	Apr-Jun 2021	Total
	Quantity (short tons)				
Arranged U.S. imports from.--					
Armenia	***	***	***	***	***
Brazil	***	***	***	***	***
Oman	***	***	***	***	***
Russia	***	***	***	***	***
Turkey	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***

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

Antidumping or countervailing duty orders in third-country markets

Since 2015, the European Commission (EC) has applied antidumping duties on EU imports of certain aluminum foil from Russia. The antidumping duty rate was set at 12.2 percent in December, 2015.[33] The products subject to the EC antidumping measures include "aluminium foil of a thickness of not less than 0,008 mm and not more than 0,018 mm, not backed, not further worked than rolled, in rolls of a width not exceeding 650 mm and of a weight exceeding 10 kg (jumbo rolls) originating in Russia, currently falling within CN code ex 7607 11 19 (TARIC code 7607 11 19 10) (the product concerned). The product concerned is commonly known as aluminium household foil (AHF)."[34]

[33] Commission Implementing Regulation (EU) 2015/2385 OJ L 322 18.12.2015 p. 110.
[34] Commission Implementing Regulation (EU) 2015/2385 OJ L 322 18.12.2015 p. 92.

Information on nonsubject countries

Global production

***.

Table VII-27
Aluminum Foil: Global Production Capacity by Country (excludes North America)

Producer	Calendar Year				
	2017	2018	2019	2020	2021
	Quantity (short tons)				
Armenia	***	***	***	***	***
Brazil	***	***	***	***	***
Russia	***	***	***	***	***
Oman	***	***	***	***	***
Turkey	***	***	***	***	***
Subject sources	***	***	***	***	***
China	***	***	***	***	***
Germany	***	***	***	***	***
India	***	***	***	***	***
Japan	***	***	***	***	***
Italy	***	***	***	***	***
Korea	***	***	***	***	***
Austria	***	***	***	***	***
Malaysia	***	***	***	***	***
France	***	***	***	***	***
Greece	***	***	***	***	***
Spain	***	***	***	***	***
Luxembourg	***	***	***	***	***
Indonesia	***	***	***	***	***
Sweden	***	***	***	***	***
Slovenia	***	***	***	***	***
Bulgaria	***	***	***	***	***
Iran	***	***	***	***	***
Czech Republic	***	***	***	***	***
Venezuela	***	***	***	***	***
Thailand	***	***	***	***	***
Taiwan	***	***	***	***	***
Pakistan	***	***	***	***	***
Argentina	***	***	***	***	***
Norway	***	***	***	***	***
South Africa	***	***	***	***	***
Croatia	***	***	***	***	***
Bangladesh	***	***	***	***	***
Costa Rica	***	***	***	***	***
Hungary	***	***	***	***	***
Poland	***	***	***	***	***
Sri Lanka	***	***	***	***	***
Serbia	***	***	***	***	***
Bahrain	***	***	***	***	***
All other reporters	***	***	***	***	***
Total reported	***	***	***	***	***

Source: ***

Global exports

Aluminum foil is produced and traded in substantial volumes throughout the world. Global Trade Atlas (GTA) publishes data on global exports of aluminum foil for HS subheading 7607.11.[35] As shown in table VII-28, global exports of subject aluminum foil totaled 2 million short tons in 2019, valued at $5.9 billion. Since 2017, global exports by volume have grown by 9.0 percent. In both volume and value, China is the world's largest exporter of subject aluminum foil accounting for nearly 900,000 short tons shipped at a value of $2.3 billion in 2019. Exports from China represented 44.9 percent of global exports, by volume, in 2019. Other leading nonsubject exporters of subject aluminum foil include Germany, Greece, and Italy with global export shares ranging from 3.3 percent to 10.2 percent in 2019. The largest sources of nonsubject U.S. imports in 2019 were Korea, Germany, China, Luxembourg and Indonesia.[36]

[35] The majority of subject aluminum foil is exported under the 7607.11 subheading. However, some subject aluminum foil is also exported under subheadings 7607.19, 7606.11, 7606.12, 7606.91, and 7606.92.

[36] USITC Dataweb, HTS subheading 7607.11 (accessed October 25, 2020).

Table VII-28
Aluminum foil: Global exports by exporter, 2017-19

Exporter	Calendar year		
	2017	2018	2019
	Quantity (short tons)		
United States	77,493	73,740	68,673
Armenia	34,899	31,206	35,903
Brazil	23,221	29,077	27,782
Oman	8,919	18,200	---
Russia	23,172	16,085	25,946
Turkey	88,304	115,061	125,960
Subject exporters	178,515	209,629	215,591
China	791,170	901,111	899,560
Germany	206,215	212,524	204,991
Greece	67,513	77,606	76,014
Italy	67,003	64,618	65,143
Korea	48,862	55,410	55,298
Japan	42,168	52,154	50,550
Luxembourg	41,982	42,720	36,448
Belgium	26,659	27,845	34,656
Slovenia	32,815	33,126	33,940
All other exporters	255,364	279,817	260,905
All reporting exporters	1,835,758	2,030,299	2,001,769
	Value (1,000 dollars)		
United States	270,971	284,093	265,692
Armenia	96,374	92,792	95,076
Brazil	75,457	96,301	87,257
Oman	281	24,583	48,168
Russia	57,717	47,056	66,643
Turkey	247,013	340,946	334,298
Subject exporters	476,843	601,679	631,441
China	2,047,473	2,487,106	2,262,449
Germany	648,627	735,657	651,363
Greece	213,476	268,935	240,872
Italy	198,655	210,140	206,591
Korea	170,760	229,752	220,396
Japan	175,264	209,034	181,806
Luxembourg	130,331	144,513	115,834
Belgium	83,197	93,856	103,018
Slovenia	99,651	108,605	101,564
All other exporters	852,059	1,003,680	877,769
All reporting exporters	5,367,306	6,377,050	5,858,794

Table continued.

Table VII-28--Continued
Aluminum foil: Global exports by exporter, 2017-19

Exporter	Calendar year		
	2017	2018	2019
	Unit value (dollars per short ton)		
United States	3,497	3,853	3,869
Armenia	2,762	2,974	2,648
Brazil	3,250	3,312	3,141
Oman	32	1,351	---
Russia	2,491	2,925	2,569
Turkey	2,797	2,963	2,654
Subject exporters	2,671	2,870	2,929
China	2,588	2,760	2,515
Germany	3,145	3,462	3,178
Greece	3,162	3,465	3,169
Italy	2,965	3,252	3,171
Korea	3,495	4,146	3,986
Japan	4,156	4,008	3,597
Luxembourg	3,104	3,383	3,178
Belgium	3,121	3,371	2,973
Slovenia	3,037	3,279	2,992
All other exporters	3,337	3,587	3,364
All reporting exporters	2,924	3,141	2,927
	Share of quantity (percent)		
United States	4.2	3.6	3.4
Armenia	1.9	1.5	1.8
Brazil	1.3	1.4	1.4
Oman	0.5	0.9	---
Russia	1.3	0.8	1.3
Turkey	4.8	5.7	6.3
Subject exporters	9.7	10.3	10.8
China	43.1	44.4	44.9
Germany	11.2	10.5	10.2
Greece	3.7	3.8	3.8
Italy	3.6	3.2	3.3
Korea	2.7	2.7	2.8
Japan	2.3	2.6	2.5
Luxembourg	2.3	2.1	1.8
Belgium	1.5	1.4	1.7
Slovenia	1.8	1.6	1.7
All other exporters	13.9	13.8	13.0
All reporting exporters	100.0	100.0	100.0

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Data reported in this table does not include in-scope merchandise (“other aluminum foil”) imported under HS subheading 7607.19.

Source: Official exports statistics under HS subheading 7607.11 reported by various national statistical authorities in the Global Trade Atlas database, accessed October 6, 2020.

Nonsubject countries

Korea

Korea is the largest nonsubject source of U.S. aluminum foil imports, and the second largest U.S. import source overall, following Turkey. Korea accounted for nearly 11 percent of U.S. aluminum foil imports by volume in 2019.[37] Also in 2019, Korea accounted for 2.8 percent of global exports of aluminum foil by volume. ***[38] According to the company's website, Lotte Aluminum has Korea's largest aluminum foil production facilities, and supplies various aluminum foil products and heat exchangers for cars and HVAC systems. The company's headquarters are located in Seoul.[39] Dong-Il Aluminium Co. Ltd. (Dong-Il) is another major Korean producer of aluminum foil. According to the company's website, Dong Il is the largest heat exchanger manufacturer in Korea, though it also produces aluminum foil for food and medicine packaging. The company's main office is in Cheonan, though it has production facilities in Gimhae and an office in Seoul.[40]

[37] USITC Dataweb, HTS 7607.11 (accessed October 25, 2020).

[38] ***, "Foil Capacity Outside of North America ('000 t)," (retrieved October 27, 2020).

[39] Lotte Aluminum, "About Us," http://www.lotte.co.kr/global/en/business/compDetail.do?compCd=L305 (retrieved October 25, 2020).

[40] Dong Il Aluminium Co. Ltd., "Corporate Overview," http://dongilal.com/sub_eng/introduction01.php (retrieved October 25, 2020).

Germany

Germany is the second largest nonsubject source of U.S. aluminum foil imports, accounting for nearly 10 percent of U.S. aluminum foil imports in 2019.[41] Germany is also the second largest global exporter of aluminum foil by volume, accounting for 10.2 percent of global exports in 2019. ***[42] Novelis, the world's largest producer of flat-rolled aluminum products has six production sites for aluminum products in Germany,[43] ***[44] Its plant in Ohle, Germany produces foil trays.[45] Norsk Hydro ASA (Hydro), a multinational firm headquartered in Norway, reportedly is the largest aluminum company in Germany[46] and one of the world's leading suppliers of thin-gauge aluminum foil for liquid aseptic packaging.[47] The company also produces aluminum foil for flexible food packaging, foil for medical and pharmaceutical packaging, and rolled products for heat exchangers.[48] The company operates three rolling mills in Germany, employing 4,962 people.[49]

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[41] USITC Dataweb, HTS 7607.11 (accessed October 25, 2020).

[42] ***, "Foil Capacity Outside of North America ('000 t)," (accessed October 27, 2020).

[43] Novelis, "Geographic Locations," https://novelis.com/contact/ (retrieved October 25, 2020).

[44] ***, "Foil Capacity Outside of North America ('000 t)," (retrieved October 27, 2020).

[45] Novelis, "Geographic Locations," https://novelis.com/contact/ (retrieved October 25, 2020).

[46] Hydro, "About Hydro," https://www.hydro.com/en/about-hydro/hydro-worldwide/europe/germany/ (retrieved October 25, 2020).

[47] Hydro, "Plain Aluminum Foil for Aseptic Packaging Applications," https://www.hydro.com/en/products-and-services/rolled-products/rolled-products-for-packaging/plain-foil-for-aseptic-packaging/ (retrieved October 25, 2020).

[48] Hydro, "Products and Services," https://www.hydro.com/en/products-and-services/rolled-products/rolled-products-for-packaging/ (retrieved October 25, 2020).

[49] Hydro, "Germany," https://www.hydro.com/en/about-hydro/hydro-worldwide/europe/germany/ (accessed October 25, 2020).

China

China was the fourth largest nonsubject source of U.S. aluminum foil imports in 2019.[50] China was also the world's largest global exporter in 2019, accounting for 44.9 percent of total exports by volume. ***[51] In March, 2018, the Commission determined that the U.S. industry was materially injured by imports of aluminum foil from China, and Commerce subsequently issued anti-dumping and countervailing duty orders on such imports.[52] There were over 100 firms believed to produce and/or export aluminum foil from China at the time of the USITC's investigation.[53] Zhejiang Junma Aluminum Industry Co. Ltd. is one of the largest manufacturers and exporters of aluminum foil in China. Its aluminum foil plant has a capacity of 80,000 rolls per day.[54] Jiangsu Zhonji Composite Materials Co., LTD (Zhonji) produces aluminum foil of thicknesses less than 0.3mm and other aluminum foil products such as for food and beverage packaging, and cigarette liners.[55] For more information on aluminum foil from China, see *Aluminum Foil from China, Inv. Nos. 701-TA-570 and 731-TA-1346 (Final),* USITC Publication 4771, April 2018.

[50] USITC Dataweb, HTS 7607.11 (accessed October 25, 2020).

[51] ***, "Foil Capacity Outside of North America ('000 t)," (accessed October 27, 2020).

[52] *Certain Aluminum Foil From the People's Republic of China: Amended Final Affirmative Countervailing Duty Determination and Countervailing Duty Order*, 83 FR 17360 and *Certain Aluminum Foil From the People's Republic of China: Amended Final Determination of Sales at Less Than Fair Value and Antidumping Duty Order*, 83 FR 17362.

[53] *Aluminum Foil from China, Inv. Nos. 701-TA-570 and 731-TA-1346 (Final),* USITC Publication 4771, April 2018, p. VII-3.

[54] AlCircle, "Top Five Aluminum Foil Manufacturers in the World," February 10, 2017, https://www.alcircle.com/news/top-five-aluminium-foil-manufacturers-in-the-world-26988.

[55] Zhonji, "Company Profile," http://www.zjalufoil.com/about/ (retrieved October 25, 2020).

APPENDIX A

FEDERAL REGISTER NOTICES

The Commission makes available notices relevant to its investigations and reviews on its website, www.usitc.gov. In addition, the following tabulation presents, in chronological order, *Federal Register* notices issued by the Commission and Commerce during the current proceeding.

Citation	Title	Link
85 FR 62759 October 5, 2020	*Aluminum Foil From Armenia, Brazil, Oman, Russia, and Turkey; Institution of Anti-Dumping and Countervailing Duty Investigations and Scheduling of Preliminary Phase Investigations*	https://www.govinfo.gov/content/pkg/FR-2020-10-05/pdf/2020-21953.pdf
85 FR 67711 October 26, 2020	*Certain Aluminum Foil From the Republic of Armenia, Brazil, the Sultanate of Oman, the Russian Federation, and the Republic of Turkey: Initiation of Less-Than-Fair-Value Investigations*	https://www.govinfo.gov/content/pkg/FR-2020-10-26/pdf/2020-23673.pdf
85 FR 68287 October 28, 2020	*Certain Aluminum Foil From the Sultanate of Oman and the Republic of Turkey: Initiation of Countervailing Duty Investigations*	https://www.govinfo.gov/content/pkg/FR-2020-10-28/pdf/2020-23926.pdf

APPENDIX B

LIST OF STAFF CONFERENCE WITNESSES

CALENDAR OF PUBLIC PRELIMINARY CONFERENCE

Those listed below appeared in the United States International Trade Commission's preliminary conference via videoconference:

Subject: Aluminum Foil from Armenia, Brazil, Oman, Russia, and Turkey

Inv. Nos.: 701-TA-658-659 and 731-TA-1538-1542 (Preliminary)

Date and Time: October 20, 2020 - 9:30 a.m.

OPENING REMARKS:

In Support of Imposition (**John M. Herrmann**, Kelley Drye & Warren LLP)
In Opposition to Imposition (**Lynn Fischer Fox**, Arnold & Porter Kaye Scholer, LLP)

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

Kelley Drye & Warren LLP
Washington, DC
on behalf of

Aluminum Association Trade Enforcement Working Group

Lee McCarter, Executive Chairman, Board of Directors,
JW Aluminum Company

Ryan Roush, Chief Commercial Officer, JW Aluminum Company

Jim D'Amico, Sales Director, Foil Products, Novelis Corporation

Susan Jackson, Legal Counsel, Commercial, Trade,
Information Governance, Novelis Corporation

Michael Pusateri, Director, Marketing North America,
Novelis Corporation

Brad Thomas, Vice President for Strategy, Sales and Marketing,
Gränges Americas Inc.

Ryan Olsen, Vice President, Business Information and Statistics,
The Aluminum Association

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

Michael T. Kerwin, Assistant Director, Georgetown Economic Services, LLC

Brad Hudgens, Senior Trade Analyst, Georgetown Economic Services, LLC

Jacob Jones, Research Assistant, Georgetown Economic Services, LLC

John M. Herrmann)
Paul C. Rosenthal)
) – OF COUNSEL
R. Alan Luberda)
Joshua R. Morey)

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

Clark Hill PLC
Washington, DC
on behalf of

ProAmpac

Paul Schabow, Vice President, Procurement, ProAmpac

Mark R. Ludwikowski)
) – OF COUNSEL
Courtney Gayle Taylor)

White and Case LLP
Washington, DC
on behalf of

Companhia Brasileira de Aluminio ("CBA")

Fabiano Schneider Urso, General Commercial Manager, CBA

David Bond)
) – OF COUNSEL
Ron Kendler)

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

Akin Gump Strauss Haure & Feld LLP
Washington, DC
on behalf of

New Process Steel ("NPS")

Glen Taylor, Vice President, Southwest, Commercial, NPS

Bernd G. Janzen) – OF COUNSEL

Arent Fox LLP
Washington, DC
on behalf of

Assan Aluminyum

Atilla Cetinel, Head of Americas BU, Assan Aluminyum

Scott Croft, Vice President, Americas Sales, Assan Aluminyum

Yavuz Arkun, Strategy and Marketing Director, Assan Aluminyum

Matthew Nolan)
) – OF COUNSEL
Friederike Goergens)

Faegre Drinker Biddle & Reath LLP
Washington, DC
on behalf of

Goodman Manufacturing L.P. (a member of the Daikin group of companies)
Bemis Company Inc. (a member of the Amcor group of companies)

Erica Paschal, Vice President of Procurement,
Goodman Manufacturing, L.P.

Tim Brown, Category Procurement Manager, Aluminum,
Amcor Flexibles North America

Ken Kiesow, Category Procurement Manager, Film,
Amcor Flexibles North America (formerly Category
Procurement Manager, Aluminum)

Douglas J. Heffner)
Richard P. Ferrin) – OF COUNSEL
Carrie Bethea)

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

Arnold & Porter Kaye Scholer LLP
Washington, DC
on behalf of

Trinidad Benham Corporation ("Trinidad")

Kent McSparran, President, Trinidad

Linda Walmsley, Vice Chair of the Board, Trinidad

Donna Walters, Director of Aluminum Risk, Trinidad

Lynn Fischer Fox)
) – OF COUNSEL
Gina Colarusso)

REBUTTAL/CLOSING REMARKS:

In Support of Imposition (**Paul C. Rosenthal**, Kelley Drye & Warren LLP)
In Opposition to Imposition (**Richard P. Ferrin**, Faegre Drinker Biddle & Reath LLP)

-END-

APPENDIX C

SUMMARY DATA

Total market

Table C-1
Aluminum foil: Summary data concerning the U.S. total market, 2017-19, January to June 2019, and January to June 2020
(Quantity=short tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short ton; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	Calendar year			January to June		Comparison years			Jan-Jun
	2017	2018	2019	2019	2020	2017-19	2017-18	2018-19	2019-20
U.S. total market consumption quantity:									
Amount	601,047	602,781	578,694	299,630	273,127	▼(3.7)	▲0.3	▼(4.0)	▼(8.8)
Producers' share (fn1)	73.3	75.3	72.6	74.0	72.9	▼(0.7)	▲2.0	▼(2.6)	▼(1.1)
Importers' share (fn1):									
Armenia	***	***	***	***	***	▼***	▲***	▼***	▲***
Brazil	***	***	***	***	***	▲***	▲***	▼***	▼***
Oman	***	***	***	***	***	▲***	▲***	▲***	▼***
Russia	***	***	***	***	***	▲***	▼***	▲***	▲***
Turkey	***	***	***	***	***	▲***	▲***	▲***	▼***
Subject sources	6.8	12.4	14.9	14.9	12.6	▲8.1	▲5.6	▲2.5	▼(2.3)
Nonsubject sources	19.9	12.3	12.4	11.1	14.5	▼(7.5)	▼(7.6)	▲0.1	▲3.4
All import sources	26.7	24.7	27.4	26.0	27.1	▲0.7	▼(2.0)	▲2.6	▲1.1
U.S. total market consumption value:									
Amount	1,738,214	2,097,496	1,911,223	1,028,188	843,447	▲10.0	▲20.7	▼(8.9)	▼(18.0)
Producers' share (fn1)	76.4	75.3	72.1	72.0	71.2	▼(4.3)	▼(1.1)	▼(3.2)	▼(0.8)
Importers' share (fn1):									
Armenia	***	***	***	***	***	▼***	▲***	▼***	▲***
Brazil	***	***	***	***	***	▲***	▲***	▼***	▲***
Oman	***	***	***	***	***	▲***	▲***	▲***	▼***
Russia	***	***	***	***	***	▲***	▼***	▲***	▲***
Turkey	***	***	***	***	***	▲***	▲***	▲***	▼***
Subject sources	6.3	11.9	14.0	13.7	13.4	▲7.7	▲5.6	▲2.1	▼(0.2)
Nonsubject sources	17.3	12.8	13.9	14.3	15.4	▼(3.4)	▼(4.5)	▲1.1	▲1.1
All import sources	23.6	24.7	27.9	28.0	28.8	▲4.3	▲1.1	▲3.2	▲0.8
U.S. importers' U.S. shipments of imports from.--									
Armenia:									
Quantity	***	***	***	***	***	▼***	▲***	▼***	▲***
Value	***	***	***	***	***	▼***	▲***	▼***	▲***
Unit value	***	***	***	***	***	▲***	▲***	▼***	▼***
Ending inventory quantity	***	***	***	***	***	▼***	▼***	▲***	▲***
Brazil:									
Quantity	***	***	***	***	***	▲***	▲***	▼***	▼***
Value	***	***	***	***	***	▲***	▲***	▼***	▲***
Unit value	***	***	***	***	***	▲***	▲***	▼***	▲***
Ending inventory quantity	***	***	***	***	***	▼***	▼***	▲***	▼***
Oman:									
Quantity	***	***	***	***	***	▲***	▲***	▲***	▼***
Value	***	***	***	***	***	▲***	▲***	▲***	▼***
Unit value	***	***	***	***	***	▲***	▲***	▼***	▼***
Ending inventory quantity	***	***	***	***	***	▲***	***	▲***	▲***
Russia:									
Quantity	***	***	***	***	***	▲***	▼***	▲***	▲***
Value	***	***	***	***	***	▲***	▼***	▲***	▼***
Unit value	***	***	***	***	***	▲***	▲***	▼***	▼***
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▲***	▼***
Turkey:									
Quantity	***	***	***	***	***	▲***	▲***	▲***	▼***
Value	***	***	***	***	***	▲***	▲***	▲***	▼***
Unit value	***	***	***	***	***	▲***	▲***	▼***	▼***
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▲***	▼***
Subject sources:									
Quantity	40,853	74,978	86,399	44,556	34,446	▲111.5	▲83.5	▲15.2	▼(22.7)
Value	108,965	248,917	267,043	140,640	113,338	▲145.1	▲128.4	▲7.3	▼(19.4)
Unit value	$2,667	$3,320	$3,091	$3,156	$3,290	▲15.9	▲24.5	▼(6.9)	▲4.2
Ending inventory quantity	***	***	***	***	***	▲***	▼***	▲***	▲***
Nonsubject sources:									
Quantity	119,643	74,196	71,982	33,308	39,644	▼(39.8)	▼(38.0)	▼(3.0)	▲19.0
Value	301,379	268,316	265,593	147,043	129,796	▼(11.9)	▼(11.0)	▼(1.0)	▼(11.7)
Unit value	$2,519	$3,616	$3,690	$4,415	$3,274	▲46.5	▲43.6	▲2.0	▼(25.8)
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▼***	▼***
All import sources:									
Quantity	160,496	149,174	158,381	77,864	74,090	▼(1.3)	▼(7.1)	▲6.2	▼(4.8)
Value	410,344	517,233	532,636	287,683	243,134	▲29.8	▲26.0	▲3.0	▼(15.5)
Unit value	$2,557	$3,467	$3,363	$3,695	$3,282	▲31.5	▲35.6	▼(3.0)	▼(11.2)
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▲***	▼***

Table continued on next page.

Table C-1--Continued
Aluminum foil: Summary data concerning the U.S.total market, 2017-19, January to June 2019, and January to June 2020
(Quantity=short tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short ton; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	Calendar year			January to June		Comparison years			Jan-Jun
	2017	2018	2019	2019	2020	2017-19	2017-18	2018-19	2019-20
U.S. producers':									
Average capacity quantity	541,692	544,180	572,057	276,343	273,015	▲5.6	▲0.5	▲5.1	▼(1.2)
Production quantity	469,677	482,607	447,204	234,120	203,025	▼(4.8)	▲2.8	▼(7.3)	▼(13.3)
Capacity utilization (fn1)	86.7	88.7	78.2	84.7	74.4	▼(8.5)	▲2.0	▼(10.5)	▼(10.4)
U.S. shipments:									
Quantity	440,551	453,607	420,313	221,766	199,037	▼(4.6)	▲3.0	▼(7.3)	▼(10.2)
Value	1,327,870	1,580,263	1,378,587	740,505	600,313	▲3.8	▲19.0	▼(12.8)	▼(18.9)
Unit value	$3,014	$3,484	$3,280	$3,339	$3,016	▲8.8	▲15.6	▼(5.9)	▼(9.7)
Export shipments:									
Quantity	27,913	26,469	24,859	12,529	10,156	▼(10.9)	▼(5.2)	▼(6.1)	▼(18.9)
Value	85,606	92,280	79,566	40,803	30,072	▼(7.1)	▲7.8	▼(13.8)	▼(26.3)
Unit value	$3,067	$3,486	$3,201	$3,257	$2,961	▲4.4	▲13.7	▼(8.2)	▼(9.1)
Ending inventory quantity	33,707	36,238	38,268	36,062	32,101	▲13.5	▲7.5	▲5.6	▼(11.0)
Inventories/total shipments (fn1)	7.2	7.5	8.6	7.7	7.7	▲1.4	▲0.4	▲1.0	▼(0.0)
Production workers	1,453	1,514	1,526	1,553	1,367	▲5.0	▲4.2	▲0.8	▼(12.0)
Hours worked (1,000s)	3,103	3,208	3,244	2,112	1,860	▲4.5	▲3.4	▲1.1	▼(11.9)
Wages paid ($1,000)	105,844	113,404	114,390	57,915	52,742	▲8.1	▲7.1	▲0.9	▼(8.9)
Hourly wages (dollars per hour)	$34	$35	$35	$27	$28	▲3.4	▲3.6	▼(0.2)	▲3.4
Productivity (short tons per 1,000 hours)	151.4	150.4	137.9	110.9	109.2	▼(8.9)	▼(0.6)	▼(8.4)	▼(1.5)
Unit labor costs	$225	$235	$256	$247	$260	▲13.5	▲4.3	▲8.9	▲5.0
Net sales:									
Quantity	468,464	480,076	445,172	234,295	209,193	▼(5.0)	▲2.5	▼(7.3)	▼(10.7)
Value	1,413,476	1,672,543	1,458,151	781,307	630,384	▲3.2	▲18.3	▼(12.8)	▼(19.3)
Unit value	3,017	3,484	3,275	3,335	3,013	▲8.6	▲15.5	▼(6.0)	▼(9.6)
Cost of goods sold (COGS)	1,317,981	1,564,390	1,382,462	721,059	617,236	▲4.9	▲18.7	▼(11.6)	▼(14.4)
Gross profit or (loss) (fn2)	95,495	108,153	75,689	60,248	13,148	▼(20.7)	▲13.3	▼(30.0)	▼(78.2)
SG&A expenses	48,537	55,912	56,871	29,229	27,872	▲17.2	▲15.2	▲1.7	▼(4.6)
Operating income or (loss) (fn2)	46,958	52,241	18,818	31,019	(14,724)	▼(59.9)	▲11.3	▼(64.0)	▼***
Net income or (loss) (fn2)	(5,934)	5,779	(33,461)	2,673	(40,213)	▼***	▲***	▼***	▼***
Capital expenditures	32,807	84,416	128,343	75,638	47,771	▲291.2	▲157.3	▲52.0	▼(36.8)
Research and development expenses	173	195	487	226	405	▲181.5	▲12.7	▲149.7	▲79.2
Net assets	630,016	686,664	766,837	***	***	▲21.7	▲9.0	▲11.7	***
Unit COGS	$2,813	$3,259	$3,105	$3,078	$2,951	▲10.4	▲15.8	▼(4.7)	▼(4.1)
Unit SG&A expenses	$104	$116	$128	$125	$133	▲23.3	▲12.4	▲9.7	▲6.8
Unit operating income or (loss) (fn2)	$100	$109	$42	$132	$(70)	▼(57.8)	▲8.6	▼(61.2)	▼***
Unit net income or (loss) (fn2)	$(13)	$12	$(75)	$11	$(192)	▼***	▲***	▼***	▼***
COGS/sales (fn1)	93.2	93.5	94.8	92.3	97.9	▲1.6	▲0.3	▲1.3	▲5.6
Operating income or (loss)/sales (fn1)	3.3	3.1	1.3	4.0	(2.3)	▼(2.0)	▼(0.2)	▼(1.8)	▼(6.3)
Net income or (loss)/sales (fn1)	(0.4)	0.3	(2.3)	0.3	(6.4)	▼(1.9)	▲0.8	▼(2.6)	▼(6.7)

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

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

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

Merchant market

Table C-2
Aluminum foil: Summary data concerning the U.S. merchant market, 2017-19, January to June 2019, and January to June 2020
(Quantity=short tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short ton; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	Calendar year			January to June		Comparison years			Jan-Jun
	2017	2018	2019	2019	2020	2017-19	2017-18	2018-19	2019-20
U.S. merchant market consumption quantity:									
Amount	***	***	***	***	***	▼***	▼***	▼***	▼***
Producers' share (fn1)	***	***	***	***	***	▼***	▲***	▼***	▼***
Importers' share (fn1):									
Armenia	***	***	***	***	***	▼***	▲***	▼***	▲***
Brazil	***	***	***	***	***	▲***	▲***	▼***	▼***
Oman	***	***	***	***	***	▲***	▲***	▲***	▼***
Russia	***	***	***	***	***	▲***	▼***	▲***	▲***
Turkey	***	***	***	***	***	▲***	▲***	▲***	▼***
Subject sources	***	***	***	***	***	▲***	▲***	▲***	▼***
Nonsubject sources	***	***	***	***	***	▼***	▼***	▲***	▲***
All import sources	***	***	***	***	***	▲***	▼***	▲***	▲***
U.S. merchant market consumption value:									
Amount	***	***	***	***	***	▲***	▲***	▼***	▼***
Producers' share (fn1)	***	***	***	***	***	▼***	▼***	▼***	▼***
Importers' share (fn1):									
Armenia	***	***	***	***	***	▼***	▲***	▼***	▲***
Brazil	***	***	***	***	***	▲***	▲***	▼***	▲***
Oman	***	***	***	***	***	▲***	▲***	▲***	▼***
Russia	***	***	***	***	***	▲***	▼***	▲***	▲***
Turkey	***	***	***	***	***	▲***	▲***	▲***	▼***
Subject sources	***	***	***	***	***	▲***	▲***	▲***	▲***
Nonsubject sources	***	***	***	***	***	▼***	▼***	▲***	▲***
All import sources	***	***	***	***	***	▲***	▲***	▲***	▲***
U.S. importers' U.S. shipments of imports from.--									
Armenia:									
Quantity	***	***	***	***	***	▼***	▲***	▼***	▲***
Value	***	***	***	***	***	▼***	▲***	▼***	▲***
Unit value	***	***	***	***	***	▲***	▲***	▼***	▼***
Ending inventory quantity	***	***	***	***	***	▼***	▼***	▲***	▲***
Brazil:									
Quantity	***	***	***	***	***	▲***	▲***	▼***	▼***
Value	***	***	***	***	***	▲***	▲***	▼***	▲***
Unit value	***	***	***	***	***	▲***	▲***	▼***	▲***
Ending inventory quantity	***	***	***	***	***	▼***	▼***	▲***	▼***
Oman:									
Quantity	***	***	***	***	***	▲***	▲***	▲***	▼***
Value	***	***	***	***	***	▲***	▲***	▲***	▼***
Unit value	***	***	***	***	***	▲***	▲***	▼***	▼***
Ending inventory quantity	***	***	***	***	***	▲***	***	▲***	▲***
Russia:									
Quantity	***	***	***	***	***	▲***	▼***	▲***	▲***
Value	***	***	***	***	***	▲***	▼***	▲***	▼***
Unit value	***	***	***	***	***	▲***	▲***	▼***	▼***
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▲***	▼***
Turkey:									
Quantity	***	***	***	***	***	▲***	▲***	▲***	▼***
Value	***	***	***	***	***	▲***	▲***	▲***	▼***
Unit value	***	***	***	***	***	▲***	▲***	▼***	▼***
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▲***	▼***
Subject sources:									
Quantity	40,853	74,978	86,399	44,556	34,446	▲111.5	▲83.5	▲15.2	▼(22.7)
Value	108,965	248,917	267,043	140,640	113,338	▲145.1	▲128.4	▲7.3	▼(19.4)
Unit value	$2,667	$3,320	$3,091	$3,156	$3,290	▲15.9	▲24.5	▼(6.9)	▲4.2
Ending inventory quantity	***	***	***	***	***	▲***	▼***	▲***	▲***
Nonsubject sources:									
Quantity	119,643	74,196	71,982	33,308	39,644	▼(39.8)	▼(38.0)	▼(3.0)	▲19.0
Value	301,379	268,316	265,593	147,043	129,796	▼(11.9)	▼(11.0)	▼(1.0)	▼(11.7)
Unit value	$2,519	$3,616	$3,690	$4,415	$3,274	▲46.5	▲43.6	▲2.0	▼(25.8)
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▼***	▼***
All import sources:									
Quantity	160,496	149,174	158,381	77,864	74,090	▼(1.3)	▼(7.1)	▲6.2	▼(4.8)
Value	410,344	517,233	532,636	287,683	243,134	▲29.8	▲26.0	▲3.0	▼(15.5)
Unit value	$2,557	$3,467	$3,363	$3,695	$3,282	▲31.5	▲35.6	▼(3.0)	▼(11.2)
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▲***	▼***

Table continued on next page.

Table C-2--Continued
Aluminum foil: Summary data concerning the U.S. merchant market, 2017-19, January to June 2019, and January to June 2020
(Quantity=short tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short ton; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	Calendar year			January to June		Comparison years			Jan-Jun
	2017	2018	2019	2019	2020	2017-19	2017-18	2018-19	2019-20
U.S. producers':									
Commercial U.S. shipments:									
Quantity	***	***	***	***	***	▼***	▲***	▼***	▼***
Value	***	***	***	***	***	▲***	▲***	▼***	▼***
Unit value	***	***	***	***	***	▲***	▲***	▼***	▼***
Commercial sales:									
Quantity	***	***	***	***	***	▼***	▲***	▼***	▼***
Value	***	***	***	***	***	▲***	▲***	▼***	▼***
Unit value	***	***	***	***	***	▲***	▲***	▼***	▼***
Cost of goods sold (COGS)	***	***	***	***	***	▲***	▲***	▼***	▼***
Gross profit or (loss) (fn2)	***	***	***	***	***	▲***	▲***	▼***	▼***
SG&A expenses	***	***	***	***	***	▲***	▲***	▲***	▼***
Operating income or (loss) (fn2)	***	***	***	***	***	▼***	▲***	▼***	▼***
Net income or (loss) (fn2)	***	***	***	***	***	▼***	▲***	▼***	▼***
Unit COGS	***	***	***	***	***	▲***	▲***	▼***	▼***
Unit SG&A expenses	***	***	***	***	***	▲***	▲***	▲***	▲***
Unit operating income or (loss) (fn2)	***	***	***	***	***	▼***	▲***	▼***	▼***
Unit net income or (loss) (fn2)	***	***	***	***	***	▼***	▲***	▼***	▼***
COGS/sales (fn1)	***	***	***	***	***	▼***	▼***	▲***	▲***
Operating income or (loss)/sales (fn1)	***	***	***	***	***	▼***	▲***	▼***	▼***
Net income or (loss)/sales (fn1)	***	***	***	***	***	▼***	▲***	▼***	▼***

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

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

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

APPENDIX D

ALUMINUM FOIL DOMESTIC LIKE PRODUCT NARRATIVES

Table D-1
Aluminum foil: U.S. producers' comparisons of fin stock by the like product factors

Item / Firm	Narratives
U.S. producers: Physical characteristics	
Aleris	***
Gränges	***
JW Aluminum	***
Novelis	***
U.S. producers: Interchangeability	
Aleris	***
Gränges	***
JW Aluminum	***
Novelis	***
U.S. producers: Manufacturing	
Aleris	***
Gränges	***
JW Aluminum	***
Novelis	***
Reynolds	***
U.S. producers: Channels	
Aleris	***
Gränges	***
JW Aluminum	***
Novelis	***
Reynolds	***
U.S. producers: Perceptions	
Aleris	***
Gränges	***
JW Aluminum	***
Novelis	***
Reynolds	***

Table continued.

Table D-1--Continued
Aluminum foil: U.S. producers' comparisons of fin stock by the like product factors

Item / Firm	Narratives
U.S. producers: Price	
Aleris	***
Gränges	***
JW Aluminum	***
Novelis	***
Reynolds	***

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

Table D-2
Aluminum foil: U.S. importers' comparisons of fin stock by the like product factors

Item / Firm	Narratives
U.S. importers: Physical characteristics	
AKG	***
Goodman	***
Gränges	***
MAHLE Behr	***
Medalco	***
Midwest Metals	***
ProAmpac	***
U.S. importers: Interchangeability	
AKG	***
Goodman	***
Gränges	***
MAHLE Behr	***
Medalco	***
Midwest Metals	***
ProAmpac	***

Table continued.

Table D-2--Continued
Aluminum foil: U.S. importers' comparisons of fin stock by the like product factors

Item / Firm	Narratives
U.S. importers: Manufacturing	
AKG	***
Goodman	***
Gränges	***
MAHLE Behr	***
ProAmpac	***
Reynolds	***
Valeo	***
U.S. importers: Channels	
AKG	***
Goodman	***
Gränges	***
MAHLE Behr	***
Medalco	***
ProAmpac	***
Reynolds	***
Sinobec	***
Valeo	***
U.S. importers: Perceptions	
AKG	***
Goodman	***
Gränges	***
MAHLE Behr	***
Medalco	***
ProAmpac	***
Reynolds	***

Table continued.

Table D-2--Continued
Aluminum foil: U.S. importers' comparisons of fin stock by the like product factors

Item / Firm	Narratives
U.S. importers: Price	
AKG	***
Goodman	***
Gränges	***
MAHLE Behr	***
Medalco	***
ProAmpac	***
Reynolds	***

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

Table D-3
Aluminum foil: U.S. producers' and U.S. importers' comparisons of in-scope fin stock products vs all other aluminum foil products

Factor	U.S. producers				U.S. importers			
	F	M	S	N	F	M	S	N
	Count of firms							
Physical characteristics	---	4	1	---	---	4	2	4
Interchangeability	1	---	3	---	1	3	---	4
Manufacturing	1	4	---	---	1	4	4	1
Channels	4	1	---	---	3	1	2	1
Perceptions	3	2	---	---	1	4	1	1
Price	1	1	3	---	1	4	1	1

Note: F=fully comparable; M=mostly comparable; S=somewhat comparable; N=never comparable.

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

Table D-4
Aluminum foil: U.S. producers' comparisons of ultra-thin by the like product factors

Item / Firm	Narratives
U.S. producers: Physical characteristics	
Aleris	***
Gränges	***
JW Aluminum	***
Novelis	***
Reynolds	***
U.S. producers: Interchangeability	
Aleris	***
Gränges	***
JW Aluminum	***
Novelis	***
Reynolds	***
U.S. producers: Manufacturing	
Aleris	***
Gränges	***
JW Aluminum	***
Novelis	***
Reynolds	***
U.S. producers: Channels	
Aleris	***
Gränges	***
JW Aluminum	***
Novelis	***
Reynolds	***

Table continued.

Table D-4--Continued
Aluminum foil: U.S. producers' comparisons of ultra-thin by the like product factors

Item / Firm	Narratives
U.S. producers: Perceptions	
Aleris	***
Gränges	***
JW Aluminum	***
Novelis	***
Reynolds	***
U.S. producers: Price	
Aleris	***
Gränges	***
JW Aluminum	***
Novelis	***
Reynolds	***

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

Table D-5
Aluminum foil: U.S. importers' comparisons of ultra-thin by the like product factors

Item / Firm	Narratives
U.S. importers: Physical characteristics	
AKG	***
All Foils	***
Bemis	***
Berry Global	***
Commodity Foil	***
Gränges	***
Kataman	***
LLFlex	***
Medalco	***
Novolex	***
ProAmpac	***
Tekni-Plex	***
U.S. importers: Interchangeability	
AKG	***
All Foils	***
Bemis	***
Berry Global	***
Commodity Foil	***
Gränges	***
Kataman	***
LLFlex	***
Medalco	***
Novolex	***
ProAmpac	***
Tekni-Plex	***

Table continued.

Table D-5--Continued
Aluminum foil: U.S. importers' comparisons of ultra-thin by the like product factors

Item / Firm	Narratives
U.S. importers: Manufacturing	
AKG	***
Bemis	***
Berry Global	***
Gränges	***
LLFlex	***
Medalco	***
Novolex	***
ProAmpac	***
Reynolds	***
Tekni-Plex	***
U.S. importers: Channels	
AKG	***
Bemis	***
Berry Global	***
Commodity Foil	***
Gränges	***
Medalco	***
Novolex	***
ProAmpac	***
Reynolds	***
Sinobec	***
Tekni-Plex	***
Valeo	***

Table continued.

Table D-5--Continued
Aluminum foil: U.S. importers' comparisons of ultra-thin by the like product factors

Item / Firm	Narratives
U.S. importers: Perceptions	
AKG	***
Bemis	***
Berry Global	***
Gränges	***
Kataman	***
LLFlex	***
Medalco	***
Novolex	***
ProAmpac	***
Reynolds	***
Tekni-Plex	***
U.S. importers: Price	
AKG	***
All Foils	***
Bemis	***
Berry Global	***
Gränges	***
LLFlex	***
Novolex	***
ProAmpac	***
Reynolds	***
Tekni-Plex	***

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

Table D-6
Aluminum foil: U.S. producers' and U.S. importers' comparisons of in-scope ultra-thin products vs all other aluminum foil products

Factor	U.S. producers				U.S. importers			
	F	M	S	N	F	M	S	N
	Count of firms							
Physical characteristics	---	4	1	---	---	2	5	11
Interchangeability	---	1	3	---	---	2	3	10
Manufacturing	---	4	1	---	---	4	7	4
Channels	3	2	---	---	5	3	4	2
Perceptions	3	2	---	---	1	2	4	5
Price	---	2	3	---	---	4	2	8

Note: F=fully comparable; M=mostly comparable; S=somewhat comparable; N=never comparable.

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

APPENDIX E

DATA ON ALUMINUM FOIL U.S. PRODUCERS' AND U.S. IMPORTERS' CHANNELS OF DISTRIBUTION

Appendix E-1
Aluminum foil: Detailed channels of distribution U.S. producers and U.S. importers, 2017-19, January to June 2019, and January to June 2020

Item	Calendar year			January to June	
	2017	2018	2019	2019	2020
	Quantity (short tons)				
U.S. shipments to distributors by.-- U.S. producers	***	***	***	***	***
U.S. importers: Armenia	***	***	***	***	***
Brazil	***	***	***	***	***
Oman	***	***	***	***	***
Russia	***	***	***	***	***
Tukey	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All imports sources	***	***	***	***	***
Combined producers and importers	***	***	***	***	***
	Share of quantity (percent)				
U.S. shipments to distributors by.-- U.S. producers	***	***	***	***	***
U.S. importers: Armenia	***	***	***	***	***
Brazil	***	***	***	***	***
Oman	***	***	***	***	***
Russia	***	***	***	***	***
Tukey	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All imports sources	***	***	***	***	***
Combined producers and importers	***	***	***	***	***
	Ratio to overall apparent consumption (percent)				
U.S. shipments to distributors by.-- U.S. producers	***	***	***	***	***
U.S. importers: Armenia	***	***	***	***	***
Brazil	***	***	***	***	***
Oman	***	***	***	***	***
Russia	***	***	***	***	***
Tukey	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All imports sources	***	***	***	***	***
Combined producers and importers	***	***	***	***	***

Table continued.

Appendix E-1--Continued
Aluminum foil: Detailed channels of distribution U.S. producers and U.S. importers, 2017-19, January to June 2019, and January to June 2020

Item	Calendar year			January to June	
	2017	2018	2019	2019	2020
	Quantity (short tons)				
U.S. shipments to consumer packaging / converter by.-- U.S. producers	***	***	***	***	***
U.S. importers: Armenia	***	***	***	***	***
Brazil	***	***	***	***	***
Oman	***	***	***	***	***
Russia	***	***	***	***	***
Tukey	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All imports sources	***	***	***	***	***
Combined producers and importers	***	***	***	***	***
	Share of quantity (percent)				
U.S. shipments to consumer packaging / converter by.-- U.S. producers	***	***	***	***	***
U.S. importers: Armenia	***	***	***	***	***
Brazil	***	***	***	***	***
Oman	***	***	***	***	***
Russia	***	***	***	***	***
Tukey	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All imports sources	***	***	***	***	***
Combined producers and importers	***	***	***	***	***

Table continued.

Appendix E-1--Continued
Aluminum foil: Detailed channels of distribution U.S. producers and U.S. importers, 2017-19, January to June 2019, and January to June 2020

Item	Calendar year			January to June	
	2017	2018	2019	2019	2020
	Ratio to overall apparent consumption (percent)				
U.S. shipments to consumer packaging / converter by.-- U.S. producers	***	***	***	***	***
U.S. importers: Armenia	***	***	***	***	***
Brazil	***	***	***	***	***
Oman	***	***	***	***	***
Russia	***	***	***	***	***
Tukey	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All imports sources	***	***	***	***	***
Combined producers and importers	***	***	***	***	***

Table continued.

Appendix E-1--Continued
Aluminum foil: Detailed channels of distribution U.S. producers and U.S. importers, 2017-19, January to June 2019, and January to June 2020

Item	Calendar year			January to June	
	2017	2018	2019	2019	2020
	Quantity (short tons)				
U.S. shipments to household use / spoolers by.-- U.S. producers	***	***	***	***	***
U.S. importers: Armenia	***	***	***	***	***
Brazil	***	***	***	***	***
Oman	***	***	***	***	***
Russia	***	***	***	***	***
Tukey	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All imports sources	***	***	***	***	***
Combined producers and importers	***	***	***	***	***
	Share of quantity (percent)				
U.S. shipments to household use / spoolers by.-- U.S. producers	***	***	***	***	***
U.S. importers: Armenia	***	***	***	***	***
Brazil	***	***	***	***	***
Oman	***	***	***	***	***
Russia	***	***	***	***	***
Tukey	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All imports sources	***	***	***	***	***
Combined producers and importers	***	***	***	***	***
	Ratio to overall apparent consumption (percent)				
U.S. shipments to household use / spoolers by.-- U.S. producers	***	***	***	***	***
U.S. importers: Armenia	***	***	***	***	***
Brazil	***	***	***	***	***
Oman	***	***	***	***	***
Russia	***	***	***	***	***
Tukey	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All imports sources	***	***	***	***	***
Combined producers and importers	***	***	***	***	***

Table continued.

Appendix E-1--Continued
Aluminum foil: Detailed channels of distribution U.S. producers and U.S. importers, 2017-19, January to June 2019, and January to June 2020

Item	Calendar year			January to June	
	2017	2018	2019	2019	2020
	Quantity (short tons)				
U.S. shipments to industrial application by.-- U.S. producers	***	***	***	***	***
U.S. importers: Armenia	***	***	***	***	***
Brazil	***	***	***	***	***
Oman	***	***	***	***	***
Russia	***	***	***	***	***
Tukey	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All imports sources	***	***	***	***	***
Combined producers and importers	***	***	***	***	***
	Share of quantity (percent)				
U.S. shipments to industrial application by.-- U.S. producers	***	***	***	***	***
U.S. importers: Armenia	***	***	***	***	***
Brazil	***	***	***	***	***
Oman	***	***	***	***	***
Russia	***	***	***	***	***
Tukey	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All imports sources	***	***	***	***	***
Combined producers and importers	***	***	***	***	***
	Ratio to overall apparent consumption (percent)				
U.S. shipments to industrial application by.-- U.S. producers	***	***	***	***	***
U.S. importers: Armenia	***	***	***	***	***
Brazil	***	***	***	***	***
Oman	***	***	***	***	***
Russia	***	***	***	***	***
Tukey	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All imports sources	***	***	***	***	***
Combined producers and importers	***	***	***	***	***

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

APPENDIX F

Narrative Responses to the Lost Sales/Lost Revenue Questionnaire

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