

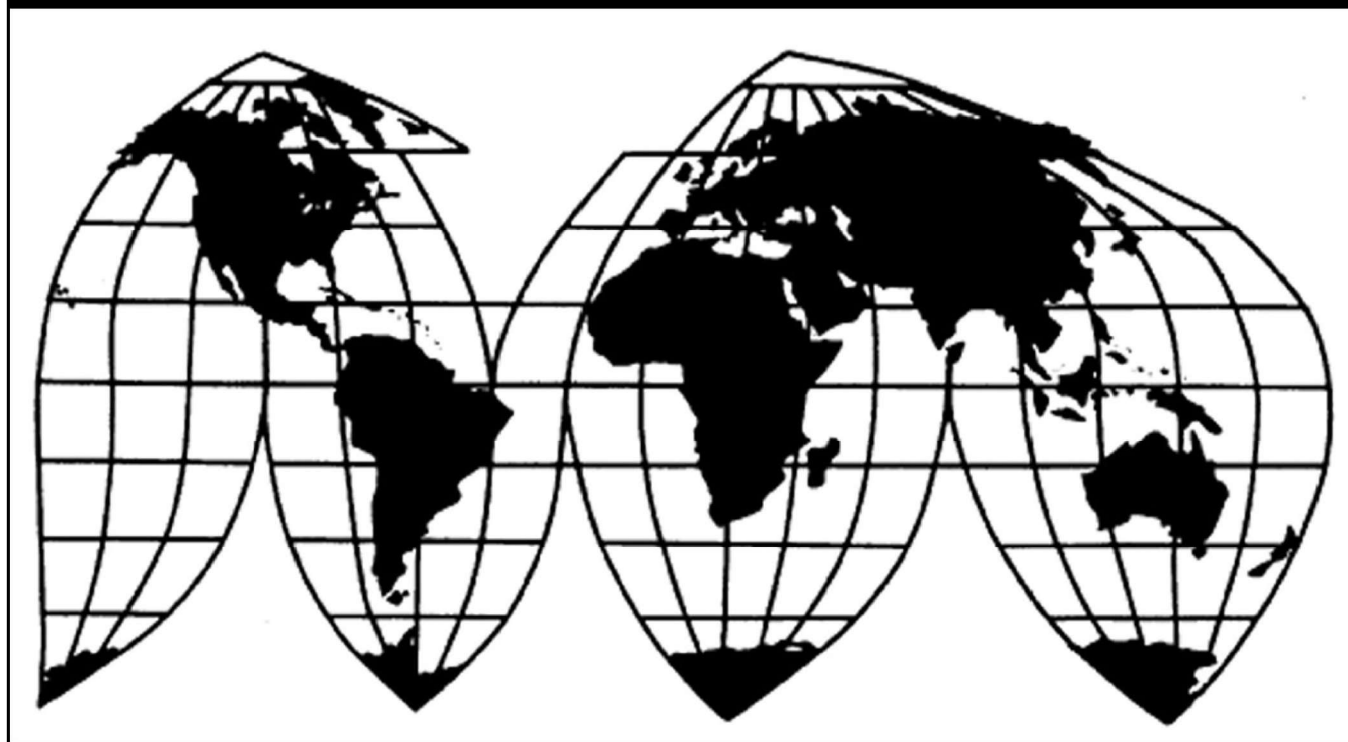
Aluminum Foil from Armenia, Brazil, Oman, Russia, and Turkey

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

Publication 5235

November 2021

U.S. International Trade Commission



Washington, DC 20436

U.S. International Trade Commission

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Note.—Information that would reveal confidential operations of individual concerns may not be published.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

UNITED STATES INTERNATIONAL TRADE COMMISSION

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

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

DETERMINATIONS

On the basis of the record¹ developed in the subject investigations, the United States International Trade Commission (“Commission”) determines, pursuant to the Tariff Act of 1930 (“the Act”), that an industry in the United States is materially injured by reason of imports of aluminum foil from Armenia, Brazil, Oman, Russia, and Turkey, 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, that have been found by the U.S. Department of Commerce (“Commerce”) to be sold in the United States at less than fair value (“LTFV”), and to be subsidized by the governments of Oman and Turkey.

BACKGROUND

The Commission instituted these investigations effective September 29, 2020, following receipt of petitions filed with the Commission and Commerce 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. The final phase of the investigations was scheduled by the Commission following notification of preliminary determinations by Commerce that imports of aluminum foil from Oman and Turkey were subsidized within the meaning of section 703(b) of the Act (19 U.S.C. 1671b(b)) and imports of aluminum foil from Armenia, Brazil, Oman, Russia, and Turkey were sold at LTFV within the meaning of 733(b) of the Act (19 U.S.C. 1673b(b)). Notice of the scheduling of the final phase of the Commission’s investigations and of a public hearing to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* on May 25, 2021 (86 FR 28146). In light of the restrictions on access to the Commission building due to the COVID–19 pandemic, the

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

Commission conducted its hearing through written testimony and video conference on September 14, 2021. All persons who requested the opportunity were permitted to participate.

Views of the Commission

Based on the record in the final phase of these investigations, we determine that an industry in the United States is materially injured by reason of imports of aluminum foil from Armenia, Brazil, Oman, Russia, and Turkey found by the U.S. Department of Commerce (“Commerce”) to be sold in the United States at less than fair value (“LTFV”) and imports of aluminum foil from Oman and Turkey found by Commerce to be subsidized by the governments of Oman and Turkey.

I. Background

The Aluminum Association Trade Enforcement Working Group and its individual members, U.S. producers of aluminum foil (collectively “Petitioners”), filed the petitions on September 29, 2020.¹ Petitioners appeared at the hearing represented by counsel and submitted prehearing and posthearing briefs, and final comments.²

A prehearing brief was filed jointly on behalf of Amcor Flexibles North America and Bemis Company Inc. (“Bemis”), Goodman Manufacturing Company L.P. (“Goodman”), Trinidad Benham Corporation (“Trinidad”), ProAmpac Intermediate, Inc., Ampac Holdings, LLC, and Jen-Coat, Inc. DBA Prolamina (collectively, “ProAmpac”), importers of subject merchandise; Adams Thermal Systems, Inc. (“Adams”), a purchaser of subject merchandise; Companhia Brasileira de Alumínio (“CBA Alumínio”) and CBA Itapissuma Ltda (“CBA Itapissuma”) (collectively, “CBA”), producers and exporters of subject merchandise from Brazil; Istanbul Ferrous and Non-Ferrous Metals Exporters’ Association and its members Assan Alüminyum Sanayi ve Ticaret A.S. (“Assan”), Asaş Alüminyum Sanayi ve Ticaret Anonim Şirketi (“Asas”), and Panda Alüminyum Anonim Şirketi (“Panda”) (collectively, “Turkish Respondents”), producers and exporters of subject merchandise from Turkey; and Rusal Armenal Closed Joint Stock Company and Rusal Sayanal and JSC Ural Foil, Joint Stock Company (collectively, “Rusal”), producers and exporters of subject merchandise from Armenia and Russia (collectively, “Joint Respondents”).³ Oman

¹ The individual members of The Aluminum Association Trade Enforcement Working Group are Gränges Americas, Inc. (“Gränges”), JW Aluminum Company (“JW Aluminum”) and Novelis Corporation (“Novelis”). Confidential Report (“CR”) at I-1, Public Report (“PR”) at I-1.

² In light of the restrictions on access to the Commission building due to the COVID-19 pandemic, the Commission conducted the hearing through video conference, as set forth in procedures provided to the parties and announced on its website.

³ ProAmpac, Rusal, CBA, Turkish Respondents, and Berry Global, Inc., joined the Joint Respondents on the prehearing brief. OARC submitted an individual prehearing brief incorporating the Joint Respondents Prehearing Brief.

Aluminum Rolling Company LLC (“OARC”), a producer and exporter of subject merchandise from Oman, submitted an individual prehearing brief incorporating by reference the arguments made in Joint Respondents’ Prehearing Brief.

ProAmpac, CBA, OARC, Turkish Respondents, Amcor, Goodman, Adams, Trinidad, and Rusal appeared at the hearing accompanied by counsel. Goodman, Bemis, and Adams jointly filed a posthearing brief and Rusal, OARC, ProAmpac, Trinidad, and Turkish Producers individually filed posthearing briefs. Final comments were filed jointly by Goodman, Bemis, and Adams and individually filed by Rusal, OARC, and Trinidad.

U.S. industry data are based on the questionnaire responses from five U.S. producers that accounted for *** domestic production of aluminum foil in 2020.⁴ U.S. import data are based on official import statistics from Commerce and from the questionnaire responses of 42 U.S. importers; these firms’ imports of aluminum foil accounted for *** percent of U.S. imports from Armenia, *** percent of U.S. imports from Brazil, *** percent of U.S. imports from Oman, *** percent of U.S. imports from Russia, *** percent of U.S. imports from Turkey, and *** percent of imports from all other sources in 2020, based on official Commerce import statistics.⁵ The Commission received questionnaire responses from foreign producers in each of the five subject countries. Exports to the United States by these foreign producers accounted for approximately *** percent of subject imports from each of the subject countries, and their reported production accounted for *** of overall production of aluminum foil in each of the subject countries.⁶

⁴ CR/PR at III-1 n.1.

⁵ CR/PR at IV-1 to IV-2.

⁶ 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 *** percent of subject imports from Armenia in 2020; Rusal estimated that its reported production accounts for approximately *** percent of overall production of aluminum foil in Armenia. CR/PR at VII-3.

The Commission received responses to its questionnaires from two foreign producers and one exporter of aluminum foil in Brazil (CBA Alumínio, CBA Itapissuma, and MG NE Hamburg Brazil) whose exports to the United States accounted for approximately *** percent of subject imports from Brazil in 2020; the two 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, OARC, whose exports to the United States accounted for approximately *** percent of subject imports from Oman in 2020; OARC estimated that its reported production accounts for approximately *** percent of overall production of aluminum foil in Oman. CR/PR at VII-16-17.

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 *** percent of subject imports from Russia in 2020; the two (Continued...)

II. Domestic Like Product

A. In General

In determining whether an industry in the United States is materially injured or threatened with material injury by reason of imports of subject merchandise, the Commission first defines the “domestic like product” and the “industry.”⁷ Section 771(4)(A) of the Tariff Act of 1930, as amended (“the Tariff Act”), defines the relevant domestic industry as the “producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product.”⁸ In turn, the Tariff Act defines “domestic like product” as “a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation.”⁹

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.¹⁰ Therefore, Commerce’s determination as to the scope of the imported merchandise that is subsidized and/or sold at less than fair value is “necessarily the starting point of the Commission’s like product analysis.”¹¹ The Commission then defines the domestic like product

(...Continued)

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 and one exporter of aluminum foil in Turkey (Asas, Assan, Panda, and Mg NE Hamburg Turkey) whose exports to the United States accounted for approximately *** percent of subject imports from Turkey in 2020; 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.

⁷ 19 U.S.C. § 1677(4)(A).

⁸ 19 U.S.C. § 1677(4)(A).

⁹ 19 U.S.C. § 1677(10).

¹⁰ 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).

¹¹ *Cleo Inc. v. United States*, 501 F.3d 1291, 1298 (Fed. Cir. 2007); *see also Hitachi Metals, Ltd. v. United States*, Case No. 19-1289, slip op. at 8-9 (Fed. Circ. Feb. 7, 2020) (the statute requires the

Commission to start with Commerce’s subject merchandise in reaching its own like product determination).

in light of the imported articles Commerce has identified.¹² The decision regarding the appropriate domestic like product(s) in an investigation is a factual determination, and the Commission has applied the statutory standard of “like” or “most similar in characteristics and uses” on a case-by-case basis.¹³ No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.¹⁴ The Commission looks for clear dividing lines among possible like products and disregards minor variations.¹⁵

B. Product Description

In its final antidumping and countervailing duty determinations with respect to imports of aluminum foil, 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,

¹² *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, 748–52 (Ct. Int’l Trade 1990), *aff’d*, 938 F.2d 1278 (Fed. Cir. 1991) (affirming the Commission’s determination defining six like products in investigations where Commerce found five classes or kinds).

¹³ *See, e.g., Cleo Inc. v. United States*, 501 F.3d 1291, 1299 (Fed. Cir. 2007); *NEC Corp. v. Department of Commerce*, 36 F. Supp. 2d 380, 383 (Ct. Int’l Trade 1998); *Nippon Steel Corp. v. United States*, 19 CIT 450, 455 (1995); *Torrington Co. v. United States*, 747 F. Supp. 744, 749 n.3 (Ct. Int’l Trade 1990), *aff’d*, 938 F.2d 1278 (Fed. Cir. 1991) (“every like product determination ‘must be made on the particular record at issue’ and the ‘unique facts of each case’”). The Commission generally considers a number of factors, including the following: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) customer and producer perceptions of the products; (5) common manufacturing facilities, production processes, and production employees; and, where appropriate, (6) price. *See Nippon*, 19 CIT at 455 n.4; *Timken Co. v. United States*, 913 F. Supp. 580, 584 (Ct. Int’l Trade 1996).

¹⁴ *See, e.g., S. Rep. No. 96-249 at 90-91 (1979).*

¹⁵ *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.”).

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 this investigation 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 this proceeding may also be entered into the United States under HTSUS 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 this investigation is dispositive.¹⁶

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

¹⁶ *Certain Aluminum Foil From the Republic of Armenia: Final Affirmative Determination of Sales at Less Than Fair Value*, 86 Fed. Reg. 52882 (Sept. 23, 2021); *Certain Aluminum Foil From Brazil: Final Affirmative Determination of Sales at Less Than Fair Value*, 86 Fed. Reg. 52886 (Sept. 23, 2021); *Certain Aluminum Foil From the Sultanate of Oman: Final Affirmative Countervailing Duty Determination*, 86 Fed. Reg. 52888 (Sept. 23, 2021); *Certain Aluminum Foil From the Sultanate of Oman: Final Affirmative Determination of Sales at Less Than Fair Value*, 86 Fed. Reg. 52876 (Sept. 23, 2021); *Certain Aluminum Foil From the Russian Federation: Final Affirmative Determination of Sales at Less Than Fair Value*, 86 Fed. Reg. 52878 (Sept. 23, 2021); *Certain Aluminum Foil From the Republic of Turkey: Final Affirmative Countervailing Duty Determination*, 86 Fed. Reg. 52884 (Sept. 23, 2021); *Certain Aluminum Foil From the Republic of Turkey: Final Affirmative Determination of Sales at Less Than Fair Value*, 86 Fed. Reg. 52880 (Sept. 23, 2021). The scope definition has not changed since the preliminary determinations and is the same for all investigations.

between 92 and 99 percent aluminum.¹⁷ It is commonly produced using 1XXX, 3XXX, and 8XXX series alloys.¹⁸ Aluminum foil can be produced to meet the requirements of various international standard specifications, including ASTM International (“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.¹⁹ 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.²⁰ 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.²¹

C. Arguments of the Parties

Domestic Producers argue that the Commission should define a single domestic like product, coextensive with the scope of investigations.²² No respondent party challenges the definition of the domestic like product from the preliminary determinations.²³

¹⁷ CR/PR at I-14.

¹⁸ CR/PR at I-14. 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.45-47 and Table I-9.

¹⁹ CR/PR at I-14.

²⁰ CR/PR at I-16.

²¹ CR/PR at I-16.

²² Petitioners Prehearing Brief at 6.

²³ Joint Respondents Prehearing Brief at 5.

D. Domestic Like Product Analysis

The record in the final phase of these investigations does not contain any new information that would warrant reconsideration of the Commission’s definition of a single domestic like product in the preliminary determinations.²⁴ Moreover, no party has argued that the Commission should adopt a definition of the domestic like product that is different from that in the preliminary determinations. Accordingly, we define a single domestic like product consisting of all aluminum foil, coextensive with the scope.

III. 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.”²⁵ In defining the domestic industry, the Commission’s general practice has been to include in the industry producers of all domestic production of the like product, whether toll-produced, captively consumed, or sold in the domestic merchant market.

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

²⁴ In the preliminary determinations, the Commission defined a single domestic like product consisting of aluminum foil, coextensive with the scope of investigations. It considered, but rejected, defining two domestic like products: (1) household/container aluminum foil and (2) industrial/converter aluminum foil. Rusal argued that household/container foil was distinct from industrial and converter foil, but the Commission found that the record did not support Rusal’s argument. The Commission found there was not a clear dividing line between these product categories with respect to any of the like product factors, and there appeared to be overlap between the product categories as to their physical characteristics and uses, their channels of distribution, and their manufacturing processes. *Aluminum Foil from Armenia, Brazil, Oman, Russia, and Turkey*, Inv. Nos. 701-TA-658-659 and 731-TA-1538-1542 (Preliminary), USITC Pub. 5138 (Nov. 2020) at 10-12 (“*Preliminary Determinations*”).

²⁵ 19 U.S.C. § 1677(4)(A).

or which are themselves importers.²⁶ Exclusion of such a producer is within the Commission's discretion based upon the facts presented in each investigation.²⁷

A. Arguments of the Parties

Petitioners contend that although *** qualify for possible exclusion under the related parties provision, the Commission should not exclude them from the domestic industry because the primary interest of both domestic producers is domestic production rather than importation.²⁸ None of the respondents have raised any issues with regard to the definition of the domestic industry.²⁹

B. Analysis

Domestic producer *** is subject to possible exclusion pursuant to the related parties provision because it imported subject merchandise during the January 2018 – March 2021 period of investigation ("POI").³⁰ Therefore, the Commission must consider whether appropriate circumstances exist to exclude this domestic producer from the domestic industry.

²⁶ 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).

²⁷ The primary factors the Commission has examined in deciding whether appropriate circumstances exist to exclude a related party include the following:

- (1) the percentage of domestic production attributable to the importing producer;
- (2) the reason the U.S. producer has decided to import the product subject to investigation (whether the firm benefits from the LTFV sales or subsidies or whether the firm must import in order to enable it to continue production and compete in the U.S. market);
- (3) whether inclusion or exclusion of the related party will skew the data for the rest of the industry;
- (4) the ratio of import shipments to U.S. production for the imported product; and
- (5) whether the primary interest of the importing producer lies in domestic production or importation. *Changzhou Trina Solar Energy Co. v. USITC*, 100 F. Supp.3d 1314, 1326-31 (Ct. Int'l. Trade 2015); see also *Torrington Co. v. United States*, 790 F. Supp. at 1168.

²⁸ Petitioners Prehearing Brief at 7-9.

²⁹ Joint Respondents Prehearing Brief at 13.

³⁰ CR/PR at Table III-13. Two other domestic producers, ***, are affiliated with ***, a producer of subject merchandise in ***. CR/PR at Table III-2. However, the information in the record indicates that *** did not export subject merchandise to the United States during the POI. See CR/PR at III-3 at n.3 and VII-9 (indicating that the three *** firms that submitted foreign producer questionnaires, which did not include ***, accounted for all or nearly all exports of subject merchandise from *** in 2020). (Continued...)

*** accounted for *** percent of U.S. production in 2020, and was the *** largest domestic producer.³¹ The ratio of its subject imports to U.S. production was *** percent in 2018, *** percent in 2019, *** percent in 2020, *** percent in interim 2020, and *** percent in interim 2021.³² *** indicated that ***.³³ It *** the petitions.³⁴

In view of the fact that *** importation of subject merchandise was small relative to its domestic production, its primary interest appears to be in domestic production. 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.

(...Continued)

Because the record does not indicate that *** exported subject merchandise to the United States, or that *** and *** imported subject merchandise from their affiliated producer in *** during the POI, we find that neither *** nor *** qualify for possible exclusion under the related parties provision.

³¹ CR/PR at Table III-1.

³² CR/PR at Table III-12.

³³ CR/PR at Table III-13.

³⁴ CR/PR at Table III-1.

IV. Cumulation³⁵

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

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

³⁵ Pursuant to Section 771(24) of the Tariff Act, imports from a subject country of merchandise corresponding to a domestic like product that account for less than 3 percent of all such merchandise imported into the United States during the most recent 12 months for which data are available preceding the filing of the petition shall be deemed negligible. 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 statute further provides that subject imports from a single country which comprise less than 3 percent of total such imports of the product may not be considered negligible if there are several countries subject to investigation with negligible imports and the sum of such imports from all those countries collectively accounts for more than 7 percent of the volume of all such merchandise imported into the United States. 19 U.S.C. § 1677(24)(A)(ii). In the case of countervailing duty investigations involving developing countries (as designated by the United States Trade Representative), the statute indicates that the negligibility limits are 4 percent and 9 percent, rather than 3 percent and 7 percent. 19 U.S.C. § 1677(24)(B).

Imports from each subject country exceed the applicable statutory negligibility threshold. Based on the 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, subject imports from Oman accounted for *** percent, subject imports from Russia accounted for *** percent, and subject imports from Turkey accounted for *** percent. CR at Table IV-3. The volume of subject imports from Oman and Turkey, respectively, is the same with respect to each of their antidumping and countervailing duty investigations. Consequently, we find that subject imports from Armenia, Brazil, Oman, Russia, and Turkey, considered individually, are not negligible.

(4) whether the subject imports are simultaneously present in the market.³⁶

While no single factor is necessarily determinative, and the list of factors is not exclusive, these factors are intended to provide the Commission with a framework for determining whether the subject imports compete with each other and with the domestic like product.³⁷ Only a “reasonable overlap” of competition is required.³⁸

Petitioners argue that the Commission should cumulate subject imports from all five countries for its material injury analysis because the statutory criteria are met and the record evidence show there is a reasonable overlap of competition.³⁹

OARC argues that the Commission should not cumulate subject imports from Oman with imports from the other subject countries because these subject imports do not meet the requirements for cumulation under the statute. It alleges that there is no meaningful overlap of competition between subject imports from Oman and subject imports from other countries because subject imports from Oman consist of only one type of aluminum foil, fin stock, which is sold primarily to one U.S. customer, and thus differ from other subject imports in terms of fungibility, customers, and geographic markets.⁴⁰

The statutory threshold for cumulation is satisfied in these investigations because Petitioners filed the antidumping and countervailing duty petitions with respect to all five countries on the same day, September 29, 2020.⁴¹

³⁶ See *Certain Cast-Iron Pipe Fittings from Brazil, the Republic of Korea, and Taiwan*, Inv. Nos. 731-TA-278-280 (Final), USITC Pub. 1845 (May 1986), *aff'd*, *Fundicao Tupy, S.A. v. United States*, 678 F. Supp. 898 (Ct. Int'l Trade), *aff'd*, 859 F.2d 915 (Fed. Cir. 1988).

³⁷ See, e.g., *Wieland Werke, AG v. United States*, 718 F. Supp. 50 (Ct. Int'l Trade 1989).

³⁸ The Statement of Administrative Action (SAA) to the Uruguay Round Agreements Act (URAA), expressly states that “the new section will not affect current Commission practice under which the statutory requirement is satisfied if there is a reasonable overlap of competition.” H.R. Rep. No. 103-316, Vol. I at 848 (1994) (*citing Fundicao Tupy, S.A. v. United States*, 678 F. Supp. at 902; *see Goss Graphic Sys., Inc. v. United States*, 33 F. Supp. 2d 1082, 1087 (Ct. Int'l Trade 1998) (“cumulation does not require two products to be highly fungible”); *Wieland Werke, AG*, 718 F. Supp. at 52 (“Completely overlapping markets are not required.”)).

³⁹ Petitioners Prehearing Brief at 12-16.

⁴⁰ OARC Prehearing Brief at 14-17 and Exhibit 1; OARC Posthearing Brief at 2-3.

⁴¹ None of the statutory exceptions to cumulation applies.

We also find there is 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 the following reasons.

Fungibility. All responding U.S. producers reported that the domestic like product and imports from each subject country were always interchangeable and that imports from each subject country were always or frequently interchangeable with each other.⁴² In every comparison between the domestic like product and imports from each subject country, with one exception, and between imports from each subject country, a majority of importers reported that products were always or frequently interchangeable.⁴³ A majority of purchasers reported that the domestic like product and imports from Brazil, Russia, and Turkey were always or frequently interchangeable, while purchasers were evenly split in comparisons between the domestic like product and subject imports from Oman, and one purchaser reported that the domestic like product was only sometimes comparable to subject imports from Armenia.⁴⁴ Additionally, most purchasers reported that domestically produced aluminum foil and imports from each subject country are comparable with respect to most purchasing factors.⁴⁵

Moreover, 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 Brazil shipped aluminum foil in all five thickness categories surveyed: ultra-thin, thin, standard, heavy, and extra-heavy. U.S. importers of subject merchandise from the other four subject countries shipped extra-heavy aluminum foil, and U.S. importers of subject merchandise from Armenia, Russia, and Turkey also shipped standard aluminum foil. Extra-heavy and standard were the two thickness categories that together accounted for the largest share of the domestic industry's U.S. shipments and U.S. shipments of imports from all five subject countries.⁴⁶

The record also shows that, contrary to OARC's argument, there was substantial overlap between subject imports from Oman, imports from other subject countries, and the domestic like product. All domestic producers, seven of nine importers, and two of four purchasers

⁴² CR/PR at Table II-11.

⁴³ CR/PR at Table II-12. In comparing the domestic like product with subject imports from Armenia, half of responding importers reported that the products were always or frequently interchangeable and half reported that they were sometimes or never interchangeable. *Id.*

⁴⁴ CR/PR at Table II-13.

⁴⁵ CR/PR at Table II-10.

⁴⁶ CR/PR at IV-12 and Table IV-4.

reported that subject imports from Oman, consisting almost exclusively of fin stock (included within the extra-heavy thickness category), and the domestic like product were always or frequently interchangeable.⁴⁷ Similarly, most purchasers reported that subject imports from Oman and the domestic like product are comparable with respect to most purchasing factors, including product range.⁴⁸ Consistent with these responses, the record shows that the domestic industry's U.S. shipments of fin stock were substantial throughout the POI, and generally stable as a share of the industry's total shipments, declining slightly from 2019 to 2020 but higher in January-March 2021 compared to January-March 2020.⁴⁹

Furthermore, all U.S. producers and importers, and half or more of purchasers, reported that subject imports from Oman were always or frequently interchangeable with imports from each of the other subject countries.⁵⁰ Consistent with these responses, the record shows that there were substantial imports of fin stock from *** during the POI.⁵¹ Based on the foregoing considerations, we find that subject imports from Oman are fungible with imports from other subject countries and the domestic like product.

Channels of Distribution. U.S. producers made most of their U.S. shipments to industrial applications, consumer packaging/converters, and consumer household use/spoolers. U.S. importers of subject merchandise from Turkey made the majority of their U.S. shipments of subject merchandise to consumer packaging/converters and consumer household use/spoolers, while importers of aluminum foil from the other subject countries (except Oman) made the majority of their U.S. shipments of subject merchandise to consumer household use/spoolers. U.S. importers of subject merchandise from Oman made *** of their U.S. shipments to industrial applications, a channel in which the domestic like product and imports from each subject country were also present.⁵²

Geographic Overlap. U.S. producers and U.S. importers from Armenia, Brazil, and Turkey reported selling aluminum foil in all regions of the contiguous United States during the POI.⁵³ U.S. importers of aluminum foil from Oman reported sales in the Southeast, Central Southwest, and Pacific Coast regions.⁵⁴ According to official U.S. import statistics, aluminum

⁴⁷ CR/PR at Tables II-11 to II-13 and Table E-17.

⁴⁸ CR/PR at Table II-10.

⁴⁹ CR/PR at Table E-14.

⁵⁰ CR/PR at Tables II-11 to II-13.

⁵¹ CR/PR at Tables E-16, E-19. There were no subject imports of fin stock from ***. See CR/PR at Tables E-15 and E-18.

⁵² CR/PR at II-2 and Table II-1.

⁵³ CR/PR at II-2 and Table II-1.

⁵⁴ CR/PR at Table II-2.

foil from each subject source entered through the Eastern region in 2020. In addition, subject imports from Armenia entered through the Northern border; subject imports from Brazil entered through the Northern and Southern borders; subject imports from Oman entered through the Southern and Western borders; and subject imports from Turkey entered through the Northern, Southern, and Western borders.⁵⁵

Simultaneous Presence in Market. With respect to the 41-month period from January 2018 through May 2021, subject imports from Armenia and Oman were present in 31 of those months; subject imports from Brazil and Turkey were present in all 41 months; and subject imports from Russia were present in 37 of those months.⁵⁶

Conclusion. We find that imports from each subject country and the domestic like product are fungible, were simultaneously present in the U.S. market during the POI, and overlap with respect to channels of distribution and geographic markets. Based on these considerations, we find that there is a reasonable overlap of competition between and among the domestic like product and imports from each subject country. Accordingly, we cumulate subject imports from Armenia, Brazil, Oman, Russia, and Turkey for purposes of our material injury analysis.

V. Material Injury by Reason of Subject Imports

Based on the record in the final phase of this investigation, we determine 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 Commerce has found to be sold in the United States at less than fair value and imports of aluminum foil from Oman and Turkey that Commerce has found to be subsidized by the governments of Oman and Turkey.

A. Legal Standards

In the final phase of antidumping and countervailing duty investigations, the Commission determines whether an industry in the United States is materially injured or threatened with material injury by reason of the imports under investigation.⁵⁷ 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

⁵⁵ CR/PR at IV-15 and Table IV-5.

⁵⁶ CR/PR at IV-17 and Table IV-6.

⁵⁷ 19 U.S.C. §§ 1671d(b), 1673d(b).

like product, but only in the context of U.S. production operations.⁵⁸ The statute defines “material injury” as “harm which is not inconsequential, immaterial, or unimportant.”⁵⁹ In assessing whether the domestic industry is materially injured by reason of subject imports, we consider all relevant economic factors that bear on the state of the industry in the United States.⁶⁰ 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.”⁶¹

Although the statute requires the Commission to determine whether the domestic industry is “materially injured or threatened with material injury by reason of” unfairly traded imports,⁶² it does not define the phrase “by reason of,” indicating that this aspect of the injury analysis is left to the Commission’s reasonable exercise of its discretion.⁶³ 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.⁶⁴

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

⁵⁸ 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).

⁵⁹ 19 U.S.C. § 1677(7)(A).

⁶⁰ 19 U.S.C. § 1677(7)(C)(iii).

⁶¹ 19 U.S.C. § 1677(7)(C)(iii).

⁶² 19 U.S.C. §§ 1671d(b), 1673d(b).

⁶³ *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).

⁶⁴ The Federal Circuit, in addressing the causation standard of the statute, observed that “[a]s long as its effects are not merely incidental, tangential, or trivial, the foreign product sold at less than fair value meets the causation requirement.” *Nippon Steel Corp. v. USITC*, 345 F.3d 1379, 1384 (Fed. Cir. 2003). This was further ratified in *Mittal Steel Point Lisas Ltd. v. United States*, 542 F.3d 867, 873 (Fed. Cir. 2008), where the Federal Circuit, quoting *Gerald Metals, Inc. v. United States*, 132 F.3d 716, 722 (Fed. Cir. 1997), stated that “this court requires evidence in the record ‘to show that the harm occurred ‘by reason of’ the LTFV imports, not by reason of a minimal or tangential contribution to material harm caused by LTFV goods.’” *See also Nippon Steel Corp. v. United States*, 458 F.3d 1345, 1357 (Fed. Cir. 2006); *Taiwan Semiconductor Industry Ass’n v. USITC*, 266 F.3d 1339, 1345 (Fed. Cir. 2001).

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.⁶⁵ In performing its examination, however, the Commission need not isolate the injury caused by other factors from injury caused by unfairly traded imports.⁶⁶ 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.⁶⁷ It is clear that the existence of injury caused by other factors does not compel a negative determination.⁶⁸

⁶⁵ 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.

⁶⁶ 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.”).

⁶⁷ S. Rep. 96-249 at 74-75; H.R. Rep. 96-317 at 47.

⁶⁸ 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.”).

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.”⁶⁹ The Commission ensures that it has “evidence in the record” to “show that the harm occurred ‘by reason of’ the LTFV imports,” and that it is “not attributing injury from other sources to the subject imports.”⁷⁰ The Federal Circuit has examined and affirmed various Commission methodologies and has disavowed “rigid adherence to a specific formula.”⁷¹

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.⁷² Congress has delegated this factual finding to the Commission because of the agency’s institutional expertise in resolving injury issues.⁷³

B. Conditions of Competition and the Business Cycle

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

⁶⁹ *Mittal Steel*, 542 F.3d at 876 & 878; *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*.

⁷⁰ *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.

⁷¹ *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.”).

⁷² We provide in our discussion below a full analysis of other factors alleged to have caused any material injury experienced by the domestic industry.

⁷³ *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 first consider the applicability of the statutory captive production provision.⁷⁴

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 during the POI, and commercial shipments accounted for between *** percent and *** percent of domestic producers' U.S. shipments during this period.⁷⁵ As both shares of the market constitute significant portions of the market, we determine that the threshold criterion for application of the captive production provision has been met.

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 is in fact sold in the merchant market.⁷⁶ Although U.S. producers reported internal consumption of aluminum foil for the production of downstream aluminum foil, no U.S. producer reported diverting aluminum foil intended for internal consumption to the merchant market.⁷⁷ Thus, we find that this criterion is satisfied.

⁷⁴ 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.

⁷⁵ CR/PR at Table III-8.

⁷⁶ 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-829-40 (Final) (Remand), USITC Pub. 3691 at 2 & n.19 (May 2004).

⁷⁷ CR/PR at III-17.

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.⁷⁸ Aluminum foil reportedly comprises *** percent of the finished cost of small reels of aluminum foil produced by ***.⁷⁹ *** also produces other downstream products, such as aluminum food containers. Aluminum foil accounts for *** percent by quantity and *** percent by value of the aluminum food containers.⁸⁰ Because the domestic like product is the predominant material input into both downstream products, we find that the second statutory criterion is satisfied.

We conclude that the criteria for application of the captive production provision are satisfied in these investigations. Accordingly, we will 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 ducting, metal packaging, HVAC systems, as well as uses in aerospace and automotive production.⁸¹ Different applications require different types of aluminum foil (*e.g.*, extra-thin/thin foil for flexible packaging for food/pharmaceuticals; standard foil for household foil products; heavy/extra-heavy duty foil also for household applications requiring extra strength and tear resistance such as for baking, grilling, and storage; extra-heavy duty for some packaging applications and fin stock, including HVAC).⁸²

Reported cost shares of foil in end-use products varied widely, ranging from 100 percent for food and beverage containers to 2.0 percent in aerospace production.⁸³ The market for aluminum foil is subject to seasonal shifts depending on end-use products; aluminum foil that is

⁷⁸ 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 at 17 n.103 (October 2008); *Polyethylene Terephthalate Film, Sheet, and Strip from India and Taiwan*, Inv. Nos. 701-TA-415 and 731-TA-933-934 (Final), USITC Pub. 3518 at 11 & n.51 (June 2002). 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-1015-16 (Final), USITC Pub. 3604 at 15 n.69 (June 2003).

⁷⁹ CR/PR at III-18 and n.24.

⁸⁰ CR/PR at III-18 and n.25.

⁸¹ CR/PR at II-14.

⁸² CR/PR at I-16 nn.51-55 and Table I-9.

⁸³ CR/PR at II-14.

used in the construction industry has periods of high demand in spring and summer when weather conditions generally favor construction activity, while aluminum foil used in food packaging peaks around certain holidays, such as Christmas, Easter, and Independence Day.⁸⁴

Apparent U.S. consumption in the merchant market declined steadily in each year of the POI from 2018 to 2020, for an overall decline of *** percent during the period; apparent U.S. consumption recovered somewhat between interim periods, and was *** percent higher in interim 2021 than in interim 2020.⁸⁵ The COVID-19 pandemic reportedly reduced overall demand for aluminum foil and contributed to lower apparent U.S. consumption in 2020, particularly in the second quarter, although demand for some aluminum foil products, in particular, household foil, increased as consumers spent more time at home.⁸⁶

3. Supply Conditions

The domestic industry was the largest source of supply to the U.S. market throughout the POI. The industry's share of apparent U.S. consumption in the merchant market decreased during the period, from *** percent in 2018 to *** percent in 2019 and *** percent in 2020.⁸⁷ The industry's share of apparent U.S. consumption in the merchant market was *** percent in interim 2021, down from *** percent in interim 2020.⁸⁸

⁸⁴ CR/PR at II-14.

⁸⁵ CR/PR at Table C-2. In the merchant market, apparent U.S. consumption of aluminum was *** short tons in 2018, *** short tons in 2019, *** short tons in 2020, *** short tons in interim 2020, and *** short tons in interim 2021. CR/PR at Table IV-9.

Apparent U.S. consumption in the total market followed similar trends. Apparent U.S. consumption in the total market declined steadily in each year of the POI from 2018 to 2020, and declined overall by 6.3 percent; it recovered somewhat between interim periods and was 4.7 percent higher in interim 2021 than in interim 2020. In the total market, apparent U.S. consumption of aluminum foil was 596,905 short tons in 2018, 582,844 short tons in 2019, 559,460 short tons in 2020, 142,185 short tons in interim 2020, and 148,915 short tons in interim 2021. CR/PR at Table IV-7.

The Commission notes that a majority or plurality of U.S. producers, importers and purchasers reported an increase in U.S. demand for aluminum foil since January 1, 2018. CR/PR at Table II-4.

⁸⁶ CR/PR at II-10 to II-11 and VII-30 n.18; see Hearing Transcript at 232, 263 (Walters) and 257-259 (Nolan).

⁸⁷ CR/PR at Table IV-10. Thus, the domestic industry's share of apparent U.S. consumption in the merchant market declined *** percentage points from 2018 to 2020. The domestic industry's share of the total U.S. market for aluminum foil was 76.0 percent in 2018, 72.1 percent in 2019 and 2020, and was 75.4 percent in interim 2020 and 68.7 percent in interim 2021. CR/PR at Table IV-8. Accordingly, the domestic industry's share of the total U.S. market declined 3.9 percentage points from 2018 to 2020, and was 6.7 percentage points lower in interim 2021 than in interim 2020.

⁸⁸ CR/PR at Table IV-10. Thus, the domestic industry's share of apparent U.S. consumption in the merchant market was *** percentage points lower in interim 2021 than in interim 2020.

By the end of the POI, the domestic industry consisted of four large producers: Gränges, Novelis, Reynolds, and JW Aluminum.⁸⁹ As discussed above, *** internally consumes all of its aluminum foil production to produce downstream products.⁹⁰ The domestic industry expanded its overall capacity from 2018 to 2020.⁹¹ Specifically, Gränges invested over \$*** million to expand its capacity after the imposition of antidumping and countervailing duty orders on aluminum foil from China in April 2018, opening additional foil rolling operations in its Newport, Arkansas facility and expanding capacity in its Huntingdon, Tennessee facility.⁹² Reynolds invested in a new separator.⁹³ And in 2018 and 2019, JW Aluminum invested \$24 million for improvements to its foil operations, including \$*** in its foil production facility in St. Louis, Missouri,⁹⁴ a facility which it closed in May 2020, in addition to its Williamsport, Pennsylvania, which it closed in January 2021, allegedly due to ***.⁹⁵

The domestic industry supplied aluminum foil in all of the surveyed thickness categories, with *** percent of the domestic industry's U.S. shipments consisting of extra-heavy aluminum foil and *** percent of its U.S. shipments consisted of standard aluminum foil in 2020.⁹⁶ The domestic industry's U.S. shipments of aluminum foil corresponding to the ultra-thin, thin, and heavy thickness categories were significant within their respective categories, but comparatively smaller.⁹⁷

U.S. shipments of cumulated subject imports in the merchant market sharply increased from 2018 to 2019, after the imposition of antidumping and countervailing duties orders on aluminum foil from China in April 2018, and became the second largest source of supply during the POI, as nonsubject imports from China retreated from the market.⁹⁸ Cumulated subject imports as a share of apparent U.S. consumption in the merchant market increased from *** percent in 2018 to *** percent in 2019, before declining to *** percent in 2020, a level ***

⁸⁹ CR/PR at Table III-1. Novelis acquired domestic producer Aleris in April 2020. CR/PR at III-3 and Tables III-2 to III-4.

⁹⁰ CR/PR at VI-1.

⁹¹ CR/PR at Table III-5. The domestic industry's capacity was lower in interim 2021 compared to interim 2020. *Id.*

⁹² See CR/PR at Tables III-3 and III-4; Petitioners Prehearing Brief at Exhibit 4.

⁹³ See CR/PR at Table III-4.

⁹⁴ Petitioners Prehearing Brief at Exhibit 4.

⁹⁵ See CR/PR at Tables III-3 and III-4. ***. CR/PR at Table III-4.

⁹⁶ CR/PR at Table IV-4.

⁹⁷ CR/PR at Table IV-4.

⁹⁸ See CR/PR at Tables IV-2 (U.S. imports), IV-7 (total market), and IV-9 (merchant market; see *also* I-6 and n.11 (indicating that Commerce issued antidumping and countervailing duty orders on aluminum foil from China in April 2018).

percentage points higher than in 2018. Cumulated subject imports as a share of apparent U.S. consumption increased from *** percent in interim 2020 to *** percent in interim 2021, an increase of *** percentage points.⁹⁹ Although there were U.S. shipments of cumulated subject imports in all five thickness categories in 2020, *** percent of U.S. shipments of cumulated subject imports consisted of standard aluminum foil and *** percent of such shipments consisted of extra-heavy aluminum foil, while shipments of ultra-thin, thin, and heavy aluminum foil were comparatively smaller.¹⁰⁰

Nonsubject imports were the third-largest source of supply of aluminum foil to the U.S. market in 2020. These include imports from China, which became subject to antidumping and countervailing duty investigations in 2017 and covered under orders beginning in April 2018.¹⁰¹ Nonsubject imports from China sharply decreased after 2018, even as nonsubject imports from other country sources increased.¹⁰² Nonsubject imports as a share of apparent U.S. consumption in the merchant market were flat from 2018 to 2019, at *** percent and *** percent respectively, before increasing to *** percent in 2020. Nonsubject imports' market share was higher in interim 2021, at *** percent, than in interim 2020, at *** percent.¹⁰³ Although there were U.S. shipments of nonsubject imports in all thickness categories in 2020, *** percent of U.S. shipments of nonsubject imports consisted of ultra-thin aluminum foil and *** percent consisted of standard aluminum foil. Shipments of thin, heavy, and extra-heavy

⁹⁹ CR/PR at Table IV-10. Cumulated subject imports' share of apparent U.S. consumption in the total market also increased overall, from 12.6 percent in 2018 to 16.3 percent in 2019 to 15.4 percent in 2020; they were 12.1 percent in interim 2020 and higher, at 16.2 percent in interim 2021. CR/PR at Table IV-8. Accordingly, cumulated subject imports share of apparent U.S. consumption in the total market increased 2.7 percentage points from 2018 to 2020, and was 4.1 percentage points higher in interim 2021 than in interim 2020.

¹⁰⁰ CR/PR at Table IV-4.

¹⁰¹ See *Certain Aluminum Foil From the People's Republic of China: Initiation of Countervailing Duty Investigation*, 82 Fed. Reg. 15688 (Mar. 30, 2017) and *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-6.

¹⁰² CR/PR at Table IV-2.

¹⁰³ CR/PR at Table IV-10. Thus, nonsubject imports share of apparent U.S. consumption increased *** percentage points from 2018 to 2020, and was *** percentage points higher in interim 2021 than in interim 2020. Nonsubject imports' share of apparent U.S. consumption in the total market increased over the POI, from 11.4 percent in 2018 to 11.6 percent in 2019 and 12.5 percent in 2020; it was 12.6 percent in interim 2020 and higher, at 15.1 percent, in interim 2021. CR/PR at Table IV-8. Thus, nonsubject imports' share of apparent U.S. consumption in the total market increased 1.1 percentage points from 2018 to 2020, and was 2.6 percentage points higher in interim 2021 than in interim 2020. CR/PR at Table C-1.

aluminum foil were comparatively smaller.¹⁰⁴ The largest country sources of nonsubject imports were China, Germany, and Korea.¹⁰⁵

The vast majority of domestic producers' U.S. commercial shipments of aluminum foil in 2020, *** percent, were subject to long-term or annual contracts, whereas *** percent of importer shipments that year were subject to long-term contracts.¹⁰⁶ A majority of responding domestic producers (three of four) reported that they renegotiate prices during long-term contracts, while half reported that they renegotiate prices during annual contracts.¹⁰⁷ Contract negotiations typically occur in the late third and early fourth quarters of each year for annual contracts covering the following year, but can occur at any time of the year at a customer's request.¹⁰⁸

The vast majority of subject imports were direct imports by purchasers, either for their own use or for retail sale.¹⁰⁹

Two of 5 U.S. producers, thirteen of 32 importers, and twenty-one of 28 purchasers reported supply constraints between January 1, 2018, and the date of the filing of the petition (September 29, 2020). A slightly higher number of market participants reported supply constraints after the petition was filed. The nature of the reported supply constraints varied.¹¹⁰

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 contributing to this level of substitutability include similar quality in most grades, little preference for particular country of origin or producers, and general similarities between domestically produced aluminum foil and aluminum foil imported from subject countries across multiple purchase factors.¹¹¹ In addition, almost all responding U.S. producers reported that aluminum foil from the United States, the subject countries, and the nonsubject countries were always interchangeable.¹¹² For most

¹⁰⁴ CR/PR at Table IV-4.

¹⁰⁵ CR/PR at Table IV-2.

¹⁰⁶ CR/PR at Table V-3.

¹⁰⁷ CR/PR at V-5.

¹⁰⁸ Hearing Transcript at 130-31 (D'Amico), 131 (Roush, Thomas).

¹⁰⁹ CR/PR at V-17 to V-18.

¹¹⁰ CR/PR at II-10 to II-12. As further discussed *infra*, the record does not support respondents' argument that increased subject import volume and market share during the POI resulted from supply constraints with respect to domestically produced aluminum foil.

¹¹¹ CR/PR at II-15 to II-16.

¹¹² CR/PR at Table II-11.

comparisons, a majority of U.S. purchasers and importers of subject merchandise reported that aluminum foil from domestic and subject sources were always or frequently interchangeable.¹¹³ Although a number of importers and purchasers reported limited availability and low quality of U.S.-produced aluminum foil, particularly with respect to ultra-thin and thin grades, the record shows that the vast majority of subject imports and the domestic like product consisted of standard and extra-heavy aluminum foil such that the extent of any quality or availability differences within these grades do not alter our conclusion regarding the high degree of substitutability between domestically produced aluminum foil and subject imports.¹¹⁴

Price is an important factor in purchasing decisions, but other factors are important as well. A majority of responding purchasers (19 of 27) identified price as among the three most important purchasing factors.¹¹⁵ Purchasers identified quality most frequently as a major purchasing factor, with 23 of 27 responding purchasers having done so.¹¹⁶ 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.¹¹⁷ U.S. importers reported a wide range of responses as to whether nonprice factors were important in purchasing decisions.¹¹⁸

The major raw materials used to produce aluminum foil are re-roll stock, primary aluminum, and secondary aluminum.¹¹⁹ Raw materials costs ranged from *** to *** percent of the domestic industry's cost of goods sold ("COGS") in the merchant market during the full years and interim periods of the POI.¹²⁰

U.S. producers' aluminum foil prices are largely determined by three factors: (1) a market-determined price for raw materials (aluminum indexed to a benchmark such as the London Metals Exchange); (2) the Platts Midwest Premium (a daily premium added to the raw

¹¹³ CR/PR at Tables II-12 and II-13. Half of the responding U.S. importers reported that the domestic like product and subject imports from Armenia were always or frequently interchangeable and half reported that they were sometimes or never interchangeable. *Id.* All responding purchasers reported that the domestic like product and subject imports from Armenia were sometimes interchangeable and half of responding purchasers reported that subject imports from Oman were always or frequently interchangeable and half reported that they were sometimes interchangeable. *See id.*

¹¹⁴ *See* CR/PR at II-16 and Tables II-8 and IV-4.

¹¹⁵ CR/PR at Table II-6.

¹¹⁶ CR/PR at Table II-6.

¹¹⁷ CR/PR at Table II-14.

¹¹⁸ CR/PR at Table II-15.

¹¹⁹ CR/PR at V-1.

¹²⁰ CR/PR at Table VI-3.

material costs of primary unwrought aluminum); and (3) the conversion price.¹²¹ The conversion price is the sole element which a U.S. aluminum foil producer determines, and its level reflects the producer's production costs (including raw material costs other than aluminum) and a profit margin.¹²² The price of aluminum fluctuated over the POI, decreasing from January 2018 until April 2020, then increasing until March 2021, resulting overall in aluminum price ending the period of investigation just slightly below the levels at the beginning of the period.¹²³ The Platts Midwest premium price increased sharply from January 2018 until May 2018, at which point it decreased from June 2018 until June 2020 when the price began to increase generally throughout the remainder of 2020, resulting in an overall increase of over *** percent for the period ending in December 2020.¹²⁴

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 2018.¹²⁵ Commerce has reportedly granted *** exclusions from Section 232 duties on imports of aluminum foil.¹²⁶

Nonsubject aluminum foil originating in China is currently subject to an additional 7.5 percent *ad valorem* duty under Section 301 of the Trade Act of 1974, as amended ("Trade Act"), effective September 21, 2019.¹²⁷

¹²¹ CR/PR at V-1 and V-6. CR/PR at Table V-1 details the U.S. industry's per unit conversion price (not cost), which is the difference between the industry's commercial sales average unit value and its per unit aluminum cost.

¹²² CR/PR at V-4.

¹²³ CR/PR at Figure V-1 and Table G-1.

¹²⁴ CR/PR at V-2 and Figure V-2.

¹²⁵ 19 U.S.C. § 1862; CR/PR at Table D-1. 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-12 to I-13 & nn.37-38. Imports of aluminum articles (including subject aluminum foil) originating in Brazil were exempted from the Section 232 duties as of March 23, 2018 (83 Fed. Reg. 13355, March 28, 2018). Although the exemption for Brazil was continued as of May 1, 2018 (83 Fed. Reg. 20677, May 7, 2018), it was subsequently discontinued as of June 1, 2018 (83 Fed. Reg. 25849, June 5, 2018). CR/PR at I-13 n.37. Imports of aluminum articles originating in Korea were exempted from the Section 232 duties as of March 23, 2018 (83 Fed. Reg. 13355, March 28, 2018). CR/PR at I-13 n.38.

¹²⁶ See CR/PR at Table D-2.

¹²⁷ See CR/PR at I-13 & nn.40-41 (The rate was initially set at 15 percent beginning on September 1, 2019, but it was decreased to 7.5 percent on February 14, 2020).

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.”¹²⁸

We find that the volume and increase in volume of cumulated subject imports was significant, both absolutely and relative to apparent U.S. consumption, over the POI. Subject import volume increased irregularly from 75,595 short tons in 2018 to 100,115 short tons in 2019 and to 91,670 short tons in 2020, a level 21.3 percent higher than in 2018.¹²⁹ Subject import volume was 20,884 short tons in interim 2021, higher than the 18,104 short tons in interim 2020.¹³⁰ U.S. importers’ U.S. shipments also increased irregularly as a share of apparent U.S. consumption in the merchant market, increasing from *** percent in 2018 to *** percent in 2019 before declining to *** percent in 2020, a level *** percentage points higher than in 2018.¹³¹ Subject import market share in the merchant market was *** percent in interim 2021, higher than the *** percent in interim 2020.¹³²

Most of the increase in subject import U.S. shipments during the POI consisted of extra-heavy aluminum foil, which accounted for *** percent of the domestic industry’s U.S. shipments in 2020. Subject imports increased their share of the merchant market for extra-heavy aluminum foil by *** percentage points, from *** percent in 2018 to *** percent in 2020 and another *** percentage points in interim 2021 at *** percent compared to interim 2020 at *** percent.¹³³ Most of the remainder of the increase in subject import U.S. shipments during the POI consisted of standard aluminum foil, which accounted for *** percent of the domestic industry’s U.S. shipments in 2020.¹³⁴ Although subject import market share declined in the merchant market for standard aluminum foil from 2018 to 2020, it retained substantial market

¹²⁸ 19 U.S.C. § 1677(7)(C)(i).

¹²⁹ CR/PR at Table IV-2. Petitioners note that subject imports nearly doubled in volume from 2017 to 2018. See Petitioners Posthearing Brief at 8.

¹³⁰ CR/PR at Table IV-2.

¹³¹ CR/PR at Table IV-10. Subject import market share in the total market was 12.6 percent in 2018, 16.3 percent in 2019, and 15.4 percent in 2020. *Id.* at Table IV-8.

¹³² CR/PR at Table IV-10. Subject import market share in the total market was 12.1 percent in interim 2020 and 16.2 percent in interim 2021. *Id.* at Table IV-8.

¹³³ CR/PR at Tables IV-4, E-7, and E-32.

¹³⁴ CR/PR at Tables IV-4 and E-7.

share at *** percent in 2020 and was *** percentage points higher in interim 2021 at *** percent compared to interim 2020 at *** percent.^{135 136}

We find that the volume of subject imports and the increase in subject import volume to be significant in absolute terms and relative to consumption in the United States.

D. Price Effects of the Subject Imports

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

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

(II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.¹³⁷

As previously discussed, 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.

¹³⁵ CR/PR at Table E-30.

¹³⁶ Petitioners argue that there is no basis for the Commission to analyze market segments other than for the purpose of determining whether subject imports and the domestic like product compete. Petitioners Posthearing Br. at Responses to Questions p.1. Petitioners are mistaken. The Commission is not legally prohibited from analyzing market segments and indeed, has done so in previous investigations. See 19 U.S.C. § 1677(7)(C)(ii); *Mattresses from Cambodia, China, Indonesia, Malaysia, Serbia, Thailand, Turkey, and Vietnam*, Inv. Nos. 701-TA-645 and 731-TA-1495-1501 (Final), USITC Pub. 5191 at 50-55 (May 2021); *Polyethylene Terephthalate (PET) Sheet from Korea and Oman*, Inv. Nos. 731-TA-1455 and 731-TA-1457 (Final), USITC Pub. 5111 at 35 (Sept. 2020), *aff'd Octal Inc. v. United States*, 2021 WL 4776021 (Ct. Int'l Trade Sept. 20, 2021); *Steel Propane Cylinders from China and Thailand*, Inv. Nos. 701-TA-607 and 731-TA-1147 and 1419 (Final), USITC Pub. 4938 at 21-27 (Aug. 2019); *Crystalline Silicon Photovoltaic Cells and Modules from China*, Inv. Nos. 701-TA-481 and 731-TA-1190 (Final), USITC Pub. 4360 at 29-37 (Nov. 2012). Whereas here, different types of aluminum foil are clearly being sold to different end-use segments, the Commission may not only analyze whether attenuated competition exists in any of the segments, but may also consider the volume and price effects of subject imports within those segments as an important way to meaningfully determine whether subject imports materially injured or threaten material injury to the domestic industry.

¹³⁷ 19 U.S.C. § 1677(7)(C)(ii).

We have examined pricing data, import purchase cost data, and information concerning lost sales and revenues in our underselling analysis. 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.¹³⁸ 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.¹³⁹ Pricing data reported by these firms accounted for approximately 9.6 percent of U.S. producers' shipments of aluminum foil in 2020.¹⁴⁰ Importers did not report pricing data for products 2-4 and reported only two quarters of data for product 1, with no corresponding domestic price data.¹⁴¹ The pricing data on the record yielded no quarterly comparisons of domestic and subject import prices.

The Commission also collected supplemental quarterly f.o.b. pricing data from importers of aluminum foil from Oman on sales of a product equivalent to product 1 as it was defined during the preliminary phase of these investigations that was shipped to unrelated U.S. retailers during the POI that was not included amongst the pricing products in the final phase of these investigations.¹⁴² Reported pricing data accounted for *** of U.S. shipments of subject imports from Oman in 2020.¹⁴³ These data show that subject imports from Oman undersold the domestic like product in one of three quarterly price comparisons at an average underselling margin of *** percent, accounting for *** of reported subject import sales volume (*** of *** short tons).¹⁴⁴ Subject imports from Oman oversold the domestic like product in

¹³⁸ CR/PR at V-7. The four pricing products are:

Product 1— Aluminum in the 8XXX or 1XXX series, standard tempers, 0.000235ga – 0.00025ga, all widths, 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, 0.00039-0.001 inch thickness, width 12-18", mill finish.

Product 4— Aluminum in the 3XXX series, standard tempers, 0.0016-0.0032 inch thickness, width 0.5-15", mill finish.

¹³⁹ CR/PR at V-8.

¹⁴⁰ CR/PR at V-8.

¹⁴¹ CR/PR at Tables V-4-V-8. Only importers from Brazil reported import price data for product 1, and only in the first and second quarters of 2018. *Id.*

¹⁴² CR/PR at Table H-1. The pricing product was **Product S1**—Aluminum in the 8XXX series, standard tempers, 0.002-0.0039 inch thickness width 6-40," mill finish. We include this data because U.S. importers of aluminum foil from Oman did not report any pricing product data nor did these importers, as discussed below, report any purchase cost data.

¹⁴³ *Calculated from* CR/PR at Table H-1 (quantity of reported sales of product S1 from Oman in 2020) divided by CR/PR at Table IV-7 (quantity of U.S. shipments of subject imports from Oman in 2020).

¹⁴⁴ CR/PR at Table H-1.

two of three quarterly price comparisons at an average overselling margin of *** percent, accounting for *** of reported subject import sales volume (*** of *** short tons).¹⁴⁵

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.¹⁴⁶ Eleven importers reported usable import purchase cost data.¹⁴⁷ Purchase cost data reported by these firms accounted for approximately 86.8 percent of 2020 U.S. shipments of subject imports from Armenia, 76.4 percent of 2020 U.S. shipments of subject imports from Brazil,¹⁴⁸ 94.3 percent of 2020 U.S. shipments of subject imports from Russia, and 41.5 percent of 2020 U.S. shipments of subject imports from Turkey.¹⁴⁹ U.S. importers of aluminum foil from Oman did not report purchase cost data.¹⁵⁰ 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 72 of 91 (or 79.1 percent of) quarterly comparisons (involving 274.9 million of 345.1 million pounds, or 79.6 percent, of reported subject import purchases), by differentials ranging from 0.2 to 35.9 percent, with an average price-cost differential of 11.8 percent.¹⁵¹ The landed duty-paid costs for subject imports were below the sales price for U.S. produced aluminum foil in 3 of 3 quarterly comparisons for product 1 (corresponding to ultra-thin foil), 38 of 51 quarterly comparison for product 3 (corresponding to standard foil), and 31 of 32 quarterly comparison for product 4 (corresponding to heavy/extra-heavy aluminum foil).¹⁵² Landed duty-paid costs for subject imports were above the sales price for U.S. produced aluminum foil in 19 quarterly (or 20.8 percent of) comparisons (involving 70.2 million of 345.1 million pounds, or 20.4 percent, of reported subject import purchases), at differentials ranging from 0.1 to 15.9 percent, with an average price-cost differential of 5.0 percent.¹⁵³ 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 quantity of subject imports.

¹⁴⁵ CR/PR at Table H-1.

¹⁴⁶ CR/PR at V-17.

¹⁴⁷ CR/PR at V-17.

¹⁴⁸ *Calculated from* CR/PR at Tables V-8 to V-11, quantities reported for Brazil in 2020 for products 1-4, divided by CR/PR at Table IV-2, quantity of all import sources in 2020.

¹⁴⁹ CR/PR at V-17.

¹⁵⁰ CR/PR at V-17.

¹⁵¹ CR/PR at Table V-14.

¹⁵² CR/PR at Table V-14. For product 2, of the five quarters for which there were price-cost comparisons, there were no quarters in which subject import purchase costs were lower than domestic prices. CR/PR Tables V-9 and V-14.

¹⁵³ CR/PR at Table V-14.

We recognize that the import purchase cost data may not reflect the total cost of importing. Therefore, we requested that direct importers provide additional information regarding the costs and benefits of directly importing aluminum foil. Seven of the 11 responding importers reported that they did not incur additional costs beyond landed duty-paid costs associated with importing.¹⁵⁴ Four of 11 responding importers reported that they did incur additional costs, three of which reported that total additional cost ranged from 1 to 7 percent compared to the landed duty-paid value.¹⁵⁵ Given that subject import purchase costs were on average *** percent below domestic sales prices for those 72 quarters in which landed duty-paid costs for subject imports were below the sales price for U.S. produced aluminum foil, and that importers reported either no additional costs or minimal additional costs, we find that, even when accounting for the additional costs reported by three importers, subject import purchase costs were predominantly, and significantly, lower than domestic sales prices.

We have also considered information concerning lost sales and revenues in our underselling analysis. Of the 28 purchasers that responded to the Commission's questionnaires, 16 reported that, since 2018, they had purchased subject imports instead of U.S.-produced product, and twelve of these 16 purchasers reported that the prices for the subject imports were lower than the prices for the domestic like product.¹⁵⁶ Three responding purchasers reported that price was a primary reason for their decision to purchase subject imports instead of domestically produced aluminum foil, and two of these purchasers reported purchasing a total of *** pounds due to the lower price of subject imports.¹⁵⁷ Responding purchasers reduced the domestic industry's share of their purchases by 7.0 percentage points from 2018 to 2020, while increasing the subject import share of their purchases by 3.4 percentage points.¹⁵⁸

Based on the high degree of substitutability between subject imports and the domestic like product, the importance of price in purchasing decisions, the comparisons illustrated by the purchase cost data, and information concerning lost sales, we find that subject import

¹⁵⁴ CR/PR at V-17.

¹⁵⁵ CR/PR at V-17.

¹⁵⁶ CR/PR at Table V-17. Purchasers indicating that subject imports were lower priced than the domestic like product, included purchasers of extra heavy and standard foil such as ***. *Id.*

¹⁵⁷ CR/PR at Table V-17. On September 20, 2021, Commission staff contacted *** to verify the data provided in its questionnaires. Revisions to *** purchaser questionnaire were limited to Part II of the questionnaire. Commission Staff confirmed that the lost sales information contained in *** purchaser questionnaire was accurate. See *** purchaser questionnaire, EDIS Doc. 747205 (Jul. 19, 2021); *** Revised purchaser questionnaire, 753967 (Oct. 12, 2021).

¹⁵⁸ CR/PR at Table V-16.

underselling was significant during the POI.¹⁵⁹ The underselling by cumulated subject imports enabled subject imports to gain sales and market share at the domestic industry's expense during the POI. In particular, after duties were imposed on imports of aluminum foil from China in 2018, subject imports surged and gained market share ceded by Chinese imports, and also took market share from the domestic industry.¹⁶⁰ Indeed, while subject imports increased their share of the merchant market by *** percentage points between 2018 and 2020, and another *** percentage points in interim 2021 compared to interim 2020, the domestic industry lost *** percentage points in market share between 2018 and 2020, and another *** percentage points in interim 2021 compared to interim 2020.¹⁶¹

We have also considered price trends for the domestic like product and subject imports during the POI. Between the first and last quarters for which data were collected, the domestic industry's sales prices declined *** percent for pricing product 2, but increased *** percent for pricing product 3 and *** percent for pricing product 4.¹⁶² Over the same period, subject import purchase costs declined by *** percent for product 1, between *** and *** percent for product 3, and between *** and *** percent for product 4.¹⁶³ The Commission also collected conversion prices for domestic producers' U.S. shipments over the period of investigation.¹⁶⁴ This data shows U.S. producers' conversion prices for all product thickness categories rising from 2018 to 2019 and then declining from 2019 to 2020.¹⁶⁵ Conversion prices reflect the price

¹⁵⁹ We find additional evidence of subject import underselling in data concerning the AUVs of U.S. shipments of aluminum foil by product category, which show that the AUVs of U.S. shipments of subject imports were generally lower than the AUVs of U.S. producers' U.S. shipment for all thicknesses and all periods, with only two exceptions. *Compare* CR/PR at Tables E-1 and E-7. Subject imports AUVs were priced higher than U.S. shipments for thin foil in 2018 and standard foil in 2019. *Id.* We recognize that AUV comparisons may be influenced by differences in product mix and changes in product mix over time, but note that the AUV data used here, broken down by thickness, would control for differences in product mix to some extent.

¹⁶⁰ CR/PR at Table C-2. As the market share held by imports from China in the U.S. merchant market declined from *** percent in 2018 to *** percent in 2019, subject import market share increased from *** percent in 2018 to *** percent in 2019. The domestic industry's market share declined from *** percent in 2018 to *** percent in 2019.

¹⁶¹ CR/PR at Tables IV-10 and C-2. In the total market, subject imports gained 2.7 percentage points 2018-20 and 4.1 in interim 2021 over interim 2020.

¹⁶² CR/PR at Tables V-5 to V-7 and V-12. U.S. producers reported a price for product 1 for only one quarter during the POI. *Id.* at V-4.

¹⁶³ CR/PR at Table V-13.

¹⁶⁴ CR/PR at Table V-1.

¹⁶⁵ CR/PR at Table V-1. The merchant market conversion price for ultra-thin aluminum foil products increased from *** per pound in 2018 to \$*** per pound in 2019, before declining to \$*** per pound in 2020. For thin aluminum foil products, the merchant market conversion price increased from (Continued...)

of aluminum foil less aluminum raw material costs, which are passed through to purchasers by indexing contracts prices to aluminum raw material costs, and are the sole factor negotiated with respect to price.¹⁶⁶

When these domestic price trends are examined within the context of the relevant conditions of competition, including the orders that were imposed on aluminum foil imports from China in 2018, we find that subject imports depressed domestic producer prices to a significant degree. Specifically, we observe that after the orders on aluminum foil from China were imposed in April 2018, U.S. producers were able to raise their conversion prices for domestically produced aluminum foil between 2018 and 2019.¹⁶⁷ Indeed, the record reflects that the domestic industry's conversion prices increased for all thicknesses of aluminum foil for which data were collected between 2018 and 2019, from \$*** per pound in 2018 to \$*** per pound in 2019 for all thicknesses (and, as detailed above, the conversion price rose for each of the product thickness categories (*i.e.*, ultra-thin, thin, standard, heavy, and extra heavy)).¹⁶⁸ As subject imports surged into the U.S. market to replace nonsubject imports from China, however, the domestic industry lost *** percentage points of market share to subject imports in the merchant market between 2018 and 2019.¹⁶⁹ In the face of intensifying competition from increasing volumes of low-priced subject imports, domestic producers were forced to renegotiate annual and long-term contracts with customers in 2018 and 2019 in an effort to retain sales.¹⁷⁰ Declarations and contemporaneous documents provided by petitioners, including purchaser emails and contracts, show that purchasers notified domestic producers of

(...Continued)

\$*** per pound in 2018 to \$*** per pound in 2019, before declining to \$*** per pound in 2020. For standard thickness aluminum foil products, the merchant market conversion price increased from \$*** per pound in 2018 to \$*** per pound in 2019, before declining to \$*** per pound in 2020. For heavy thickness aluminum foil products, the merchant market conversion price increased from \$*** per pound in 2018 to \$*** per pound in 2019, before declining to \$*** per pound in 2020. For extra heavy aluminum foil products, the merchant market conversion price increased from \$*** per pound in 2018 to \$*** per pound in 2019, before declining to \$*** per pound in 2020.

¹⁶⁶ CR/PR at V-6.

¹⁶⁷ CR/PR at Table V-1.

¹⁶⁸ CR/PR at Table V-1. We note that Table V-1 of the Report contains the U.S. producers' reported merchant market conversion prices (not costs) by aluminum thickness and by period. U.S. producers' merchant market conversion prices rose for each thickness category of aluminum foil products. *Id.*

¹⁶⁹ CR/PR at Table IV-10.

¹⁷⁰ CR/PR at Table C-2 and Tables J-7 to J-11. As noted above, *** of U.S. producers' sales are made pursuant to annual and long-term contracts, and half or more responding producers reported that such contracts are subject to renegotiation. *Id.* at V-5.

offers of lower prices for subject imports and used the offers to request that existing contracts be renegotiated and prices reduced.¹⁷¹ Consistent with this evidence, representatives of domestic producers testified at the hearing that competition from low-priced subject imports forced them to renegotiate existing contracts to lower conversion prices and negotiate new contracts at lower conversion prices.¹⁷² As a consequence, the domestic industry's conversion prices declined for all thickness of aluminum foil between 2019 and 2020, from \$*** per pound in 2019 to \$*** per pound in 2020 for all thicknesses.¹⁷³ As additional evidence that subject import competition contributed to these conversion price trends, we note that the domestic industry's conversion prices increased for three of five thickness categories after the petitions

¹⁷¹ *** was forced to reopen two contracts with ***, one for household foil and the other for food containers, which were concluded in October 2018 and reduce its conversion prices and contractual volume for supply between 2019-2021. Petitioners' Prehearing Brief at Exhibit 2, Attachment 7 and 8. *** was also forced to renegotiate a two-year contract (2019-2020) with *** in June 2020 to match pricing offered by a Russian producer. *Id.* at Exhibit 3, Attachment 1.

¹⁷² Hearing Transcript at 21 (D'Amico), 29, 65 (Thomas), 69 (Roush), and 96 (D'Amico).

¹⁷³ The Commission also collected quarterly conversion prices for U.S. producers. CR/PR at Appendix J. Consistent with the data cited above, quarterly conversion prices for all U.S. producers for all thicknesses decreased from the first quarter of 2019 to the third quarter of 2020 with one exception, then increased starting in the fourth quarter of 2020 after the petitions were filed. *** quarterly conversion prices decreased for extra heavy foil from \$*** per pound in the first quarter of 2019 to \$*** in the third quarter of 2020, and then increased to \$*** per pound in the fourth quarter of 2020 and to \$*** per pound in the first quarter of 2021. *Id.* at Table J-7. *** quarterly conversion prices of ultra-thin foil decreased from \$*** in the first quarter of 2019 to \$*** in the second quarter of 2020 (no quarterly conversion prices were reported after that quarter); thin foil decreased from \$*** in the first quarter of 2019 to \$*** in the second quarter of 2020 (no quarterly conversion prices were reported after that quarter); standard foil decreased from \$*** in the first quarter of 2019 to \$*** in the third quarter of 2020, and then increased to \$*** per pound in the fourth quarter of 2020; extra heavy foil decreased from \$*** in the first quarter of 2019 to \$*** in the third quarter of 2020, and then increased to \$*** per pound in the fourth quarter of 2020. *Id.* at Table J-9. *** quarterly conversion prices of extra heavy foil decreased from \$*** in the first quarter of 2019 to \$*** in the third quarter of 2020, and then increased to \$*** per pound in the fourth quarter of 2020 and to \$*** in the first quarter of 2021. *Id.* at Table J-10. *** quarterly conversion prices of ultra-thin foil decreased from \$*** in the first quarter of 2019 to \$*** in the third quarter of 2020 (and remained at that level in the fourth quarter of 2020); thin foil decreased from \$*** in the first quarter of 2019 to \$*** in the third quarter of 2020, and then increased to \$*** in the fourth quarter of 2020 and to \$*** in the first quarter of 2021; standard foil decreased from \$*** in the first quarter of 2019 to \$*** in the third quarter of 2020, and remained at that level in the fourth quarter of 2020 before increasing to \$*** in the first quarter of 2021. *** quarterly conversion prices of extra heavy foil increased from \$*** in the first quarter of 2019 to \$*** in the third quarter of 2020, and then increased to \$*** in the fourth quarter of 2020 and to \$*** in the first quarter of 2021. *Id.* at Table J-8. The increase in its conversion prices for extra heavy foil was due to the fact that it had inherited a contract from ***, the conversion prices of which were ***. When that contract ended, *** negotiated a contract with *** that was ***, but was ***. Petitioners Posthearing Brief, Response to Commissioner Questions at 63-64.

were filed in September 2020.¹⁷⁴ The quarterly pricing data reported by domestic producers show a similar trend, ***.¹⁷⁵

The record shows that subject imports substantially contributed to the decline in the domestic industry's conversion prices between 2019 and 2020. Although the concurrent decline in apparent U.S. consumption could have also placed some downward pressure on conversion prices,¹⁷⁶ declarations, contemporaneous documents, and testimony provided by domestic producers show that purchasers used the availability of low-priced subject imports to extract lower prices from domestic producers,¹⁷⁷ and accepted price increases after the petitions were filed.¹⁷⁸ Consequently, we find that the significant and growing quantity of low-priced subject imports depressed domestic prices to a significant degree.

Based on the above, we find that cumulated subject imports significantly undersold the domestic like product, which not only prevented domestic producers from gaining any of the market share ceded by imports from China after imposition of antidumping and countervailing duty orders against those imports in 2018 (as subject imports instead replaced the majority of the market share once held by imports from China), but also resulted in the domestic producers' loss in sales and market share to subject imports. In addition, subject imports

¹⁷⁴ U.S. producers reported merchant market conversion prices increased from interim 2020 to interim 2021 for ultra-thin, thin, and heavy foil and remained steady for extra heavy foil. U.S. producers' merchant market conversion prices decreased for standard foil. CR/PR at Table V-1.

¹⁷⁵ CR/PR at Tables V-7 to V-11, J-7 to J-11, and Figures V-4 to V-6.

¹⁷⁶ As noted above, apparent U.S. consumption of aluminum foil in the merchant market declined by *** percent between 2018 and 2020. CR/PR at Table C-2. However, as also noted above, a majority or plurality of U.S. producers, importers and purchasers reported an increase in U.S. demand for aluminum foil since January 1, 2018. CR/PR at Table II-4.

¹⁷⁷ Hearing Transcript at 21 (D'Amico), 29, 65 (Thomas), 69 (Roush), and 96 (D'Amico). In addition, as reviewed above, certain domestic producers were forced to reopen contracts with specific customers in order to meet the lower prices of subject imports.

¹⁷⁸ See Petitioners Prehearing Brief at Exhibit 2, Attachment 7 and 8, Exhibit 3, Attachment 1; Hearing Transcript at 21, 24-25, (D'Amico), 29, 43 (Herrmann), 65 (Thomas), 69 (Roush), 96 (D'Amico), and 112 (Thomas); Petitioners Posthearing Brief at Exhibits, 3, 4 and 5; and Petitioners Responses to Commissioner Questions at 31, 60-61. We observe that conversion prices increased beginning in the fourth quarter of 2020 despite the decline in apparent U.S. consumption in 2020. CR/PR at Table C-2. In addition, as noted above, the quarterly pricing data reported by domestic producers indicate that domestic prices ***. The U.S. industry's AUVs of each of the products for which the Commission collected quarterly pricing data (except for Product 1, for which no U.S. prices were reported) increased between the last quarter of 2020 and the first quarter of 2021. For Product 2, the AUVs increased from \$*** per pound to \$*** between those quarters. For Product 3, the AUVs increased from \$*** to \$*** per pound. For Product 4, the AUVs increased from \$*** to \$*** per pound. CR/PR at Tables V-9, V-10, and V-11.

significantly depressed domestic producer prices. We therefore find that subject imports had significant price effects.

E. Impact of the Subject Imports¹⁷⁹

Section 771(7)(C)(iii) of the Tariff Act provides that examining the impact of subject imports, the Commission “shall evaluate all relevant economic factors which have a bearing on the state of the industry.”¹⁸⁰ These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, gross profits, net profits, operating profits, cash flow, return on investment, return on capital, ability to raise capital, ability to service debts, research and development, and factors affecting domestic prices. No single factor is dispositive and all relevant factors are considered “within the context of the business cycle and conditions of competition that are distinctive to the affected industry.”¹⁸¹

¹⁷⁹ The statute instructs the Commission to consider the “magnitude of the dumping margin” in an antidumping proceeding as part of its consideration of the impact of imports. 19 U.S.C. § 1677(7)(C)(iii)(V). In its final determinations of sales at less value, Commerce found dumping margins of 29.11 percent for imports from Armenia, 13.93 to 63.05 percent for imports from Brazil, 3.89 percent for imports from Oman, 62.18 percent for imports from Russia, and 2.28 percent for imports from Turkey. See *Certain Aluminum Foil From the Republic of Armenia: Final Affirmative Determination of Sales at Less Than Fair Value*, 86 Fed. Reg. 52882, 52883 (September 23, 2021); *Certain Aluminum Foil From Brazil: Final Affirmative Determination of Sales at Less Than Fair Value*, 86 Fed. Reg. 52886, 52887 (September 23, 2021); *Certain Aluminum Foil From the Sultanate of Oman: Final Affirmative Determination of Sales at Less Than Fair Value*, 86 Fed. Reg. 52876, 52877 (September 23, 2021); *Certain Aluminum Foil From the Russian Federation: Final Affirmative Determination of Sales at Less Than Fair Value*, 86 Fed. Reg. 52878, 52879 (September 23, 2021); and *Certain Aluminum Foil From the Republic of Turkey: Final Affirmative Determination of Sales at Less Than Fair Value*, 86 Fed. Reg. 52880, 52881 (September 23, 2021). We take into account in our analysis the fact that Commerce has made final findings that all subject producers in Armenia, Brazil, Oman, Russia, and Turkey are selling subject imports in the United States at less than fair value. In addition to this consideration, our impact analysis has considered other factors affecting domestic prices. Our analysis of the significant underselling and price effects of subject imports, described in both the price effects discussion and below, is particularly probative to an assessment of the impact of the subject imports.

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

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

The domestic industry invested more than \$500 million since 2016 to increase their capacity to supply aluminum foil to the United States market.¹⁸² Despite the imposition of the 2018 antidumping and countervailing duty orders on aluminum foil from China, the domestic industry did not benefit from its investments.¹⁸³ Subject imports increased as the imports from China substantially retreated.¹⁸⁴ As reviewed below, the significant volume of subject imports, which had significant adverse price effects on the prices of the domestic like product, resulted in declines in virtually all domestic industry trade and financial indicators.

The domestic industry's output indicators decreased markedly from 2018 to 2020 and in interim 2021, as compared to interim 2020. Although the industry's capacity increased over the POI, its production and capacity utilization both declined. Capacity rose by 1.8 percent from 2018 to 2020, increasing 5.1 percent from 544,180 short tons in 2018 to 572,057 short tons in 2019, before declining to 553,961 short tons in 2020; it was 130,702 short tons in interim 2021, down from 142,698 short tons in 2020.¹⁸⁵ Production decreased by 11.6 percent from 2018 to 2020, decreasing 7.0 percent from 482,003 short tons in 2018 to 448,127 short tons in 2019, and then declining further to 426,082 short tons in 2020; it was 105,318 short tons in interim 2021, down from 108,381 short tons in interim 2020.¹⁸⁶ Capacity utilization decreased by 11.7 percentage points overall from 2018 to 2020, declining 10.2 percentage points from 88.6 percent in 2018 to 78.3 percent in 2019 and to 76.9 percent in 2020; it was 80.6 percent in interim 2021, higher than the 76.0 percent in interim 2020.¹⁸⁷

The domestic industry's commercial U.S. shipments in the merchant market decreased by *** percent from 2018 to 2020, declining from *** short tons in 2018 to *** short tons in 2019 and then declining further to *** short tons in 2020; commercial shipments were *** short tons in interim 2021, lower than *** short tons in interim 2020.¹⁸⁸ The value of these

¹⁸² See Petitioners Prehearing Brief at 20-25 (domestic producers made significant investments to greatly expand their capacity to produce and supply aluminum foil); Petitioners Posthearing Brief at 5 ("In connection with the relief provided by the AD/CVD orders on CAF from China, as well as the preliminary affirmative determinations by the Commission and the Commerce Department in these investigations, domestic products have resiliently invested \$525 million in their foil operations since 2016."); Petitioners Final Comments at 2.

¹⁸³ On April 19, 2018, the U.S. Department of Commerce issued antidumping and countervailing duty orders on aluminum foil from China. CR/PR at I-6.

¹⁸⁴ See CR/PR at Table IV-2.

¹⁸⁵ CR/PR derived from Table III-5 and C-1.

¹⁸⁶ CR/PR derived from Table III-5 and C-1.

¹⁸⁷ CR/PR derived from Table III-5 and Table C-1.

¹⁸⁸ CR/PR at Table C-2. The domestic industry's U.S. shipments in the total market decreased by 11.0 percent from 2018 to 2020, declining from 453,607 short tons in 2018 to 420,313 short tons in (Continued...)

shipments decreased by *** percent, decreasing from \$*** in 2018 to \$*** in 2019 and then declining further to \$*** in 2020; it was \$*** in interim 2021, and higher at \$*** in interim 2020.¹⁸⁹ The domestic industry's share of apparent U.S. consumption in the merchant market declined *** percentage points from 2018 to 2020, decreasing steadily from *** percent in 2018 to *** percent in 2019 to *** percent in 2020; it was *** percent in interim 2021, lower than the *** percent reported in interim 2020.¹⁹⁰

The domestic industry's end-of-period inventories declined by 4.1 percent from 2018 to 2020, increasing 9.5 percent from 31,070 short tons in 2018 to 34,025 short tons in 2019, before declining to 29,796 short tons in 2020; they were 25,299 short tons in interim 2021, lower than the 30,062 short tons in interim 2020.¹⁹¹

Most of the domestic industry's employment indicators declined from January 2018 to March 2021. Employment fell by 9.6 percent from 2018 to 2020, increasing from 1,514 production-related workers ("PRWs") in 2018 to 1,526 PRWs in 2019, and then declining to 1,368 PRWs in 2020, a number significantly lower than in 2018; there were 1,315 PRWs in interim 2021, lower than the 1,484 PRWs in interim 2020.¹⁹² Total hours worked decreased by 11.9 percent from 2018 to 2020, increasing modestly from 3.21 million hours in 2018 to 3.24 million hours in 2019, before declining to 2.83 million hours in 2020; they were 669,000 hours in interim 2021, lower than the 781,000 hours in interim 2020.¹⁹³ Wages paid fell by 7.9 percent from 2018 to 2020, increasing from \$114.6 million in 2018 to \$116.3 million in 2019, before declining to \$105.6 million in 2020, a figure lower than 2018; they were \$27.0 million in

(...Continued)

2019 and then declining further to 403,571 short tons in 2020; they were 102,278 short tons in interim 2021, lower than 107,159 short tons in interim 2020. CR/PR at Tables C-1 and III-8. Internal consumption was *** short tons in 2018, *** short tons in 2019, *** short tons in 2020, *** short tons in interim 2020, and *** short tons in interim 2021. CR/PR at Table III-8.

¹⁸⁹ CR/PR at Table C-2. In the total market, the value of the domestic industry's U.S. shipments declined by 22.2 percent between 2018 and 2020, decreasing from \$1.58 billion in 2018 to \$1.38 billion in 2019 before declining further to \$1.23 billion in 2020; they were \$336.3 million in interim 2021, higher than \$340.0 million in interim 2020. CR/PR at Tables C-1 and III-8. The value of internal consumption was \$*** in 2018, \$*** in 2019, \$*** in 2020; it was \$*** in interim 2021, higher than \$*** in interim 2020. CR/PR at Table III-8.

¹⁹⁰ CR/PR at Tables C-1 and III-9.

¹⁹¹ CR/PR at Tables C-1 and III-9.

¹⁹² CR/PR at Tables C-1 and III-14.

¹⁹³ CR/PR at Tables C-1 and III-14. Hours worked per PRW were 2,119 hours in 2018, 2,126 hours in 2019, and 2,066 hours in 2020; they were 509 hours in interim 2021, lower than the 526 hours in interim 2020. *Id.* at Table III-14.

interim 2021, lower than the \$30.3 million in interim 2020.¹⁹⁴ Productivity increased overall by a modest 0.3 percent over the period, decreasing from 150.3 short tons per 1,000 hours in 2018 to 138.1 short tons per 1,000 hours in 2019, before increasing to 150.8 short tons per 1,000 hours in 2020; productivity was 157.4 short tons per 1,000 hours in interim 2021, and higher than the 138.8 short tons per 1,000 hours in interim 2020.¹⁹⁵

The domestic industry's financial performance in the merchant market declined markedly over the period, as subject imports captured market share from the domestic industry and depressed domestic prices to a significant degree. Merchant market producers' revenues from commercial sales declined *** percent from 2018 to 2020, decreasing from \$*** in 2018 to \$*** in 2019 and \$*** in 2020; they were \$*** in interim 2021, lower than the \$*** in interim 2020.¹⁹⁶ These producers' gross profits in the merchant market increased from \$*** in 2018 to \$*** in 2019 and then, as domestic producers' conversion costs to conversion revenue rose from 2019 to 2020, domestic producers gross profits declined to \$*** in 2020, a figure less than 2018; they were \$*** in interim 2021, higher than the \$*** in interim 2020.¹⁹⁷ Their operating income decreased each year from \$*** in 2018 to \$*** in 2019 to \$*** in 2020, a figure well below that of 2018; it was \$*** in interim 2021, higher than the \$*** in interim 2020.¹⁹⁸ Merchant market producers' operating margin declined from *** percent in 2018 to *** percent in 2019 and 2020, a level below that of 2016, the last full year of the period of investigation in the investigation of *Aluminum Foil from China* (***) percent).¹⁹⁹ Their operating margin was *** percent in interim 2021, higher than the *** percent in interim 2020.²⁰⁰

¹⁹⁴ CR/PR at Tables C-1 and III-14. Hourly wages were \$35.74 in 2018, \$35.86 in 2019, and \$37.37 in 2020; they were \$40.42 in interim 2021, higher than the \$38.75 in interim 2020. *Id.*

¹⁹⁵ CR/PR at Tables C-1 and III-14. Unit labor costs per short ton were \$238 in 2018, \$260 in 2019, and \$248 in 2020; they were \$257 in interim 2021, lower than the \$279 in interim 2020. *Id.*

¹⁹⁶ CR/PR at Tables C-2 and VI-3. In the total market, the domestic industry's revenues from total net sales decreased from \$1.67 billion in 2018 to \$1.46 billion in 2019, and to \$1.31 billion in 2020; its revenues from total net sales were \$361.6 million in interim 2021, higher than the \$356.5 million in interim 2020. *See* CR/PR at Tables C-1 and VI-1.

¹⁹⁷ CR/PR at Tables C-2 and VI-3. Gross profits in the total market decreased from \$88.5 million in 2018 to \$84.6 million in 2019 and then rose to \$88.0 million in 2020; they were \$21.8 million in interim 2021, higher than the \$20.9 million in interim 2020. CR/PR at Tables C-1 and VI-1.

¹⁹⁸ CR/PR at Tables C-2 and VI-3. Operating income in the total market decreased from \$32.4 million in 2018 to \$220,000 in 2019, before increasing to \$23.1 million in 2020; it was \$10.4 million in interim 2021, higher than the \$7.3 million in interim 2020. CR/PR at Tables C-1 and VI-1.

¹⁹⁹ *Aluminum Foil from China*, Investigation Nos. 701-TA-570 and 731-TA-1346 (Final), Confidential Staff Report at Table C-2.

²⁰⁰ CR/PR at Tables C-2 and VI-3. In the total market, the domestic industry's operating margin decreased from 1.9 percent in 2018 to 0.0 percent in 2019, before increasing to 1.8 percent in 2020; its (Continued...)

Merchant market producers' net income worsened overall, decreasing from \$*** in 2018 to \$*** in 2019, and then increasing to a \$*** in 2020; it was \$*** in interim 2021, higher than the \$*** in interim 2020.²⁰¹

The domestic industry's capital expenditures for the merchant market rose from \$*** in 2018 to \$*** in 2019 before declining to \$*** in 2020; they were \$*** in 2021, lower than the \$*** in interim 2020.²⁰² The domestic industry incurred research and development ("R&D") expenses of \$*** in 2018, \$*** in 2019, and \$*** 2020; R&D expenses were \$*** in interim 2021, lower than the \$*** in interim 2020.²⁰³ Five U.S. producers reported that cumulated subject imports had negative effects on their firms' investment, growth, development and production efforts, or the scale of capital investments.²⁰⁴ The domestic industry's total assets for the merchant market were \$*** in 2018, \$*** in 2019, and \$*** in 2020;²⁰⁵ its operating return on its assets was *** percent in 2018, *** percent in 2019, and *** percent in 2019.²⁰⁶

Subject import volume and market share increased significantly over the POI, driven by significant underselling. We note that the beginning of the POI in these investigations overlaps with the Commission's determination that the U.S. industry was already suffering material injury by reason of dumped and subsidized imports from China.²⁰⁷ Over the POI, increasing volumes of low-priced subject imports not only replaced nonsubject imports from China as they retreated from the U.S. market between 2018 and 2019, but also captured *** percentage points of market share in the merchant market from the domestic industry between 2018 and 2020, and subject imports' market share was *** percentage points higher in interim 2021 compared to interim 2020. As the domestic industry lost market share to subject imports, it was unable to capitalize on its substantial investments in new capacity made in anticipation of relief from unfairly traded imports from China, and instead suffered declining production,

(...Continued)

operating margin was 2.9 percent in interim 2021, higher than the 2.0 percent in interim 2020. CR/PR at Tables C-1 and VI-1.

²⁰¹ CR/PR at C-2 and VI-3. In the total market, the domestic industry's net income also worsened overall from 2018 to 2020, decreasing from \$1.5 million in 2018 to a \$25.8 million loss in 2019, and then increasing to \$191,000 in 2020; it was \$9.6 million in interim 2021, higher than the \$1.1 million in interim 2020. CR/PR at Tables C-1 and VI-1.

²⁰² Derived from CR/PR at Table VI-9. The changes in capital expenditures over the POI are largely attributable to ***, which ***. CR/PR at VI-27.

²⁰³ CR/PR at VI-11.

²⁰⁴ CR/PR at Tables VI-16 and VI-17.

²⁰⁵ Derived from CR/PR at Table VI-13.

²⁰⁶ Derived from CR/PR at Table VI-14.

²⁰⁷ *Aluminum Foil from China*, Investigation Nos. 701-TA-570 and 731-TA-1346 (Final), USITC Pub. 4771 (April 2018).

capacity utilization, shipments, market share, and employment. The domestic industry's financial performance also declined between 2018 and 2020, as subject imports captured market share from the industry and depressed domestic prices to a significant degree.

With the market share of subject imports being *** percentage points higher in interim 2021 as compared to interim 2020, the industry was unable to fully capitalize on the *** percent increase in apparent U.S. consumption in interim 2021. Although the domestic industry's operating income was higher in interim 2021 than in interim 2020 due to increases in conversion prices in interim 2021, the industry's performance nevertheless continued to weaken with respect to production, shipments, and employment, and the improvement in its capacity utilization and financial performance was weaker than would have been expected in light of higher apparent U.S. consumption in interim 2021 as compared to interim 2020.

We are unpersuaded by Joint Respondents' argument that increased subject imports could not have displaced domestic production because subject import competition was attenuated by the highly segmented nature of the U.S. market.²⁰⁸ In their view, few U.S. producers supply standard foil to the merchant market, while other segments of the aluminum foil market were either underserved by domestic producers due to supply constraints or completely dependent on subject imports.²⁰⁹ We recognize that many purchasers reported supply constraints with respect to domestically produced aluminum foil during the POI.²¹⁰ Contrary to respondents' argument, however, the record shows that the domestic industry produced aluminum foil in all thickness gauges, including standard foil, generally in larger volumes than subject imports during the POI.²¹¹ Moreover, the vast majority of U.S.

²⁰⁸ Respondents also argue that the domestic industry's section 232 exclusion requests for aluminum foil are evidence that the industry had a structural capacity limitation during the POI that made it unable to service demand for aluminum foil in the U.S. market. *See, e.g.*, Joint Respondents Prehearing Brief at 51-53 and Exhibits 4-6. The record shows, however, that *** was the only domestic producer to file exclusion requests for aluminum foil products. Its *** exclusion requests were for a total of *** metric tons of a niche product *** cannot manufacture domestically; these imports were produced by ***, using proprietary alloys. *See* CR/PR at D-6 and Table D-4; *see also* Petitioners Posthearing Brief at 7-8 and Hearing Transcript at 72-73 (Thomas).

²⁰⁹ Joint Respondents Prehearing Brief at 93-95 and Exhibit 2.

²¹⁰ *See* CR/PR at II-12, II-20, II-29 to II-30, V-41 to V-44 nn.12-13, and Table V-17; Hearing Transcript at 146-47, 155 (Walters), 160-61 (Boehm), and 167-69 (Brown).

²¹¹ *See* CR/PR at Table IV-4 and D-2. For example, Gränges expanded aluminum casting capacity at its Huntingdon, Tennessee, facility. *See* Petitioners Prehearing Brief at 22 and Exhibit 3. Moreover, Novelis attempted to obtain commitments from purchasers during the POI to justify reopening production of aluminum foil used in household applications at its Terre Haute, Indiana, mill, but was unsuccessful until the filing of the petitions. *See* Petitioners Posthearing Brief, Responses to Questions at 13-14.

commercial shipments of both domestic and subject aluminum foil consisted of standard and extra heavy aluminum foil.²¹² U.S. aluminum foil producers implemented or announced expansions or re-openings of production facilities after imposition of orders on aluminum foil imports from China to produce or increase production of standard and extra heavy foil.²¹³ Thus, domestic producers served or were in a position to serve these segments of the U.S. market.

Furthermore, the domestic industry's declining capacity utilization and conversion prices during the POI are inconsistent with a significant shortage of domestically produced aluminum foil. The domestic industry's rate of capacity utilization declined from 88.6 percent in 2018 to 76.9 percent in 2020, providing the industry with ample unused capacity with which it could have increased production and shipments of aluminum foil.²¹⁴ The record also shows that the availability of domestically produced aluminum foil was adversely impacted by subject imports during the POI. Low-priced subject imports led JW Aluminum to close two U.S. production facilities, which produced aluminum foil in a wide range of thicknesses, and prevented Novelis from reopening its Terre Haute facility for the production of standard foil until July 2021, after provisional duties were imposed on subject imports.²¹⁵

Had subject imports been pulled into the U.S. market by shortages of domestically produced aluminum foil, it would have been reasonable to expect a continuous increase in the domestic industry's conversion prices over the POI, and higher subject import prices. Instead, the industry's conversion prices declined between 2019 and 2020, as purchasers used low-priced subject imports to extract price concessions from domestic producers, and subject import purchase costs generally declined.²¹⁶ ²¹⁷ For instance, contrary to purchaser *** allegation that U.S. producers were unwilling or unable to supply adequate volumes of aluminum foil, particularly fin stock,²¹⁸ the record shows that *** rejected, on the basis of price,

²¹² Compare CR/PR at Table E-1 (U.S. producers) with Table E-7 (U.S. importers).

²¹³ See CR/PR at Tables III-3 and III-4.

²¹⁴ CR/PR at Table III-5. Thus, the domestic industry's rate of capacity utilization declined 11.7 percentage points from 2018 to 2020.

²¹⁵ CR/PR at Tables III-3 to III-4, and VI-17; Hearing Transcript at 34 (Roush) and 76-77 (D'Amico); see also Petitioners Posthearing Brief at Exhibit 2 (Declaration of Jim D'Amico).

²¹⁶ See Section V.D, above.

²¹⁷ Further, we note that the ratio of conversion costs to conversion revenue for the U.S. industry in the merchant market increased, from *** percent in 2018 to *** percent in 2020. CR/PR at Table VI-7. This increase is coincident with a decline in the industry's operating margin, from *** percent in 2018 to *** percent in 2020, and a decrease in the industry's net income margin, from *** percent in 2018 to *** percent in 2020. CR/PR at Table VI-3.

²¹⁸ CR/PR at II-11.

offers from three U.S. producers (***) to supply fin stock.²¹⁹ Consequently, the record does not support respondents' argument that increased subject import volume and market share during the POI resulted from any widespread supply constraints with respect to domestically produced aluminum foil.

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. Nonsubject imports' volume and market share in the merchant market increased from 2018 through 2020 and nonsubject imports' volume and market share were higher in interim 2021 than they had been in interim 2020.²²⁰ Nonsubject imports, however, captured less market share from the domestic industry than subject imports during the POI.²²¹ Moreover, the AUVs of U.S. shipments of nonsubject imports were consistently higher than the AUVs of U.S. shipments of subject imports throughout the POI.²²² While we acknowledge that nonsubject imports increased and gained market share at the expense of the domestic industry,²²³ this does not sever the causal link between subject imports and the domestic industry's declining performance.

²¹⁹ See Petitioners Prehearing Brief at 59-60, Exhibit 2 Attachments 1-3, Exhibit 3 Attachments 1-6, and Exhibit 4 Attachment 1. The record also shows that domestic producers have not shifted capacity away from fin stock and towards other, allegedly higher margin products, as respondents claim. See CR/PR at Tables III-6 and F-7.

²²⁰ Nonsubject imports' share of the U.S. merchant market was *** percent in 2018, *** percent in 2019, and *** percent in 2020; it was *** percent in interim 2020 and *** percent in interim 2021. CR/PR at Table C-2. Nonsubject imports' share of the U.S. total market followed a similar trend; it was 11.4 percent in 2018, 11.6 percent in 2019, 12.5 percent in 2020, 12.6 percent in interim 2020, and 15.1 percent in interim 2021. CR/PR at Table C-1.

²²¹ CR/PR at Table IV-10. In the merchant market, nonsubject imports captured *** percentage points of market share from the domestic industry between 2018 and 2020 and another *** percentage points of market share in interim 2021 compared to interim 2020. *Id.*

²²² See CR/PR at Table IV-2.

²²³ In the total market during the full three-year period (2018 to 2020), the domestic producers lost a greater portion of market share to subject imports (2.7 percentage points) than they lost to non-subject imports (1.1 percentage points). See CR/PR at Table C-1. Further, the domestic producers lost more market share to subject imports (4.1 percentage points) than they lost to nonsubject imports (2.6 percentage points) during the interim period (the first quarter of 2021 compared to the first quarter of 2020). See *id.* Similarly, in the merchant market during the full three-year period (2018 to 2020), the domestic producers lost a greater portion of market share to subject imports (*** percentage points) than they lost to non-subject imports (*** percentage points). See CR/PR at Table C-2. Further, in the merchant market the domestic producers lost more market share to subject imports (*** percentage points) than they lost to nonsubject imports (*** percentage points) between the interim periods (the first quarter of 2021 compared to the first quarter of 2020). See *id.*

We also recognize that apparent U.S. consumption in the merchant market declined over the POI, by *** percent from 2018 to 2019 and by another *** percent from 2019 to 2020.²²⁴ While apparent U.S. consumption fell by *** percent over the POI, U.S. producers' commercial shipments declined nearly ***, resulting in the domestic industry's loss in market share to subject imports. Therefore, declining apparent U.S. consumption cannot explain the domestic industry's declining market share. Nor can it explain the extent of the industry's financial deterioration. While concurrent declines in apparent U.S. consumption could have placed some downward pressure on conversion prices, a majority of market participants did not observe this decline in demand,²²⁵ and the record lacks evidence of purchasers using changes in demand to exert pricing pressure. Instead, the record shows that purchasers used the availability of low-priced subject imports to extract lower prices from domestic producers,²²⁶ and that they accepted price increases after the petitions were filed. We also observe that when apparent U.S. consumption increased in interim 2021 relative to interim 2020, the industry's performance continued to decline by many measures as subject imports captured additional market share from the industry. Therefore, changes in apparent U.S. consumption cannot explain the domestic industry's declining performance over the POI and interim period.

OARC argues that the domestic industry's operations were disrupted by supply constraints and the COVID-19 pandemic in 2020, which caused the industry to be unable to supply several categories of aluminum foil including fin stock.²²⁷ Petitioners, however, maintain that the domestic industry was capable of supplying the U.S. market throughout the POI in all categories of aluminum foil, and that the COVID-19 pandemic had only a modest negative impact on their operations in 2020.²²⁸ Indeed, the record shows that ***, and the vast majority of the market participants reported that U.S. demand for aluminum foil increased during the POI.²²⁹

²²⁴ CR/PR at Tables IV-7 and IV-9.

²²⁵ A majority or plurality of U.S. producers, importers and purchasers reported an increase in U.S. demand for aluminum foil since January 1, 2018. CR/PR at Table II-4; *see also* Hearing Transcript at 22 (D'Amico) and 34 (Roush).

²²⁶ As noted above, *** was forced to reopen two contracts with ***, one for household foil and the other for food containers, which were concluded in October 2018 and reduce its conversion prices and contractual volume for supply between 2019-2021. Petitioners' Prehearing Brief at Exhibit 2, Attachment 7 and 8. *** was also forced to renegotiate a two-year contract (2019-2020) with *** in June 2020 to match pricing offered by a Russian producer. *Id.* at Exhibit 3, Attachment 1.

²²⁷ OARC Prehearing Brief at 33-34.

²²⁸ Petitioners Prehearing Brief at 60-72 and Exhibits 3-4; *see also* CR/PR at II-10 to II-12.

²²⁹ CR/PR at Tables II-4 and III-4; *see also* Hearing Transcript at 22 (D'Amico) and 34 (Roush).

In sum, we find that during the POI, the significant volume of subject imports, the increase in subject import volume, and significant subject import underselling, which depressed domestic producer prices to a significant degree and enabled subject imports to gain market share at the expense of the domestic industry, significantly impacted the domestic industry.

VI. Conclusion

For the reasons stated above, we determine that an industry in the United States is materially injured by reason of imports of aluminum foil from Armenia, Brazil, Oman, Russia, and Turkey found by Commerce to be sold in the United States at LTFV and imports of aluminum foil from Oman and Turkey found by Commerce to be subsidized by the governments of Oman and Turkey.

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}

Table I-1

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)
November 13, 2020	Commission’s preliminary determinations (85 FR 73748, November 19, 2020)
February 17, 2021	Commerce’s postponement of antidumping duty preliminary determinations regarding Armenia, Brazil, Oman, Russia, and Turkey (86 FR 9909)
March 5, 2021	Commerce’s preliminary affirmative countervailing duty determinations and alignment of final determinations with final antidumping duty determinations regarding Oman (86 FR 12913) and Turkey (86 FR 12911)

Table continued.

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 Appendix B presents the witnesses appearing at the Commission’s hearing.

Table I-1 Continued

Effective date	Action
May 4, 2021	Commerce's preliminary affirmative antidumping duty determination, postponement of final determination, and extension of provisional measures regarding Armenia (86 FR 23672), Brazil (86 FR 23678), Oman (86 FR 23681), Russia (86 FR 23683), and preliminary negative antidumping duty determination, postponement of final determination regarding Turkey (86 FR 23686); scheduling of final phase of Commission investigations (86 FR 28146, May 25, 2021)
September 14, 2021	Commission's hearing
September 23, 2021	Commerce's final affirmative antidumping duty determinations for Armenia (86 FR 52882), Brazil (86 FR 52886), Oman (86 FR 52876), Russia (86 FR 52878), and Turkey (86 FR 52880), and final affirmative countervailing duty determinations for Oman (86 FR 52888) and Turkey (86 FR 52884).
October 19, 2021	Commission's vote
November 5, 2021	Commission's views

Statutory criteria

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

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

Section 771(7)(C) of the Act (19 U.S.C. § 1677(7)(C)) further provides that--⁴

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

In addition, Section 771(7)(J) of the Act (19 U.S.C. § 1677(7)(J)) provides that—⁵

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

⁴ Amended by PL 114-27 (as signed, June 29, 2015), Trade Preferences Extension Act of 2015.

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

Organization of report

Part I of this report presents information on the subject merchandise, subsidy rates 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, ***⁷ of Russia, and *** of Turkey. The leading U.S. importer of aluminum foil from subject sources Armenia, Brazil, Russia, and Turkey is ***, followed by ***, the leading U.S. importer of aluminum foil from Oman. Leading importers of aluminum foil from nonsubject countries (primarily China, Germany, Greece, Italy, and Korea) include ***, ***.

⁶ Petition, Vol. I, p. 8.

⁷ *** are two affiliated Russian producers of aluminum foil. These firms provided separate foreign producer questionnaire responses to Commission in the preliminary phase. In the final phase, both firms provided their aggregated data in one foreign producer questionnaire to the Commission.

U.S. purchasers of aluminum foil are firms that distribute aluminum foil or use aluminum foil in their manufacturing processes; leading purchasers include ***, ***, ***, and ***.

Apparent U.S. consumption of aluminum foil totaled approximately 559,460 short tons (\$1.7 billion) in 2020. Currently, seven firms are known to produce aluminum foil in the United States.⁸ U.S. producers' U.S. shipments of aluminum foil totaled 403,571 short tons (\$1.2 billion) in 2020, and accounted for 72.1 percent of apparent U.S. consumption by quantity and 71.0 percent by value. U.S. importers' U.S. shipments of imports from subject sources totaled 85,891 short tons (\$239.1 million) in 2020 and accounted for 15.4 percent of apparent U.S. consumption by quantity and 13.8 percent by value. U.S. importers' U.S. shipments of imports from nonsubject sources totaled 69,998 short tons (\$261.9 million) in 2020 and accounted for 12.5 percent of apparent U.S. consumption by quantity and 15.1 percent by value.

Summary data and data sources

A summary of data collected in these investigations is presented in appendix C, table C-1. Except as noted, U.S. industry data are based on questionnaire responses of five firms that accounted for nearly *** U.S. production of aluminum foil during 2020.⁹ Unless otherwise noted, U.S. imports are based on firms' responses to Commission questionnaires.

⁸ The Commission received U.S. producer questionnaire responses from five firms, Aleris Rolled Products, Inc. ("Aleris"), Gränges, JW Aluminum Company ("JW Aluminum"), Novelis, and Reynolds. The petition listed two additional producers, ***. *** are estimated to account for *** percent of U.S. production of aluminum foil in 2019. Petition, Volume I, p. 5 and Exh. GEN-1.

⁹ Estimates for year 2020 are based on responses from these five firms, which accounted for *** percent of U.S. production of aluminum foil during 2019.

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.¹⁰ On April 19, 2018, Commerce issued antidumping and countervailing duty orders on aluminum foil from China.¹¹

Nature and extent of subsidies and sales at LTFV

Subsidies

On March 5, 2021, Commerce published a notice in the Federal Register of its preliminary determination of countervailable subsidies for producers and exporters of aluminum foil from Oman and Turkey.¹² On September 23, 2021, Commerce published its notice of final determination of countervailable subsidies for producers and exporters of aluminum foil from Oman¹³ and Turkey.¹⁴ Tables I-2 and I-3 present Commerce's findings of subsidization of aluminum foil in Oman and Turkey, respectively.

Table I-2

Aluminum foil: Commerce's preliminary and final subsidy determination with respect to imports from Oman

Entity	Preliminary countervailable subsidy rate (percent)	Final countervailable subsidy rate (percent)
Oman Aluminum Rolling Company LLC/Sohar Paper Cores LLC	2.15	1.93
All others	2.15	1.93

Source: 86 FR 12913, March 5, 2021 and 86 FR 52888, September 23, 2021.

¹⁰ *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.

¹¹ *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.

¹² 86 FR 12913, March 5, 2021; and 86 FR 12911, March 5, 2021.

¹³ 86 FR 52888, September 23, 2021.

¹⁴ 86 FR 52884, September 23, 2021.

Note: For further information on programs determined to be countervailable, see Commerce's associated Issues and Decision Memorandum for the Preliminary and Final Determinations in the Countervailing Duty Investigation of Certain Aluminum Foil from Oman, Case C-523-816, February 26, 2021 and September 16, 2021.

Table I-3
Aluminum foil: Commerce's preliminary and final subsidy determination with respect to imports from Turkey

Entity	Preliminary countervailable subsidy rate (percent)	Final countervailable subsidy rate (percent)
Assan Aluminyum Sanayi ve Ticaret A.S.	2.79	2.60
All others	2.79	2.60

Source: 86 FR 12911, March 5, 2021 and 86 FR 52884, September 23, 2021.

Note: For further information on programs determined to be countervailable, see Commerce's associated Issues and Decision Memorandum for the Preliminary and Final Determinations in the Countervailing Duty Investigation of Certain Aluminum Foil from Turkey, Case C-489-845, February 26, 2021 and September 16, 2021.

Sales at LTFV

On May 4, 2021, Commerce published a notice in the Federal Register of its preliminary determination of sales at LTFV with respect to imports from Armenia,¹⁵ Brazil,¹⁶ Oman,¹⁷ Russia,¹⁸ and Turkey.¹⁹ On September 23, 2021, Commerce published its notice of final determination of sales at LTFV with respect to imports from Armenia²⁰, Brazil²¹, Oman²², Russia²³, and Turkey²⁴. Tables I-4, I-5, I-6, I-7, and I-8 present Commerce's dumping margins with respect to imports of aluminum foil from Armenia, Brazil, Oman, Russia, and Turkey.

¹⁵ 86 FR 23672, May 4, 2021.

¹⁶ 86 FR 23678, May 4, 2021.

¹⁷ 86 FR 23681, May 4, 2021.

¹⁸ 86 FR 23683, May 4, 2021.

¹⁹ 86 FR 23686, May 4, 2021.

²⁰ 86 FR 52882, September 23, 2021.

²¹ 86 FR 52886, September 23, 2021.

²² 86 FR 52876, September 23, 2021.

²³ 86 FR 52878, September 23, 2021.

²⁴ 86 FR 52880, September 23, 2021.

Table I-4**Aluminum foil: Commerce's preliminary and final weighted-average LTFV margins with respect to imports from Armenia**

Exporter	Producer	Preliminary dumping margin (percent)	Final dumping margin (percent)
Rusal Products GmbH	Rusal Armenal CJSC	188.84	29.11
Rusal Marketing GmbH	Rusal Armenal CJSC	188.84	29.11
All other exporters	All other producers	188.84	29.11

Source: 86 FR 23672, May 4, 2021 and 86 FR 52882, September 23, 2021.

Table I-5**Aluminum foil: Commerce's preliminary and final weighted-average LTFV margins with respect to imports from Brazil**

Exporter or producer	Preliminary dumping margin (percent)	Final dumping margin (percent)
Arconic Ind. E Com de Metais LTDA	63.05	63.05
Companhia Brasileira de Alumínio/CBA Itapissuma	13.87	13.93
All others	13.87	13.93

Source: 86 FR 23678, May 4, 2021 and 86 FR 52886, September 23, 2021.

Note: ***, CBA's foreign producer questionnaire response, II-2a.

Table I-6**Aluminum foil: Commerce's preliminary and final weighted-average LTFV margins with respect to imports from Oman**

Exporter or producer	Preliminary dumping margin (percent)	Final dumping margin (percent)
Oman Aluminium Rolling Company LLC	4.03	3.89
All others	4.03	3.89

Source: 86 FR 23681, May 4, 2021 and 86 FR 52876, September 23, 2021.

Table I-7**Aluminum foil: Commerce's preliminary and final weighted-average LTFV margins with respect to imports from Russia**

Exporter or producer	Preliminary dumping margin (percent)	Final dumping margin (percent)
Rusal Marketing GmbH/Rusal Products GmbH/RTI Limited/ JSC United Company Rusal – Trading House/JSC Rusal Sayanal/JSC Ural Foil	62.18	62.18
All others	62.18	62.18

Source: 86 FR 23683, May 4, 2021 and 86 FR 52878, September 23, 2021.

Table I-8

Aluminum foil: Commerce's preliminary and final weighted-average LTFV margins with respect to imports from Turkey

Exporter or producer	Preliminary dumping margin (percent)	Final dumping margin (percent)
Assan Alüminyum Sanayi ve Ticaret A.S.; Kibar Dis Ticaret A.S.; and Ispak Esnek Ambalaj Sanayi A.S	0.00	2.28
All others	N/A	2.28

Source: 86 FR 23686, May 4, 2021 and 86 FR 52880, September 23, 2021.

The subject merchandise

Commerce's scope

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

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.

²⁵ 86 FR 23674, May 4, 2021.

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”): statistical reporting numbers 7607.11.3000, 7607.11.6090,²⁶ 7607.11.9030, 7607.11.9060, 7607.11.9090, and 7607.19.6000.²⁷ Foil classified in heading 7607 must measure 0.2 mm or less in thickness. The 2021 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 7607.19.60.²⁸ Subject aluminum foil originating in Oman is eligible for special duty rates under the United States-Oman Free Trade Agreement Implementation Act.²⁹ 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 7607.19.60.³⁰ Subject foil produced in Brazil is eligible for duty-free entry under the Generalized System of Preferences under each of the covered subheadings; such foil produced in Thailand is eligible for this treatment only under subheading 7607.19.60.³¹ Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection (“CBP”).

²⁶ 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*.

²⁷ 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.

²⁸ *HTSUS (2021) Revision 8*, USITC Publication 5225, October 2021, p. 76-10.

²⁹ *HTSUS (2021) Revision 8*, USITC Publication 5225, October 2021, HTS general note 31, p. GN-562.

³⁰ *HTSUS (2021) Revision 8*, USITC Publication 5225, October 2021, p. 76-10. Products of Oman classified in chapter 76 are not covered by tariff shift origin rules and generally qualify for FTA status under a 35 percent minimum value contribution test. See general note 31(b).

³¹ *HTSUS (2021) Revision 8*, USITC Publication 5225, October 2021, p. 76-10, HTS general note 4(a), pp. GN-11 – 12, HTS general note 4(d), pp. GN-15 – 21.

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,³² as of March 23, 2018.³³ At this time, imports of these products originating in Australia,³⁴ Canada, and Mexico³⁵ are exempt from duties or quota limits; imports originating in Argentina are exempt from duties, but instead are subject to quota limits;³⁶ and imports originating in all other countries – including subject countries Armenia, Brazil,³⁷ Oman, Russia,

³² 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.

³³ *Adjusting Imports of Aluminum Into the United States*, Presidential Proclamation 9704, March 8, 2018, 83 FR 11619, March 15, 2018.

³⁴ 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).

³⁵ 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).

³⁶ 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 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 2021 annual and third-quarter 2021 Section 232 import quota limits for wrought aluminum (including aluminum foil) originating in Argentina, see the CBP quota bulletin, "QB 21-703 2020 Aluminum Absolute Quota 3rd Quarter for Argentina," June 28, 2021, available at <https://www.cbp.gov/trade/quota/bulletins/qb-21-703-2021-aluminum-absolute-quota-3rd-quarter-argentina>.

³⁷ Imports of aluminum articles (including subject aluminum foil) originating in Brazil were 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).

and Turkey are subject to the 10 percent additional duties.³⁸ See also U.S. notes 19(a) and 19(b) in subchapter III of HTS chapter 99.³⁹

Section 301 tariff treatment

Nonsubject aluminum foil originating in China is subject to an additional 7.5 percent⁴⁰ *ad valorem* duty under Section 301 of the Trade Act of 1974, as amended (“Trade Act”), effective September 21, 2019.⁴¹ See also U.S. note 20(s) in subchapter II of HTS chapter 99.⁴²

³⁸ Imports of aluminum articles originating in Korea and the European Union member states (“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). Imports of aluminum articles originating in the United Arab Emirates were exempted from the Section 232 duties as of February 3, 2021 (86 FR 6825, January 25, 2021) but the exemption was revoked on February 1, 2021 (86 FR 8265, February 4, 2021).

³⁹ *HTSUS (2021) Revision 8*, USITC Publication 5225, October 2021, pp. 76-17, 99-III-13 – 99-III-15, 99-III-242 – 99-III-243.

⁴⁰ 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.

⁴¹ 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).

⁴² *HTSUS (2021) Revision 8*, USITC Publication 5225, October 2021, pp. 76-17, 99-III-82 – 99-III-84, 99-III-94.

The product

Description and applications

Aluminum foil is a thin, wrought⁴³ aluminum product that is produced via a rolling process. The subject product is aluminum foil having a thickness of 0.2 mm (0.007874 inch) 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.⁴⁴ Aluminum foil is commonly produced using 1XXX,⁴⁵ 3XXX,⁴⁶ and 8XXX⁴⁷ series aluminum alloys. Aluminum foil can be produced to meet the requirements of various international standard specifications, including American Society for Testing and Materials (“ASTM”) International Standard B-479.⁴⁸

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-9 presents information on aluminum foil by alloy series, properties, and end uses.

⁴³ Wrought aluminum consists of aluminum products that are rolled, drawn, extruded, or otherwise mechanically formed.

⁴⁴ Petition, Vol. 1, p. 8.

⁴⁵ 1XXX series contains 99 percent or more aluminum by weight. This is considered commercially pure by industry standards.

⁴⁶ The main alloying metal in 3XXX series aluminum is manganese.

⁴⁷ 8XXX series alloys include metals such as lithium, tin, nickel, and titanium.

⁴⁸ 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).

Table I-9**Aluminum alloy series: Alloying metals, physical properties, and end uses**

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, flexible packaging
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, household foil, heat exchangers (air conditioning), building products (insulation), flexible packaging, converter foil, cable wrap, automotive heat shield

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. Petitioners' Post-Hearing Brief, pp. 113-114.

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

Aluminum foil is produced and imported in a variety of gauges, or levels of thickness, and is commonly denominated in inches, millimeters, or microns.⁴⁹ The major categories of aluminum foil by thickness include:⁵⁰

- **Ultra-thin**— Aluminum foil less than 0.000315 inch (8 microns) in thickness.⁵¹
- **Thin**— Aluminum foil greater than or equal to 0.000315 inch (8 microns) and less than 0.00039 inch (10 microns) in thickness.⁵²
- **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.⁵³
- **Heavy**— Aluminum foil greater than 0.001 inch (25 microns) in thickness and less than 0.00177 inch (45 microns) in thickness.⁵⁴
- **Extra heavy**— Aluminum foil greater than or equal to 0.00177 inch (45 microns) in thickness.⁵⁵

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.”

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.⁵⁶ 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.

⁴⁹ Microns are commonly referred to as micrometers and represent one thousandth of a millimeter, or one millionth of a meter.

⁵⁰ U.S. Packaging and Wrapping LLC, “Thickness of Aluminum Foil,” <http://www.uspackagingandwrapping.com/blog/Thickness-of-Aluminum-Foil.html>, (retrieved August 3, 2021).

⁵¹ Ultra-thin aluminum foil is primarily used as flexible packaging for food, medical device, pharmaceutical, and health care industries.

⁵² The thin category generally corresponds to aluminum foil used in flexible packaging.

⁵³ 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.

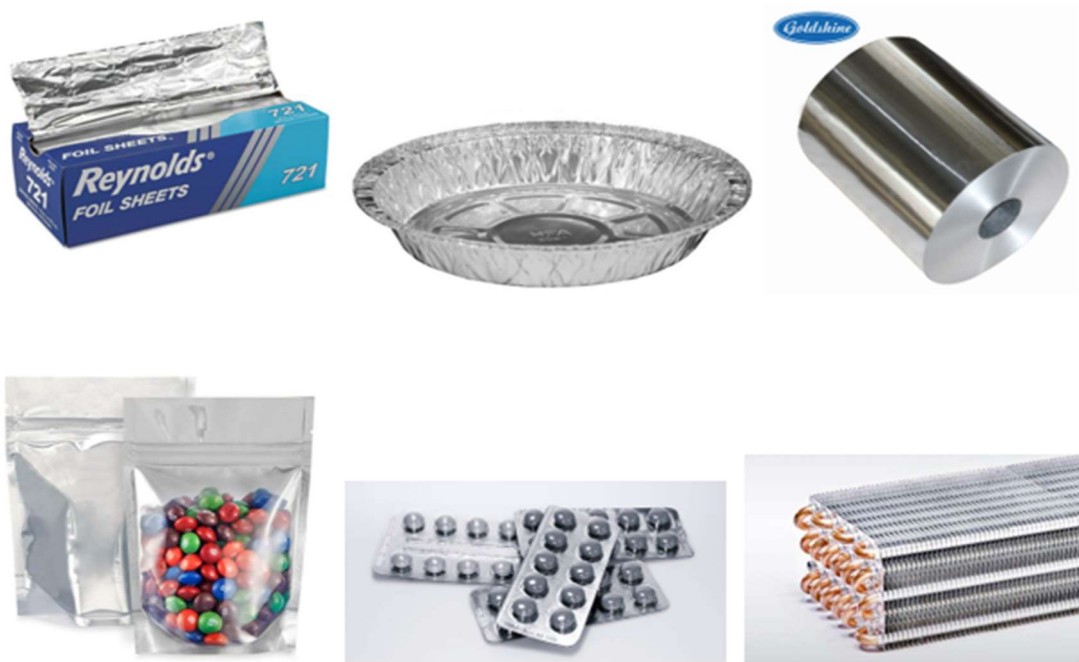
⁵⁴ Heavy duty and extra heavy duty aluminum foil are also used in household applications because they provide extra strength and tear resistance for baking, grilling and storage applications.

⁵⁵ The extra heavy duty aluminum foil category is used in some packaging applications but it also includes certain fin stock.

⁵⁶ Aluminum Association, “Foil and Packaging,” <http://www.aluminum.org/product-markets/foil-packaging>, (retrieved August 3, 2021).

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&qclid=Cj0KCQjw28T8BRDbARIsAEOMBczi2DJ3IjQGAIXkZ1PQKG946kXxqSDW2MupYmLA89Md6PKYPDyVhKEaAsR6EALw_wcB, (retrieved August 3, 2021); 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 August 3, 2021); Alibaba, https://www.alibaba.com/product-detail/8011-Aluminium-Foil-Raw-Material-Jumbo_60650799535.html, (retrieved August 3, 2021).

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

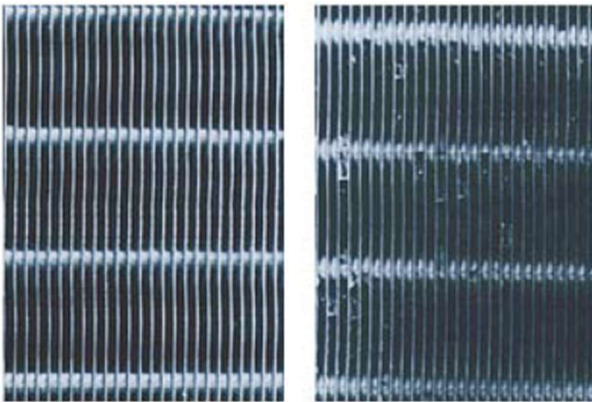
Source: Uline, https://www.uline.com/Product/Detail/S-19167SILB/Plastic-Retail-Food-Bags/Stand-Up-Barrier-Pouches-4-x-6-x-2-Silver-Back?pricode=WZ749&gadtype=pla&id=S-19167SILB&qclid=CJ_x0ZuBn9MCFdiPswod-msDUw&gclsrc=aw.ds, (retrieved August 3, 2021); Hydro, <https://www.hydro.com/en/products-and-services/rolled-products/rolled-products-for-packaging/plain-foil-for-medical-and-pharmaceutical-packaging/>, (retrieved October 22, 2020); Elval, <https://www.elval.com/en/markets-heating-ventilation-air-conditioning-hvac-heat-exchangers>, (retrieved August 3, 2021).

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 7XXX⁵⁷ series alloys in a variety of gauges;⁵⁸ however, certain fin stock is produced using 8XXX series alloys as well.⁵⁹ Figure I-2 presents an example of fin stock. For fin stock, a coating material is applied to further improve corrosion resistance and operating efficiency in applications such as cooling equipment (air conditioners).⁶⁰

Figure I-2

Certain fin stock: Pre-coated fin stock (left) and fin stock with no treatment (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 August 3, 2021).

⁵⁷ 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 August 3, 2021).

⁵⁸ Almetals, Inc., “Fin Stock Suppliers,” <https://www.almetals.com/metals/fin-stock.aspx>, (retrieved August 3, 2021).

⁵⁹ Haomei, “Bare Aluminum Fin Stock,” <http://aluminiumfinstock.com/bare-aluminium-fin-stock.html> (retrieved August 3, 2021).

⁶⁰ Haomei, “Hydrophilic Aluminum Fin Stock,” <http://aluminiumfinstock.com/hydrophilic-aluminium-fin-stock.html> (retrieved August 3, 2021).

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 alumina is then reduced to remove oxygen and produce molten aluminum metal. The molten aluminum is then alloyed with different metals to attain certain properties and qualities. During the secondary smelting process, aluminum scrap (both old⁶¹ and new⁶²) 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.

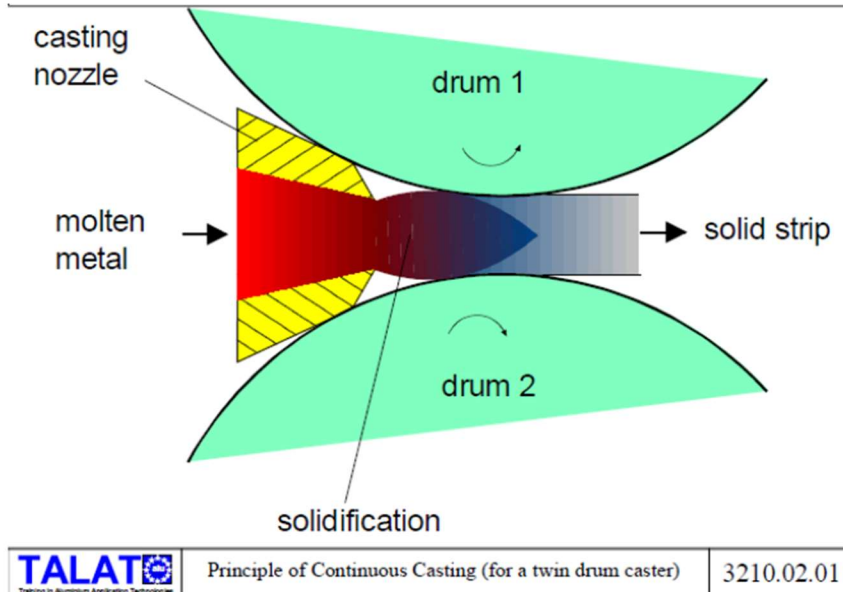
⁶¹ Old scrap is post-consumer material derived from various end uses such as manufactured products and construction materials.

⁶² New scrap is generated during the manufacturing of various aluminum products, and often takes the form of shavings and trimmings.

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 rollers⁶³ and emerges as a continuous solid strip of aluminum (figure I-3). The strip of 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).⁶⁴ Strips produced during this process can be between 3 and 20 mm (0.11811 and 0.787402 inch) in thickness.⁶⁵ 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)



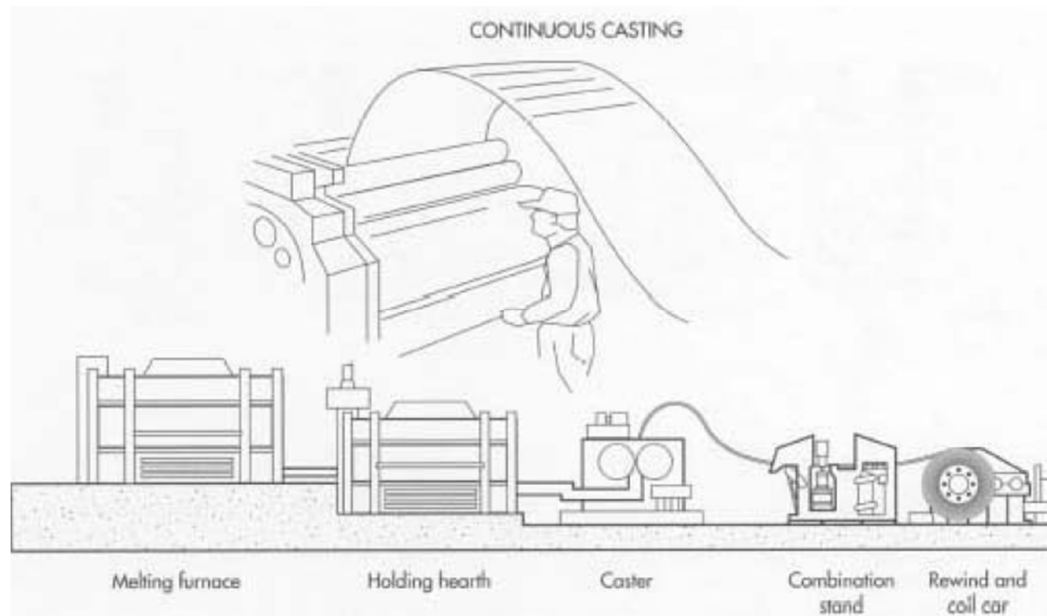
Source: Catrin Kammer, European Aluminum Association, "TALAT Lecture 3210, Continuous Casting of Aluminum," 1999, 4.

⁶³ The water-cooled rollers are labeled 'drum 1' and 'drum 2' in Figure I-3.

⁶⁴ How Products are Made, "Aluminum Foil: Smelting," <http://www.madehow.com/Volume-1/Aluminum-Foil.html> (retrieved August 4, 2021).

⁶⁵ Catrin Kammer, European Aluminum Association, "TALAT Lecture 3210, Continuous Casting of Aluminum," 1999, p. 3.

Figure I-4
Aluminum foil: Continuous casting process



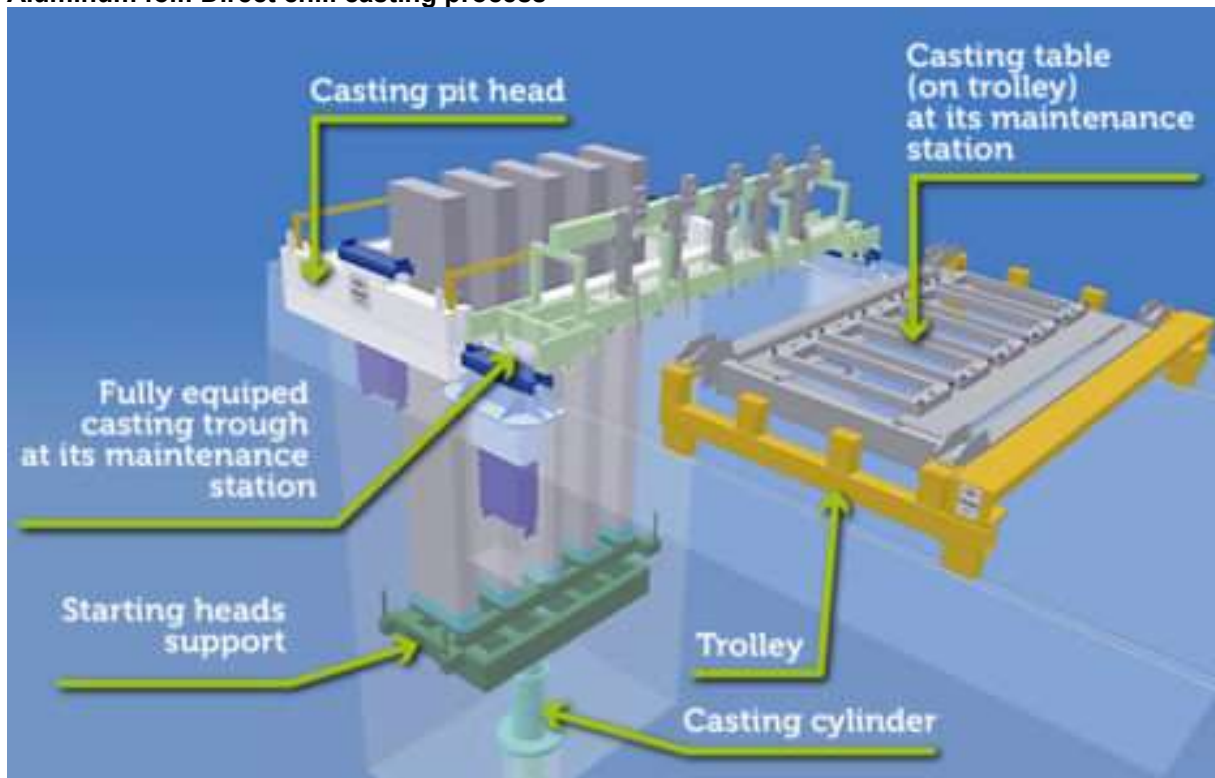
Source: <http://www.madehow.com/Volume-1/Aluminum-Foil.html>, (retrieved October 22, 2020).

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 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 scalping⁶⁶ before they are cooled to room temperature and transferred to a hot rolling mill for further processing.

⁶⁶ 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 rolls (rollers). The major difference between these methods is how the input (foil stock in coils, slabs, or 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 rolls reduce the slab or sheet ingot down to a desired gauge (thickness), usually between 4 and 6 mm (0.15748 and 0.23622 inch).⁶⁷ 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 opposite directions.⁶⁸ 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. Not all cold mills have the ability to reduce the gauge of aluminum foil to all thicknesses.⁶⁹ Regular cold rolling mills have difficulty flattening foil sufficiently once the gauge approaches .001 inch, typical for standard foil.⁷⁰ Instead, a doubling mill, a specific type of cold mill, is typically necessary to produce foil in gauges of .001 inches or less. Cold-rolling two coils at the same time, the process is known as doubling, and is used to avoid breakage that may occur as the foil is reduced in thickness.⁷¹ Doubling the foil sheet produces two natural finishes, bright and matte.⁷² 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.

⁶⁷ Roy Woodward, European Aluminum Association, "TALAT Lecture 1301, The Rolling of Aluminum: the Process and the Product," 1994, p. 6.

⁶⁸ Petition, Vol. 1, p. 8.

⁶⁹ Petitioners' Post-Hearing Brief, p. 112.

⁷⁰ Post-Hearing Brief of Assan Alüminyum Respondents, Appendix, p. 1.

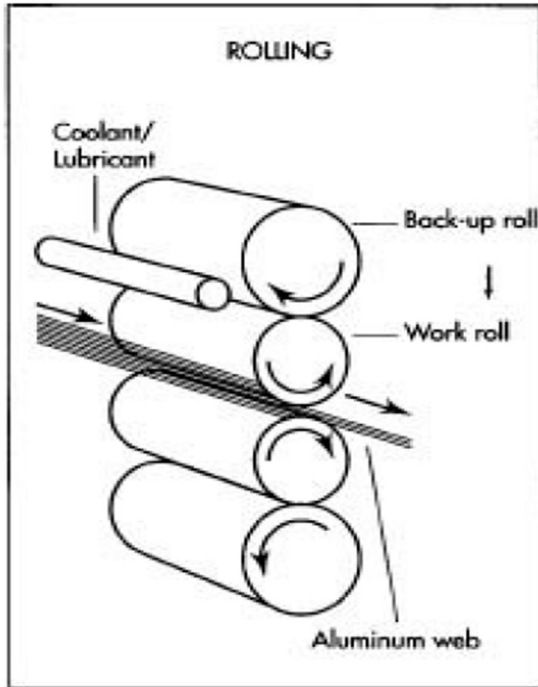
⁷¹ Aluminum Association, "Foil and Packaging," <http://www.aluminum.org/product-markets/foil-packaging>, (retrieved August 4, 2021).

⁷² 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.

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.⁷³ Once inspected and packed, the finished rolls of aluminum foil are then shipped to customers for various end uses.

⁷³ Petition, Vol. 1, p. 9.

Figure I-6
Aluminum foil: Rolling aluminum foil stock



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

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.⁷⁴ 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.⁷⁵ 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.⁷⁶

⁷⁴ How Products are Made, "Aluminum Foil: Smelting," <http://www.madehow.com/Volume-1/Aluminum-Foil.html>, (retrieved August 4, 2021).

⁷⁵ Catrin Kammer, European Aluminum Association, "TALAT Lecture 3210, Continuous Casting of Aluminum," 1999, p. 4.

⁷⁶ 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.

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 materials is excluded from the scope of these investigations.

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.⁷⁷ Therefore, petitioners contend that there should be a single domestic like product coextensive with the scope of these investigations.⁷⁸

Respondents noted that the term “domestic like product” refers to “a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation.”⁷⁹ In the preliminary phase, the Commission concluded that there’s a single domestic like product, which is aluminum foil, coextensive with the scope of these investigations.^{80 81} Respondents noted that they do not have any issues regarding this definition.⁸²

⁷⁷ 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.

⁷⁸ *Ibid.*

⁷⁹ Respondents prehearing brief, p. 5.

⁸⁰ Aluminum Foil from Armenia, Brazil, Oman, Russia, and Turkey: Investigation Nos. 701-TA-658-659 and 731-TA-1538-1542 (Preliminary), p. 12.

⁸¹ 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.

⁸² Respondents prehearing brief, p. 5.

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.¹

Apparent U.S. consumption decreased in terms of both quantity and value. Overall, apparent U.S. consumption in terms of quantity in 2020 was 6.3 percent lower than in 2018. Apparent U.S. consumption in terms of value in 2020 was 18.7 percent lower than in 2018.

U.S. purchasers

The Commission received 28 usable questionnaire responses from firms that had purchased aluminum foil during January 2018-March 2021.^{2 3} Twelve responding purchasers produce consumer products, five produce industrial products, five produce both consumer and industrial products, six are distributors and two reported producing other goods. One purchaser, ***, reported being a converter of flexible packaging material and the other, ***, reported that it produces high-end visual decorative products. In general, the majority of responding U.S. purchasers were located in the Midwest and Northeastern region of the United States. The responding purchasers represented firms in a variety of domestic industries, including the food service, processing, and packaging industry, the HVAC industry, the automotive industry, and the construction industry. Large purchasers of aluminum foil include, in descending order, ***, ***, ***, ***, and ***.

¹ Petition, Volume I, p. 8.

² Of the 28 responding purchasers, 26 purchased domestic aluminum foil, none purchased imports of the subject merchandise from Armenia, three purchased imports of subject merchandise from Brazil, three purchased imports of subject merchandise from Oman, one purchased imports of subject merchandise from Russia, six purchased subject merchandise from Turkey, and 16 purchased imports of aluminum foil from other sources.

³ Twenty-five purchasers indicated they had marketing/pricing knowledge of domestic product, five of Armenian product, nine of Brazilian product, three of Omani product, five of Russian product, fourteen of Turkish product, and nineteen of nonsubject countries.

Channels of distribution

U.S. producers sold mainly to industrial applications, consumer packaging/converters, and consumer household use/spoolers as shown in table II-1. Importers of aluminum foil from Oman sold mainly to industrial applications and importers of aluminum foil from Turkey sold the majority to consumer packaging/converters and consumer household use/spoolers, while importers of aluminum foil from the other subject countries sold the majority of aluminum foil to consumer household use/spoolers.

Table II-1
Aluminum foil: Share of U.S. shipments by source, channel of distribution, and period

Shares in percent

Source	Channel	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
United States	Share to distributors	***	***	***	***	***
United States	Share to consumer packaging/converter	***	***	***	***	***
United States	Share to consumer household use/spoolers	***	***	***	***	***
United States	Share to industrial applications	***	***	***	***	***
Armenia	Share to distributors	***	***	***	***	***
Armenia	Share to consumer packaging/converter	***	***	***	***	***
Armenia	Share to consumer household use/spoolers	***	***	***	***	***
Armenia	Share to industrial applications	***	***	***	***	***
Brazil	Share to distributors	***	***	***	***	***
Brazil	Share to consumer packaging/converter	***	***	***	***	***
Brazil	Share to consumer household use/spoolers	***	***	***	***	***
Brazil	Share to industrial applications	***	***	***	***	***
Oman	Share to distributors	***	***	***	***	***
Oman	Share to consumer packaging/converter	***	***	***	***	***
Oman	Share to consumer household use/spoolers	***	***	***	***	***
Oman	Share to industrial applications	***	***	***	***	***
Russia	Share to distributors	***	***	***	***	***
Russia	Share to consumer packaging/converter	***	***	***	***	***
Russia	Share to consumer household use/spoolers	***	***	***	***	***
Russia	Share to industrial applications	***	***	***	***	***
Turkey	Share to distributors	***	***	***	***	***
Turkey	Share to consumer packaging/converter	***	***	***	***	***
Turkey	Share to consumer household use/spoolers	***	***	***	***	***
Turkey	Share to industrial applications	***	***	***	***	***

Table II-1 Continued

Aluminum foil: Share of U.S. shipments by source, channel of distribution, and period

Shares in percent

Source	Channel	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Subject sources	Share to distributors	***	***	***	***	***
Subject sources	Share to consumer packaging/converter	***	***	***	***	***
Subject sources	Share to consumer household use/spoolers	***	***	***	***	***
Subject sources	Share to industrial applications	***	***	***	***	***
China	Share to distributors	***	***	***	***	***
China	Share to consumer packaging/converter	***	***	***	***	***
China	Share to consumer household use/spoolers	***	***	***	***	***
China	Share to industrial applications	***	***	***	***	***
Germany	Share to distributors	***	***	***	***	***
Germany	Share to consumer packaging/converter	***	***	***	***	***
Germany	Share to consumer household use/spoolers	***	***	***	***	***
Germany	Share to industrial applications	***	***	***	***	***
Korea	Share to distributors	***	***	***	***	***
Korea	Share to consumer packaging/converter	***	***	***	***	***
Korea	Share to consumer household use/spoolers	***	***	***	***	***
Korea	Share to industrial applications	***	***	***	***	***
AOS	Share to distributors	***	***	***	***	***
AOS	Share to consumer packaging/converter	***	***	***	***	***
AOS	Share to consumer household use/spoolers	***	***	***	***	***
AOS	Share to industrial applications	***	***	***	***	***
Nonsubject	Share to distributors	***	***	***	***	***
Nonsubject	Share to consumer packaging/converter	***	***	***	***	***
Nonsubject	Share to consumer household use/spoolers	***	***	***	***	***
Nonsubject	Share to industrial applications	***	***	***	***	***
All import	Share to distributors	***	***	***	***	***
All import	Share to consumer packaging/converter	***	***	***	***	***
All import	Share to consumer household use/spoolers	***	***	***	***	***
All import	Share to industrial applications	***	***	***	***	***

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

Geographic distribution

U.S. producers and importers reported selling aluminum foil to all regions in the contiguous United States (table II-2). For U.S. producers, 4.9 percent of sales were within 100 miles of their production facility, 90.7 percent were between 101 and 1,000 miles, and 4.4 percent were over 1,000 miles. Importers sold 97.9 percent within 100 miles of their U.S. point of shipment, 2.0 percent between 101 and 1,000 miles, and 0.01 percent over 1,000 miles.

Importers reported internally consuming aluminum foil from Armenia, Brazil, Russia, and Turkey in the Southeast and Midwest regions of the United States. Additionally, aluminum foil from Russia is also internally consumed in the Northeast region of the United States and aluminum foil from Turkey is consumed in the Central Southwest region of the United States.

Table II-2
Aluminum foil: Count of U.S. producers' and U.S. importers' geographic markets

Region	U.S. producers	Armenia	Brazil	Oman	Russia	Turkey	Subject sources
Northeast	4	1	3	0	3	6	8
Midwest	4	1	5	0	3	4	9
Southeast	4	2	4	2	4	6	13
Central Southwest	4	1	4	2	3	2	8
Mountain	3	1	2	0	3	3	5
Pacific Coast	4	1	1	3	3	2	5
Other	0	1	1	0	3	2	3
All regions (except Other)	3	1	1	0	3	2	3
Reporting firms	4	2	6	5	4	9	19

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

Note: Other U.S. markets include AK, HI, PR, and VI.

Supply and demand considerations

U.S. supply

Table II-3 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 2020 and nearly *** times the total production capacity reported by the largest subject country (***) in the same year.

Table II-3
Aluminum foil: Supply factors that affect the ability to increase shipments to the U.S. market, by country

Quantity in short tons; ratio and share in percent; count is number of “yes” responses

Factor	Measure	United States	Armenia	Brazil	Oman	Russia	Turkey	Subject suppliers
Capacity 2018	Quantity	544,180	***	***	***	***	***	***
Capacity 2020	Quantity	553,961	***	***	***	***	***	***
Capacity utilization 2018	Ratio	88.6	***	***	***	***	***	***
Capacity utilization 2020	Ratio	76.9	***	***	***	***	***	***
Inventories to total shipments 2018	Ratio	6.5	***	***	***	***	***	***
Inventories to total shipments 2020	Ratio	6.9	***	***	***	***	***	***
Home market shipments 2020	Share	93.8	***	***	***	***	***	***
Non-US export market shipments 2020	Share	6.2	***	***	***	***	***	***
Ability to shift production (firms reporting “yes”)	Count	***	***	***	***	***	***	***

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

Note: Responding U.S. producers accounted for virtually all of U.S. production of aluminum foil in 2020. 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 2020. 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.”

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 decreased from 2018 to 2020. U.S. producers' inventories relative to total shipments remained largely constant from 2018 to 2020. Exports of U.S. produced aluminum foil remained at or below *** percent of total shipments throughout the period. The majority of U.S. producers *** 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 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 a lack of unused capacity, low inventory levels, and the size of Armenian production capacity relative to the production capacity of the domestic industry.

Armenian production capacity increased slightly from 2018 to 2020. Armenian total reported production capacity was just over *** percent of the production capacity reported by U.S. producers in 2020. Although Armenian capacity increased from 2018 to 2020, Armenian production capacity utilization remained high and increased throughout the period and exceeded the U.S. producers' capacity utilization rates by over *** percentage points in 2020. Armenian producers' inventories relative to total shipments decreased by almost *** from 2018 to 2020. The Armenian producer reported selling *** percent of shipments to export markets other than the United States in 2020. The responding Armenian producer, Rusal Armenal, reported that it *** production from other products to aluminum foil. ***. Rusal Armenal 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 size of the Brazilian producers' production capacity relative to the domestic industry mitigates the responsiveness of supply.

Brazilian production capacity increased from 2018 to 2020. Brazilian total reported production capacity was slightly under *** percent of the production capacity reported by U.S. producers in 2020. Although Brazilian capacity utilization decreased from 2018 to 2020, Brazilian production capacity utilization remained high throughout the period and exceeded the U.S. industry's capacity utilization rates by approximately *** percentage points in 2020. Brazilian producers' inventories remained largely constant relative to production from 2018 to 2020. Brazilian producers reported selling over half of their commercial shipments to their home market and just over *** percent of their commercial shipments to export markets other than the United States in 2020. All responding Brazilian producers (2 of 2) 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 ***.

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 moderate changes in the quantity of shipments of aluminum foil to the U.S. market. The main contributing factor to this degree of responsiveness of supply are the availability of unused capacity and the ability to shift production to or from alternate products. Factors mitigating the responsiveness of supply include a limited ability to shift shipments from alternate markets, low inventory levels, and the size of Omani production capacity relative to the production capacity of the domestic industry.

Omani production capacity remained constant from 2018 to 2020. Total reported production capacity was approximately *** percent of the production capacity reported by U.S. producers in 2020. Omani capacity utilization increased from 2018 to 2020 but was *** percentage points lower than U.S. production capacity utilization rates in 2020. The Omani producer's inventories were *** throughout the period. The Omani producer reported selling just under *** percent of commercial shipments to its home market and markets other than the United States in 2020. The responding Omani producer reported that it was able 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 limited 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 size of the Russian producers' production relative to the domestic industry capacity mitigates the responsiveness of supply.

Russian production capacity decreased from 2018 to 2020. Total reported Russian production capacity was less than *** of the production capacity reported by U.S. producers in 2020. Russian capacity utilization increased from 2018 to 2020 and was over *** percentage points higher than U.S. capacity utilization rates in 2020. The Russian producer's inventory levels remained largely constant relative to production from 2018 to 2020, and the inventory-to-shipment ratio was more than twice those in other subject countries in 2020. The Russian producer reported selling over *** of commercial shipments to its home market and *** percent to markets other than the United States in 2020. The responding Russian producer reported that it could switch production from other products to aluminum foil. Russian producers reported that they could produce ***.

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 size of the Turkish producers' production capacity relative to the domestic industry mitigates the responsiveness of supply.

Turkish production capacity and production increased while capacity utilization rates decreased from 2018 to 2020. Total reported Turkish production capacity was just over *** of reported U.S. production capacity. Turkish producers' inventory levels relative to total shipments were largely constant from 2018 to 2020. Turkish producers' shipments to their home market and exports to non-U.S. markets accounted for over *** percent of commercial shipments in 2020. 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 45.4 percent of total U.S. imports in 2020. The largest sources of nonsubject imports during January 2018-March 2021 were China, Germany, and Korea. Combined, these countries accounted for *** percent of nonsubject imports in 2020.

Supply constraints

Two of five U.S. producers and 13 of 32 importers reported that they had experienced supply constraints between January 1, 2018 and September 29, 2020. U.S. producer *** reported supply constraints and reported that it had the capacity to supply a wide range of foil products but due to low-priced imports from subject countries, it was forced to close a plant. U.S. producer *** reported that there were no supply constraints since January 1, 2018 and that it had honored all contracts except for rare and temporary delays caused by mechanical failures. Importer *** reported that there were supply constraints because it could not get enough aluminum to manufacture certain items. Importer *** reported supply constraints and reported that there is not enough capacity to meet its demand and that there are lead times in excess of 54 weeks.⁴ Importer *** reported that it had been unable to purchase fin stock from U.S. suppliers. Importer *** reported that COVID-19

⁴ Importer *** did not specify if lead times were for U.S. produced aluminum foil, imported aluminum, or a market average.

has resulted in supply constraints due to shutdowns and logistical delays. Purchaser *** reported that it was unable to increase purchases as demand for household foil products increased because there was limited U.S. production capacity. Purchaser *** reported that it had been on periodic allocation since 2018 with Aleris and Novelis and that Gränges has failed to quote its prices despite requests. Purchaser *** reported that JWA and Gränges refuse to fill its orders before the AD/CVD case against China. Purchaser *** further reported that JWA and Gränges had declined to fill orders that fell within their production capabilities. Purchaser *** reported that Gränges had been unable to supply finstock in adequate volumes in a timely manner and Novelis and JW do not have the capacity or interest in supplying it.⁵

Twenty-one of 28 responding purchasers reported that they had experienced supply constraints between January 1, 2018 and September 29, 2020. Purchaser *** reported that raw material shortages in Costa Rica caused supply constraints that lasted for months at a time. Purchaser *** reported that supply constraints are caused by U.S. producers having limited capacity to produce aluminum foil for food packaging and that U.S. producers have raised prices as a result of demand exceeding supply. Purchaser *** reported that supply constraints have been caused by a combination of U.S. producers having limited capacity and shipping constraint due to vessel and container availability. Purchaser *** reported that JW Aluminum's permanent plant closure caused supply constraints in the U.S. market. Purchaser *** reported that U.S. producers only allocate a fixed amount of aluminum foil to them, deliver lower quantities than stated in the contract and that this has inhibited its ability to accept new customers. Purchaser *** reported that it is on allocation with all U.S. producers of aluminum foil and the quantity currently demanded is greater than what the domestic industry can produce. Purchaser *** reported that the domestic industry refused to supply it with aluminum foil and a domestic producer informed *** that it would no longer supply a particular material. Purchaser *** reported that domestic producers have been unable to supply thin foil.

Three of five U.S. producers and 25 of 35 importers reported that they had experienced supply constraints since the petition was filed on September 29, 2020. U.S. producer *** reported that it had difficulty obtaining raw materials since the petition was filed. U.S. producer *** reported that there had been a temporary shutdown of its production facilities and that it had taken time to reopen and get the plant back to its normal production levels.

⁵ Witnesses from Trinidad Benham, Adams Thermal Systems, New England Foil, Amcor, ProAmpac, and Goodman provided detailed testimony about domestic supply constraints in the hearing. Hearing transcript at 222, 261 (Walters), 207 (Boehm), 162-65 (Schabow), 153-54 (Paschal).

Importer *** reported that both domestic and foreign producers were operating at full capacity to meet the increased demand for aluminum foil that the pandemic has caused. Purchaser *** reported that U.S. producers are unwilling or unable to supply them with adequate volumes of aluminum foil in a timely manner.

Twenty of 28 purchasers reported that they had experienced supply constraints since the petition was filed on September 29, 2020. Purchaser *** reported that it had experienced supply constraints due to limited domestic capacity and increased tariffs and duties on foreign aluminum foil. Purchaser *** reported that there had been a demand for HVAC units and this increased demand had caused shortages in the market. Purchaser *** reported that U.S. producer Gränges did not have sufficient capacity to supply container foil. Purchaser *** reported that shortages increased since the filing of the petition as demand for domestically produced product increased. Purchaser *** reported shutting down its facility for periods of time because of a lack of aluminum foil to process as lead times for aluminum foil from U.S. producers increased and tariffs on imported aluminum foil decreased access to foreign aluminum foil.

Availability of supply and merchandise

Purchasers were asked if the availability of aluminum foil from U.S. producers, subject importers, and nonsubject importers had changed since January 2018. The majority of responding purchasers reported that the availability of aluminum foil from domestic producers (19 of 28), subject importers (16 of 21), and nonsubject importers (11 of 18) had changed since January 2018. Eighteen purchasers reported that the availability of domestic aluminum foil has decreased since 2018 namely because U.S. producers do not have the capacity to supply sufficient quantities of all of the grades demanded by the U.S. market. Importers who reported that the availability of subject imports and nonsubject imports changed since January 2018 reported that imports increased in response to demand that U.S. producers were unable to fill or were in the market prior to 2018 and decreased availability in response to tariffs and duties on aluminum foil.

Purchasers were asked if certain grades, types, or sizes of aluminum foil were only available from one source. The majority of responding purchasers (17 of 28) reported that certain grades, types, or sizes of aluminum foil were only available from one source. Purchaser *** reported that H19 temper alloys which are used to make pie pans are only available from domestic producers. Purchaser *** reported that 8079 and 1200 alloys are predominately cast in Germany while 1235 alloys are made in the United States. Purchaser *** reported that it was unable to source household foil domestically and purchaser

*** reported that it was unable to purchase 5056 thin gauge foil domestically. Purchaser *** reported that some 8XXX series alloys are only produced internationally. Purchaser *** reported that JW Aluminum only produces 55" rolls which leads to poor roll utilization in *** production process. Purchaser *** reported that bright ultra-thin foil is not produced in the United States. Purchaser *** reported that food and medical grade aluminum foil under 7 microns was only available from Europe, China, South Korea, and Brazil.

New suppliers

Seven of 28 purchasers indicated that new suppliers entered the U.S. market since January 1, 2018. Purchasers cited seeking new foreign producers because U.S. producers were unable to supply the market. Purchaser *** reported that Bangkok Foil entered the U.S. market.

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, air filters, flexible duct, metal packaging, automotive radiators, 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 in aerospace production.

Business cycles

Four of five U.S. producers, 18 of 38 importers, and 18 of 28 purchasers indicated that the market was subject to business cycles or distinct conditions of competition. Demand for aluminum foil used in food packaging peaks around certain holidays, such as Christmas, Easter, and the Fourth of July. Importer *** reported that aluminum foil used in building and construction was seasonal and demand increases in the spring and summer when there is more construction activity.

Demand trends

Most firms reported an increase in U.S. demand for aluminum foil since January 1, 2018 (table II-4). Several importers and purchasers also indicated that demand fluctuated. Purchasers reported that demand for their end use products either fluctuated (11) or increased (9).

Table II-4
Aluminum foil: Count of firms' responses regarding overall domestic and foreign demand

Market	Firm type	Increase	No change	Decrease	Fluctuate
Domestic demand	U.S. producers	5	0	0	0
Domestic demand	Importers	17	7	2	8
Domestic demand	Purchasers	15	1	3	7
Foreign demand	U.S. producers	2	0	0	1
Foreign demand	Importers	10	5	1	13
Foreign demand	Purchasers	9	2	4	6
Demand for end use products	Purchasers	9	1	2	11

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

Substitute products

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

Substitutability issues

This section will assess the degree to which U.S.-produced aluminum foil and imports of aluminum foil from subject countries can be substituted for one another by examining the importance of certain purchasing factors and the comparability of aluminum foil from domestic and imported sources based on those factors. Based on available data, staff believes that there is generally a moderate-to-high degree of substitutability between domestically produced aluminum foil and aluminum foil imported from subject sources.⁶ Factors contributing to this

⁶ The degree of substitution between domestic and imported aluminum foil depends upon the extent of product differentiation between the domestic and imported products and reflects how easily purchasers can switch from domestically produced aluminum foil to the aluminum foil imported from subject countries (or vice versa) when prices change. The degree of substitution may include such factors as relative prices (discounts/rebates), quality differences (e.g., grade standards, defect rates, etc.), and differences in sales conditions (e.g., lead times between order and delivery dates, reliability of supply, product services, etc.).

level of substitutability include similar quality in most grades, little preference for particular country of origin or producers, general similarities between domestically produced aluminum foil and aluminum foil imported from subject countries across multiple purchase factors. However, multiple importers and purchasers reported limited availability and low quality of U.S.-produced aluminum foil, specifically in regards to ultra-thin and thin grades, limits substitutability of domestic aluminum foil and aluminum foil imported from subject countries.

Factors affecting purchasing decisions

Purchaser decisions based on source

As shown in table II-5, most purchasers and their customers sometimes or never make purchasing decisions based on the producer or country of origin. However, a plurality of purchasers reported always basing purchases based on the manufacturer. Of the 11 purchasers that reported that they always make decisions based on the manufacturer, six firms cited quality, four cited availability, two cited lead times, one cited price, one cited brightness of the aluminum foil. Other reasons cited include technical advice and testing requirements.

Table II-5
Aluminum foil: Count of purchasing decisions by purchaser or their customer, based on producer and country of origin

Firm making decision	Decision based on	Always	Usually	Sometimes	Never
Purchaser	Producer	11	3	6	9
Customer	Producer	2	0	8	14
Purchaser	Country	8	2	7	11
Customer	Country	3	0	6	15

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

Importance of purchasing domestic product

Thirteen of 15 purchasers reported that most or all of their purchases did not require purchasing U.S.-produced product. One reported that domestic product was required by law (for 0.7 percent of its purchases), three reported it was required by their customers (for 1.0 to 80.0 percent of their purchases), and three reported other preferences for domestic product. Reasons cited for preferring domestic product included: contractual obligations with U.S. producers, avoiding re-certification or re-qualification of materials, and limited production of specific types or grades of aluminum foil results in a limited choice of suppliers.

Most important purchase factors

The most often cited top three factors firms consider in their purchasing decisions for aluminum foil were quality (23 firms), availability/supply (20 firms), and price/cost (19 firms) as shown in table II-6. Quality was the most frequently cited first-most important factor (cited by 15 firms), followed by price/cost (5 firms); availability/supply was the most frequently reported second-most important factor (13 firms); and price/cost was the most frequently reported third-most important factor (9 firms).

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

Factor	First	Second	Third	Total
Quality	15	5	3	23
Availability / Supply	3	13	4	20
Price / Cost	5	5	9	19
All other factors	4	4	11	NA

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

Note: Other factors include on-time delivery, being an approved vendor, product range, and brightness.

The majority of purchasers reported that they usually (11) or sometimes (11) purchase the lowest-priced product; three always and four never purchase the lowest-priced product.

Importance of specified purchase factors

Purchasers were asked to rate the importance of 15 factors in their purchasing decisions (table II-7). The factors rated as very important by more than half of responding purchasers were availability (27 firms), reliability of supply (26 firms), product consistency and quality meets industry standards (24 firms each), delivery time (22 firms), price (19 firms), quality exceeds industry standards (18 firms), and technical support/service (15 firms).

Table II-7**Aluminum foil: Count of importance of purchase factors, as reported by U.S. purchasers, by factor**

Factor	Very important	Somewhat important	Not important
Availability	27	1	0
Delivery terms	8	19	1
Delivery time	22	6	0
Discounts offered	5	18	4
Minimum quantity requirements	5	16	7
Packaging	6	17	4
Payment terms	8	17	2
Price	19	8	1
Product consistency	24	4	0
Product range	9	15	3
Quality meets industry standards	24	4	0
Quality exceeds industry standards	18	10	0
Reliability of supply	26	2	0
Technical support/service	15	13	1
U.S. transportation costs	9	15	3

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

Lead times

U.S. producers reported that 100 percent of their commercial shipments were produced-to-order, with lead times averaging 39 days. Importers reported that 96.0 percent of their commercial shipments were from U.S. inventories with a lead time of 2 days. The remaining 4.0 percent of importers' commercial shipments were produced-to-order, with lead times averaging 82 days.

Supplier certification

Twenty-four of 28 responding purchasers require their suppliers to become certified or qualified to sell aluminum foil to their firm. Purchasers reported that the time to qualify a new supplier typically ranged from 60 to 365 days. Ten purchasers reported that a domestic or foreign supplier had failed in its attempt to qualify aluminum foil, or had lost its approved status since 2018. Purchasers identified U.S. producers Gränges (3 firms), JWA (1 firm) and A.J. Oster Alliance (1 firm) as having failed to qualify aluminum foil or had lost its approved status since 2018. Purchasers identified foreign producers Hulamin (South Africa), 2 firms), Symetal (Greece), PT Intimbumi (Indonesias), Garmco (Bahrain), CBA (Brazil), and Bingheng (Thailand) as having failed to qualify aluminum foil or having lost its approved status since 2018. Purchasers report that failure to meet quality standards, high defect rates, failure to meet required physical standards such as brightness, having insufficient production capacity to fill orders, or failure to successfully substitute alternative alloys for certain products were reasons that a domestic or foreign supplier had failed in its attempt to qualify.

Minimum quality specifications

As can be seen from table II-8, the majority of responding purchasers reported that domestically produced product always or usually met minimum quality specifications. The majority of responding purchasers reported that aluminum foil from Armenia, Brazil, Oman, Russia, Turkey, and nonsubject countries always or usually met minimum quality specifications.

Table II-8
Aluminum foil: Count of firms' responses regarding suppliers' ability to meet minimum quality specifications, by source

Source of purchases	Always	Usually	Sometimes	Rarely or never	Don't Know
United States	9	12	2	2	1
Armenia	2	2	0	0	17
Brazil	2	4	1	0	15
Oman	1	1	0	0	20
Russia	3	2	0	0	18
Turkey	2	6	0	1	15
All other sources	5	10	0	1	5

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

Note: Purchasers were asked how often domestically produced or imported aluminum foil meets minimum quality specifications for their own or their customers' uses.

Nine of 28 responding purchasers reported consistency was a factor that determined quality. Five purchasers reported that aluminum foil being "clean" was a large factor in the quality of aluminum foil. Three purchasers reported material specification or standards, two reported being wrinkle or hole free, one purchaser reported shape and finish, one reported being free of white rust, and one reported defect free were large factors in the quality of aluminum foil.

Changes in purchasing patterns

Purchasers were asked about changes in their purchasing patterns from different sources since 2018 (table II-9); reasons reported for changes in sourcing included domestic supply constraints, lower prices, quality issues, and ensuring a continual supply of aluminum foil through a diversified supply chain. Twenty of 28 responding purchasers reported that they had changed suppliers since January 1, 2018. Specifically, firms dropped or reduced purchases from the United States because the aluminum foil was low quality and high cost, an inability of U.S. producers to produce an item or enough of an item, and increased lead times. Firms added or increased purchases from the United States because of increased consumer demand for aluminum foil, section 232 tariffs, and antidumping duties. Firms added or increased purchases from subject countries because the products that they required were available, foreign producers had the production capacity available to supply the products required, were of higher quality, and had lower delivery lead times. Firms decreased purchases from subject countries because of additional tariffs or duties on products, or because the purchase was a one-time trial that failed.

Table II-9

Aluminum foil: Count of changes in purchase patterns from U.S., subject, and nonsubject countries

Source of purchases	Decreased	Increased	Constant	Fluctuated	Did not purchase
United States	9	6	4	6	1
Armenia	0	3	0	0	19
Brazil	1	3	1	2	15
Oman	1	2	0	0	18
Russia	1	0	1	3	17
Turkey	2	4	0	4	14
All other sources	5	6	4	3	3
Source unknown	0	0	0	0	9

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

Purchase factor comparisons of domestic products, subject imports, and nonsubject imports

Purchasers were asked a number of questions comparing aluminum foil produced in the United States, subject countries, and nonsubject countries. First, purchasers were asked for a country-by-country comparison on the same 15 factors (table II-10) for which they were asked to rate the importance.

Most responding purchasers reported that aluminum foil from the United States and Armenia were comparable on all factors except availability, delivery time, price and U.S. transportation costs. Half of responding purchasers reported that aluminum foil from the United States was superior to aluminum foil from Armenia in terms of delivery time and U.S. transportation costs and half reported that aluminum foil from the United States and Armenia were comparable. Half of responding purchasers reported that aluminum foil from the United States and Armenia was comparable and half of responding purchasers reported that aluminum foil from the United States was inferior to aluminum foil from Armenia in terms of availability and price.

The majority of purchasers reported that aluminum foil from the United States and Brazil was comparable on most factors except availability and delivery time. The majority of responding purchasers reported that aluminum foil from the United States was inferior to aluminum foil from Brazil in terms of availability. A plurality of responding purchasers reported that aluminum foil from the United States was superior to aluminum foil from Brazil in terms of delivery time.

The majority of responding purchasers reported that aluminum foil from the United States and Oman was comparable on most factors except for delivery time, reliability of supply, and technical support/service. The majority of responding purchasers reported that aluminum foil from the United States was inferior to aluminum foil from Oman in terms of delivery time, reliability of supply and technical support/service.

The majority of responding purchasers reported that aluminum foil from the United States and Russia was comparable on all factors.

The majority of responding purchasers reported that aluminum foil from the United States and Turkey was comparable on most factors except availability, price, and U.S. transportation costs. The majority of responding purchasers reported that aluminum foil from the United States was inferior to aluminum foil from Turkey in terms of availability. The majority of purchasers reported that aluminum foil from the United States was superior to aluminum foil from Turkey in terms of U.S. transportation costs.

The majority of responding purchasers reported that aluminum foil from the United States and nonsubject countries were comparable on most factors except availability, delivery time, price, and product range. The majority of responding purchasers reported that aluminum foil from the United States was inferior to aluminum foil from nonsubject countries in terms of availability. Purchaser responses comparing aluminum foil produced in the United States and nonsubject countries were mixed with respect to delivery time. A plurality of responding purchasers reported that aluminum foil from the United States was comparable to aluminum foil from nonsubject countries in terms of product range and a plurality reported that aluminum foil from the United States was inferior to aluminum foil from nonsubject countries in terms of product range.

At least half of responding purchasers reported that aluminum foil from Armenia and nonsubject countries were comparable on all factors

All responding purchasers reported that aluminum foil from Oman and aluminum foil from nonsubject countries were comparable on the majority of factors except delivery times, product range, quality exceeding industry standards, reliability of supply, technical support/service, and U.S. transportation costs. Half of responding purchasers reported that aluminum foil from Oman was comparable to aluminum foil from nonsubject countries and half reported that aluminum foil from Oman was inferior to aluminum foil from nonsubject countries in terms of except delivery times, product range, quality exceeding industry standards, reliability of supply, technical support/service, and U.S. transportation costs.

The majority of responding purchasers reported that aluminum foil from Brazil, Russia and Turkey reported that aluminum foil from nonsubject countries were comparable on all factors.

Table II-10**Aluminum foil: Count of purchasers' responses comparing U.S.-produced and imported product**

Factor	Country pair	Superior	Comparable	Inferior
Availability	United States vs. Armenia	0	2	2
Delivery terms	United States vs. Armenia	1	3	0
Delivery time	United States vs. Armenia	2	2	0
Discounts offered	United States vs. Armenia	0	3	1
Minimum quantity requirements	United States vs. Armenia	0	4	0
Packaging	United States vs. Armenia	0	4	0
Payment terms	United States vs. Armenia	0	4	0
Price	United States vs. Armenia	0	2	2
Product consistency	United States vs. Armenia	0	4	0
Product range	United States vs. Armenia	0	3	1
Quality meets industry standards	United States vs. Armenia	0	4	0
Quality exceeds industry standards	United States vs. Armenia	0	4	0
Reliability of supply	United States vs. Armenia	0	4	0
Technical support/service	United States vs. Armenia	0	4	0
U.S. transportation costs	United States vs. Armenia	2	2	0

Table continued.

Table II-10 Continued**Aluminum foil: Count of purchasers' responses comparing U.S.-produced and imported product**

Factor	Country pair	Superior	Comparable	Inferior
Availability	United States vs. Brazil	0	1	6
Delivery terms	United States vs. Brazil	1	6	0
Delivery time	United States vs. Brazil	3	2	2
Discounts offered	United States vs. Brazil	0	7	0
Minimum quantity requirements	United States vs. Brazil	0	7	0
Packaging	United States vs. Brazil	0	7	0
Payment terms	United States vs. Brazil	0	6	1
Price	United States vs. Brazil	0	4	3
Product consistency	United States vs. Brazil	0	5	2
Product range	United States vs. Brazil	0	5	2
Quality meets industry standards	United States vs. Brazil	0	5	2
Quality exceeds industry standards	United States vs. Brazil	0	5	2
Reliability of supply	United States vs. Brazil	1	4	2
Technical support/service	United States vs. Brazil	0	7	0
U.S. transportation costs	United States vs. Brazil	3	4	0

Table continued.

Table II-10 Continued**Aluminum foil: Count of purchasers' responses comparing U.S.-produced and imported product**

Factor	Country pair	Superior	Comparable	Inferior
Availability	United States vs. Oman	0	3	2
Delivery terms	United States vs. Oman	0	4	1
Delivery time	United States vs. Oman	2	0	3
Discounts offered	United States vs. Oman	0	4	1
Minimum quantity requirements	United States vs. Oman	0	3	2
Packaging	United States vs. Oman	1	4	0
Payment terms	United States vs. Oman	0	4	1
Price	United States vs. Oman	0	4	1
Product consistency	United States vs. Oman	0	4	1
Product range	United States vs. Oman	0	4	1
Quality meets industry standards	United States vs. Oman	0	5	0
Quality exceeds industry standards	United States vs. Oman	0	4	1
Reliability of supply	United States vs. Oman	0	2	3
Technical support/service	United States vs. Oman	0	2	3
U.S. transportation costs	United States vs. Oman	1	3	1

Table continued.

Table II-10 Continued**Aluminum foil: Count of purchasers' responses comparing U.S.-produced and imported product**

Factor	Country pair	Superior	Comparable	Inferior
Availability	United States vs. Russia	0	3	2
Delivery terms	United States vs. Russia	1	4	0
Delivery time	United States vs. Russia	2	3	0
Discounts offered	United States vs. Russia	0	4	1
Minimum quantity requirements	United States vs. Russia	0	5	0
Packaging	United States vs. Russia	0	5	0
Payment terms	United States vs. Russia	0	5	0
Price	United States vs. Russia	0	3	2
Product consistency	United States vs. Russia	0	5	0
Product range	United States vs. Russia	0	4	1
Quality meets industry standards	United States vs. Russia	0	5	0
Quality exceeds industry standards	United States vs. Russia	0	5	0
Reliability of supply	United States vs. Russia	0	5	0
Technical support/service	United States vs. Russia	0	5	0
U.S. transportation costs	United States vs. Russia	2	3	0

Table continued.

Table II-10 Continued**Aluminum foil: Count of purchasers' responses comparing U.S.-produced and imported product**

Factor	Country pair	Superior	Comparable	Inferior
Availability	United States vs. Turkey	0	4	5
Delivery terms	United States vs. Turkey	1	6	2
Delivery time	United States vs. Turkey	2	6	1
Discounts offered	United States vs. Turkey	0	6	3
Minimum quantity requirements	United States vs. Turkey	0	8	1
Packaging	United States vs. Turkey	0	8	1
Payment terms	United States vs. Turkey	0	8	1
Price	United States vs. Turkey	2	3	4
Product consistency	United States vs. Turkey	0	8	1
Product range	United States vs. Turkey	0	6	3
Quality meets industry standards	United States vs. Turkey	1	7	1
Quality exceeds industry standards	United States vs. Turkey	0	7	2
Reliability of supply	United States vs. Turkey	0	6	3
Technical support/service	United States vs. Turkey	0	8	1
U.S. transportation costs	United States vs. Turkey	5	3	1

Table II-10 Continued**Aluminum foil: Count of purchasers' responses comparing U.S.-produced and imported product**

Factor	Country pair	Superior	Comparable	Inferior
Availability	US v. Nonsubject	0	6	8
Delivery terms	US v. Nonsubject	3	9	2
Delivery time	US v. Nonsubject	4	5	5
Discounts offered	US v. Nonsubject	0	9	4
Minimum quantity requirements	US v. Nonsubject	0	13	1
Packaging	US v. Nonsubject	1	11	2
Payment terms	US v. Nonsubject	0	12	2
Price	US v. Nonsubject	1	7	6
Product consistency	US v. Nonsubject	0	10	3
Product range	US v. Nonsubject	1	7	7
Quality meets industry standards	US v. Nonsubject	0	10	4
Quality exceeds industry standards	US v. Nonsubject	1	9	4
Reliability of supply	US v. Nonsubject	0	9	5
Technical support/service	US v. Nonsubject	1	12	1
U.S. transportation costs	US v. Nonsubject	2	10	2

Table II-10 Continued

Aluminum foil: Count of purchasers' responses comparing U.S.-produced and imported product

Factor	Country pair	Superior	Comparable	Inferior
Availability	Armenia vs Nonsubject sources	2	2	0
Delivery terms	Armenia vs Nonsubject sources	1	2	0
Delivery time	Armenia vs Nonsubject sources	1	2	0
Discounts offered	Armenia vs Nonsubject sources	0	3	0
Minimum quantity requirements	Armenia vs Nonsubject sources	1	2	0
Packaging	Armenia vs Nonsubject sources	1	2	0
Payment terms	Armenia vs Nonsubject sources	1	2	0
Price	Armenia vs Nonsubject sources	0	3	0
Product consistency	Armenia vs Nonsubject sources	1	2	0
Product range	Armenia vs Nonsubject sources	1	2	0
Quality meets industry standards	Armenia vs Nonsubject sources	1	2	0
Quality exceeds industry standards	Armenia vs Nonsubject sources	1	2	0
Reliability of supply	Armenia vs Nonsubject sources	1	2	0
Technical support/service	Armenia vs Nonsubject sources	1	2	0
U.S. transportation costs	Armenia vs Nonsubject sources	0	3	0

Table II-10 Continued

Aluminum foil: Count of purchasers' responses comparing U.S.-produced and imported product

Factor	Country pair	Superior	Comparable	Inferior
Availability	Brazil vs Nonsubject sources	1	6	0
Delivery terms	Brazil vs Nonsubject sources	1	6	0
Delivery time	Brazil vs Nonsubject sources	1	5	1
Discounts offered	Brazil vs Nonsubject sources	0	7	0
Minimum quantity requirements	Brazil vs Nonsubject sources	1	6	0
Packaging	Brazil vs Nonsubject sources	1	6	0
Payment terms	Brazil vs Nonsubject sources	1	5	1
Price	Brazil vs Nonsubject sources	1	6	0
Product consistency	Brazil vs Nonsubject sources	1	6	0
Product range	Brazil vs Nonsubject sources	2	5	0
Quality meets industry standards	Brazil vs Nonsubject sources	1	6	0
Quality exceeds industry standards	Brazil vs Nonsubject sources	1	6	0
Reliability of supply	Brazil vs Nonsubject sources	1	6	0
Technical support/service	Brazil vs Nonsubject sources	1	5	1
U.S. transportation costs	Brazil vs Nonsubject sources	1	5	1

Table II-10 Continued**Aluminum foil: Count of purchasers' responses comparing U.S.-produced and imported product**

Factor	Country pair	Superior	Comparable	Inferior
Availability	Oman vs Nonsubject sources	0	2	0
Delivery terms	Oman vs Nonsubject sources	0	2	0
Delivery time	Oman vs Nonsubject sources	0	1	1
Discounts offered	Oman vs Nonsubject sources	0	2	0
Minimum quantity requirements	Oman vs Nonsubject sources	0	2	0
Packaging	Oman vs Nonsubject sources	0	2	0
Payment terms	Oman vs Nonsubject sources	0	2	0
Price	Oman vs Nonsubject sources	0	2	0
Product consistency	Oman vs Nonsubject sources	0	2	0
Product range	Oman vs Nonsubject sources	0	1	1
Quality meets industry standards	Oman vs Nonsubject sources	0	2	0
Quality exceeds industry standards	Oman vs Nonsubject sources	0	1	1
Reliability of supply	Oman vs Nonsubject sources	0	1	1
Technical support/service	Oman vs Nonsubject sources	0	1	1
U.S. transportation costs	Oman vs Nonsubject sources	0	1	1

Table II-10 Continued**Aluminum foil: Count of purchasers' responses comparing U.S.-produced and imported product**

Factor	Country pair	Superior	Comparable	Inferior
Availability	Russia vs Nonsubject sources	1	4	0
Delivery terms	Russia vs Nonsubject sources	1	4	0
Delivery time	Russia vs Nonsubject sources	1	4	0
Discounts offered	Russia vs Nonsubject sources	0	5	0
Minimum quantity requirements	Russia vs Nonsubject sources	1	4	0
Packaging	Russia vs Nonsubject sources	1	4	0
Payment terms	Russia vs Nonsubject sources	1	4	0
Price	Russia vs Nonsubject sources	0	5	0
Product consistency	Russia vs Nonsubject sources	1	4	0
Product range	Russia vs Nonsubject sources	1	4	0
Quality meets industry standards	Russia vs Nonsubject sources	1	4	0
Quality exceeds industry standards	Russia vs Nonsubject sources	1	4	0
Reliability of supply	Russia vs Nonsubject sources	1	4	0
Technical support/service	Russia vs Nonsubject sources	1	4	0
U.S. transportation costs	Russia vs Nonsubject sources	0	5	0

Table II-10 Continued**Aluminum foil: Count of purchasers' responses comparing U.S.-produced and imported product**

Factor	Country pair	Superior	Comparable	Inferior
Availability	Turkey vs Nonsubject sources	2	5	1
Delivery terms	Turkey vs Nonsubject sources	1	6	1
Delivery time	Turkey vs Nonsubject sources	1	6	1
Discounts offered	Turkey vs Nonsubject sources	0	7	1
Minimum quantity requirements	Turkey vs Nonsubject sources	1	6	1
Packaging	Turkey vs Nonsubject sources	1	6	1
Payment terms	Turkey vs Nonsubject sources	1	6	1
Price	Turkey vs Nonsubject sources	1	6	1
Product consistency	Turkey vs Nonsubject sources	1	6	1
Product range	Turkey vs Nonsubject sources	1	6	1
Quality meets industry standards	Turkey vs Nonsubject sources	1	6	1
Quality exceeds industry standards	Turkey vs Nonsubject sources	1	6	1
Reliability of supply	Turkey vs Nonsubject sources	2	5	1
Technical support/service	Turkey vs Nonsubject sources	1	6	1
U.S. transportation costs	Turkey vs Nonsubject sources	0	6	2

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

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

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 Armenia, Brazil, Oman, Russia, Turkey, or nonsubject countries, U.S. producers, importers, and purchasers were asked whether the products can always, frequently, sometimes, or never be used interchangeably. As shown in tables II-11 through II-13, the majority of producers reported that aluminum foil from the United States, subject, and nonsubject countries can always be used interchangeably.

At least half of responding importers reported that aluminum foil from the United States, subject, and nonsubject countries can always or frequently be used interchangeably. However, several importers reported that aluminum foil from the United States and subject countries can sometimes or never be used interchangeably. Importer *** reported that the aluminum foil produced in the United States had lower quality than imported aluminum foil as aluminum foil produced in the United States has “saggy edges, holes and oil residue.” Importer *** reported that imported aluminum foil has a wider width than U.S.-produced aluminum foil and that the quality of U.S.-produced thin gauge foil is poor. Importer *** reported that the ultra-thin gauge aluminum foil produced in Brazil is not currently available in the United States and not widely produced globally. Importer *** reported that aluminum foil from the United States was not interchangeable with imported aluminum foil as thicker gauges results in production inefficiencies breaks in production of down-stream products compared to aluminum foil. Importer *** reported that ultra-thin gauge material is not available in the United States as U.S. producers have stopped manufacturing it. Importer *** reported that aluminum foil from the United States and subject countries is interchangeable if the foil is .0005 inches or thicker as the U.S. does not produce ultra-thin and thin aluminum foil gauges. Importer *** reported that aluminum foil from the United States is not interchangeable with imported foil because U.S. producers do not produce the household foil, the alloys or sizes of container stock that the firm demands. Importer *** reported that it only purchased imports from Oman because Gränges was unable to supply its requirements.

Purchaser responses on the interchangeability of U.S.-produced aluminum foil with aluminum foil produced in subject countries and nonsubject countries were mixed, with half or more reporting that domestically produced aluminum foil was always or frequently interchangeable with imports of aluminum foil from Brazil, Oman, Russia, and Turkey but the sole responding purchaser comparing U.S.-produced and Armenian aluminum foil reported that they are sometimes interchangeable. Purchaser *** reported that domestic and imported aluminum foil were only sometimes interchangeable due to supply constraints.

Purchaser *** reported that domestic material is only sometimes interchangeable with material sourced from Turkey because the downstream applications require specific grades thickness, flatness and other performance parameters that the domestic industry has been either unable to meet or supply in sufficient volumes. Responding purchasers reported that aluminum foil from subject countries was always or frequently interchangeable with aluminum foil from other subject countries and from nonsubject countries, except when comparing aluminum foil from Russia and Oman. When comparing aluminum foil from Russia and Oman, half of responding purchasers reported that aluminum foil from Russia was always interchangeable with aluminum foil from Oman and half of responding purchasers reported that aluminum foil from Russia was never interchangeable with aluminum foil from Oman. Purchaser *** reported that aluminum foil produced in Turkey and other countries may be interchangeable in some applications but not in high bright, ultra-thin ones.

Table II-11
Aluminum foil: Count of U.S. producers reporting the interchangeability between aluminum foil produced in the United States and in other countries, by country pair

Country pair	Always	Frequently	Sometimes	Never
United States vs. Armenia	5	0	0	0
United States vs. Brazil	5	0	0	0
United States vs. Oman	5	0	0	0
United States vs. Russia	5	0	0	0
United States vs. Turkey	5	0	0	0
Armenia vs. Brazil	5	0	0	0
Armenia vs. Oman	4	1	0	0
Armenia vs. Russia	5	0	0	0
Armenia vs. Turkey	5	0	0	0
Brazil vs. Oman	4	1	0	0
Brazil vs. Russia	5	0	0	0
Brazil vs. Turkey	5	0	0	0
Oman vs. Russia	4	1	0	0
Oman vs. Turkey	4	1	0	0
Russia vs. Turkey	5	0	0	0
United States vs. Other	5	0	0	0
Armenia vs. Other	5	0	0	0
Brazil vs. Other	5	0	0	0
Oman vs. Other	5	0	0	0
Russia vs. Other	5	0	0	0
Turkey vs. Other	5	0	0	0

Table continued.

Table II-12**Aluminum foil: Count of importers reporting the interchangeability between aluminum foil produced in the United States and in other countries, by country pair**

Country pair	Always	Frequently	Sometimes	Never
United States vs. Armenia	0	2	1	1
United States vs. Brazil	7	3	5	3
United States vs. Oman	5	2	2	0
United States vs. Russia	8	1	2	1
United States vs. Turkey	10	4	3	2
Armenia vs. Brazil	7	1	0	0
Armenia vs. Oman	4	1	0	0
Armenia vs. Russia	8	0	1	0
Armenia vs. Turkey	7	1	0	0
Brazil vs. Oman	4	1	0	0
Brazil vs. Russia	7	1	1	0
Brazil vs. Turkey	7	1	1	0
Oman vs. Russia	4	1	0	0
Oman vs. Turkey	4	1	0	0
Russia vs. Turkey	7	1	1	0
United States vs. Other	9	4	8	4
Armenia vs. Other	6	1	1	0
Brazil vs. Other	6	5	4	0
Oman vs. Other	4	0	1	1
Russia vs. Other	6	1	2	0
Turkey vs. Other	8	2	2	0

Table continued.

Table II-13
Aluminum foil: Count of purchasers reporting the interchangeability between aluminum foil produced in the United States and in other countries, by country pair

Country pair	Always	Frequently	Sometimes	Never
United States vs. Armenia	0	0	1	0
United States vs. Brazil	3	2	1	2
United States vs. Oman	1	1	2	0
United States vs. Russia	3	0	1	0
United States vs. Turkey	4	3	4	0
Armenia vs. Brazil	3	1	0	0
Armenia vs. Oman	1	0	0	0
Armenia vs. Russia	4	0	0	0
Armenia vs. Turkey	4	1	0	0
Brazil vs. Oman	1	0	0	0
Brazil vs. Russia	3	1	0	0
Brazil vs. Turkey	4	3	0	1
Oman vs. Russia	1	0	0	1
Oman vs. Turkey	2	0	0	0
Russia vs. Turkey	4	1	0	0
United States vs. Other	2	5	5	2
Armenia vs. Other	2	1	0	0
Brazil vs. Other	2	4	1	0
Oman vs. Other	0	0	0	0
Russia vs. Other	2	1	0	0
Turkey vs. Other	2	3	1	0

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

In addition, U.S. producers, importers, and purchasers were asked to assess how often differences other than price were significant in sales of aluminum foil from the United States, subject, or nonsubject countries. As seen in tables II-14 through II-16, all responding U.S. producers reported that there is never a difference other than price between aluminum foil produced in the United States, subject, and nonsubject countries.

Importer responses on the differences other than price were mixed when comparing aluminum foil produced in the United States to subject countries. The majority of importers reported that there were sometimes or never differences other than price when comparing U.S.-produced aluminum foil to Armenia and Oman, half reported that there are always or frequently differences when comparing U.S.-produced product with product imported from Russia, and a majority of purchasers reported that there were always or frequently differences other than price when comparing domestically produced aluminum foil to imported aluminum foil from Brazil and Turkey. The majority of importers reported that there were sometimes or never differences other than price when comparing subject countries to each other on factors

other than price. Importer responses were mixed when comparing aluminum foil produced in the United States and subject countries to aluminum foil produced in nonsubject countries. Importer *** reported that U.S. producers struggle to compete in the ultra-thin gauge foil category because the U.S. producers have “older manufacturing equipment which frequently produces pinholes in thin foil gauges.” Importer *** reported that U.S.-produced aluminum foil is low quality and that U.S. producers did not have the capacity to supply the firm or did not want to produce the thin gauges the firm requested. Importer *** reported that wider widths and thin gauges were an issue with domestic suppliers. Importer *** reported that there is not technology to produce ultra-thin gauge foil in the United States. Importer *** reported that U.S.-produced foil has poor quality thin and ultra-thin foil. Importer *** reported that U.S. producers were unable to supply the firm and this was the only reason it purchased aluminum foil from Oman.

Purchaser responses on the differences other than price between aluminum foil produced in the United States, subject, and nonsubject countries were mixed. Half or more of purchasers reported that there were always or frequently significant factors other than price when comparing domestically produced product and imported aluminum foil from subject countries. Purchaser *** reported that the supplier from Oman has significant advantages in terms of good quality and on-time delivery. Purchaser *** reported that domestic suppliers lack the product range and were unable to meet its specified tolerances and quality standards for the products they do produce. Purchaser *** reported that it was put on allocation by domestic producers and ensuring a steady supply of aluminum foil and not price was the driver for purchasing imports. Purchaser *** reported that domestic producers do not produce the high bright, ultra-thin aluminum foil it requires. Purchaser *** reported that U.S. producers do not make the volume of aluminum foil it requires. Purchaser *** reported that it had not been able to source ultra-thin gauge from the United States so it sources it from Brazil and it is unable to source standard gauges from the United States so it sources them from nonsubject countries. Purchaser *** reported that the only U.S. producer it found was very poor quality compared to aluminum foil produced in Costa Rica and Greece.

Table II-14**Aluminum foil: Count of U.S. producers reporting the significance of differences other than price between aluminum foil produced in the United States and in other countries, by country pair**

Country pair	Always	Frequently	Sometimes	Never
United States vs. Armenia	0	0	0	5
United States vs. Brazil	0	0	0	5
United States vs. Oman	0	0	0	5
United States vs. Russia	0	0	0	5
United States vs. Turkey	0	0	0	5
Armenia vs. Brazil	0	0	0	5
Armenia vs. Oman	0	0	0	5
Armenia vs. Russia	0	0	0	5
Armenia vs. Turkey	0	0	0	5
Brazil vs. Oman	0	0	0	5
Brazil vs. Russia	0	0	0	5
Brazil vs. Turkey	0	0	0	5
Oman vs. Russia	0	0	0	5
Oman vs. Turkey	0	0	0	5
Russia vs. Turkey	0	0	0	5
United States vs. Other	0	0	0	5
Armenia vs. Other	0	0	0	5
Brazil vs. Other	0	0	0	5
Oman vs. Other	0	0	0	5
Russia vs. Other	0	0	0	5
Turkey vs. Other	0	0	0	5

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

Table II-15**Aluminum foil: Count of importers reporting the significance of differences other than price between aluminum foil produced in the United States and in other countries, by country pair**

Country pair	Always	Frequently	Sometimes	Never
United States vs. Armenia	4	0	2	3
United States vs. Brazil	11	1	2	3
United States vs. Oman	3	0	3	3
United States vs. Russia	5	1	3	3
United States vs. Turkey	7	4	3	5
Armenia vs. Brazil	1	1	1	4
Armenia vs. Oman	0	0	1	4
Armenia vs. Russia	2	1	1	5
Armenia vs. Turkey	1	1	2	4
Brazil vs. Oman	0	0	1	4
Brazil vs. Russia	2	1	1	4
Brazil vs. Turkey	2	1	1	4
Oman vs. Russia	0	0	1	4
Oman vs. Turkey	0	0	1	4
Russia vs. Turkey	2	1	1	5
United States vs. Other	13	3	4	4
Armenia vs. Other	2	1	2	4
Brazil vs. Other	6	3	3	3
Oman vs. Other	1	0	2	3
Russia vs. Other	3	1	3	3
Turkey vs. Other	5	1	2	4

Table continued.

Table II-16**Aluminum foil: Count of purchasers reporting the significance of differences other than price between aluminum foil produced in the United States and in other countries, by country pair**

Country pair	Always	Frequently	Sometimes	Never
United States vs. Armenia	0	0	1	1
United States vs. Brazil	4	1	1	1
United States vs. Oman	1	1	1	1
United States vs. Russia	2	0	1	1
United States vs. Turkey	3	3	3	2
Armenia vs. Brazil	1	1	0	1
Armenia vs. Oman	0	0	0	1
Armenia vs. Russia	1	1	0	2
Armenia vs. Turkey	1	1	0	2
Brazil vs. Oman	0	0	0	1
Brazil vs. Russia	1	1	0	1
Brazil vs. Turkey	1	1	1	1
Oman vs. Russia	0	0	0	1
Oman vs. Turkey	0	0	0	1
Russia vs. Turkey	1	1	0	2
United States vs. Other	7	0	5	1
Armenia vs. Other	1	1	0	1
Brazil vs. Other	1	2	3	0
Oman vs. Other	0	0	0	1
Russia vs. Other	1	1	1	0
Turkey vs. Other	1	1	2	1

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

Elasticity estimates

This section discusses elasticity estimates; parties are encouraged to comment on these estimates and should do so as an attachment to their prehearing or posthearing brief.

U.S. supply elasticity

The domestic supply elasticity for aluminum foil measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price of aluminum foil. The elasticity of domestic supply depends on several factors including the level of excess capacity, the ease with which producers can alter capacity, producers' ability to shift to production of other products, the existence of inventories, and the availability of alternate markets for U.S.-produced aluminum foil. Analysis of these factors above indicates that the U.S. industry has a limited to moderate ability to increase or decrease shipments to the U.S. market; an estimate in the range of 2 to 4 is suggested.

U.S. demand elasticity

The U.S. demand elasticity for aluminum foil measures the sensitivity of the overall quantity demanded to a change in the U.S. market price of aluminum foil. This estimate depends on factors discussed above such as the existence, availability, and commercial viability of substitute products, as well as the component share of the aluminum foil in the production of any downstream products. Based on the available information, the aggregate demand for aluminum foil is likely to be highly inelastic; a range of -0.25 to -0.5 is suggested.

Substitution elasticity

The elasticity of substitution depends upon the extent of product differentiation between the domestic and imported products.⁷ Product differentiation, in turn, depends upon such factors as quality (e.g., chemistry, appearance, etc.) and conditions of sale (e.g., availability, sales terms/discounts/promotions, etc.). Based on available information, the elasticity of substitution between U.S.-produced aluminum foil and imported aluminum foil is likely to be in the range of 3 to 6. Furthermore, most purchasers reported that aluminum foil from the United States, subject countries, and nonsubject countries were comparable on most

⁷ The substitution elasticity measures the responsiveness of the relative U.S. consumption levels of the subject imports and the domestic like products to changes in their relative prices. This reflects how easily purchasers switch from the U.S. product to the subject products (or vice versa) when prices change.

factors and the factors where purchasers differentiated aluminum foil from the United States and subject countries were availability, price, delivery time, and U.S. transportation costs.

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 subsidy rates 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 nearly *** of U.S. production of aluminum foil during 2020.

U.S. producers

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

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

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 their U.S. producer questionnaires during 2019, accounting for *** percent of U.S. aluminum foil production in that same year.

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.

As indicated in table III-2, two U.S. producers (***)² are related to a foreign producer of the subject merchandise and *** U.S. producers are related to U.S. importers of the subject merchandise.³ In addition, as discussed in greater detail below, one U.S. producer (***) imported the aluminum foil from subject sources⁴ and purchased the subject merchandise from U.S. importers.

Table III-3 presents an overview of important industry events related to aluminum foil industry since January 1, 2018.

Table III-3
Aluminum foil: Important industry events since January 1, 2018

Year	Company	Description of Event
2018	Gränges	Expansion: Gränges announced a \$26 million expansion of its plant in Newport, Arkansas ⁵ to focus on production of light gauge aluminum foil. ⁶
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. ⁷
2019	JW Aluminum	Expansion: JW Aluminum neared completion on phase 1 of a \$300 million expansion of its Goose Creek, South Carolina facility which included 220,000 square feet of additional space and 50 new jobs to produce flat-rolled aluminum. ⁸

Table continued.

² ***.

³ *** U.S. producer questionnaire response.

⁴ ***. U.S. producer and U.S. importer questionnaire responses, part II. See also table III-12 for more information.

⁵ Gränges, "Gränges 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-26-million>.

⁶ 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 of Noranda in 2016. Some surface treatment business was restarted upon acquisition, while its foil production remained idle until 2019.

⁷ S&P Global, "Gränges 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>.

⁸ The Berkeley Independent, "Phase I of JW Aluminum's \$300 million expansion nearly complete," August 26, 2019, https://www.postandcourier.com/berkeley-independent/news/phase-i-of-jw-aluminums-300-million-expansion-nearly-complete/article_bc62a910-01e7-5b76-bcf7-f294853e71b3.html.

Table III-3 Continued
Aluminum foil: Important industry events since January 1, 2018

Year	Company	Description of Event
2020	JW Aluminum	Closure: Following an announcement in January 2020, JW Aluminum closed its St. Louis, Missouri plant in May 2020. The plant produced aluminum foil for sale to converters. ⁹
2020	JW Aluminum	Closure: In September 2020, JW Aluminum announced it would be closing its Williamsport, Pennsylvania facility, effective January 2021. ¹⁰ This facility focused on the production of foil products for aerospace, building and construction, automotive, transportation, and general distribution. ¹¹
2020	JW Aluminum	Fire damage: The Goose Creek, South Carolina manufacturing facility which produces flat rolled aluminum products suffered four fires during the second half of the year, with damage estimates of \$100 million. ¹² JW Aluminum has said the fires were sustained at non-foil production facilities. ¹³
2020	Novelis	Acquisition: Novelis completed acquisition of Aleris Corporation in April. ¹⁴ Novelis gained rolling mills in Uhrichville, Ohio, and Richmond, Virginia, and casting and finishing facilities in Davenport, Iowa. ¹⁵ The company is required to divest its newly acquired rolling mill in Lewisport, Kentucky in order to meet regulatory conditions of the merger.
2021	Gränges	Expansion: Gränges announced that it will invest \$33 million to expand its aluminum casting operations in Huntingdon, Tennessee to meet growing demand from North American customers. The casting capacity will increase by about 25,000 metric tons (27,558 short tons) per year and enable higher capacity utilization in the downstream rolling and slitting operations. ¹⁶

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

⁹ JW Aluminum, "JW Aluminum Announces the Closure of its Plant in St. Louis, Missouri," January 21, 2020. <http://www.jwaluminum.com/news-1>.

¹⁰ JW Aluminum, "JW Aluminum Announces the Closure of its Plant in Williamsport, PA," September 2, 2020. <http://www.jwaluminum.com/news-1-0-0>.

¹¹ JW Aluminum, "Locations," (retrieved August 27, 2021), <http://www.jwaluminum.com/locations-0>.

¹² Berkeley County News, "Four fires reported at JW Aluminum since August; what is the cause?" December 10, 2020. <https://www.counton2.com/news/local-news/berkeley-county-news/four-fires-reported-at-jw-aluminum-since-august-what-is-the-cause/>; The Post and Courier, "Cause of fire at the center of SC aluminum maker's \$100M insurance fight," June 25, 2021. https://www.postandcourier.com/business/cause-of-fire-at-the-center-of-sc-aluminum-makers-100m-insurance-fight/article_dc181f5c-d5bd-11eb-acf9-1f50d9796bb5.html.

¹³ Hearing transcript, p. 119

¹⁴ Novelis, "Novelis Completes Acquisition of Aleris," April 14, 2020, <https://novelis.com/novelis-completes-acquisition-of-aleris/>.

¹⁵ Recycling Today, "DOJ sues to stop Novelis purchase of Aleris," September 5, 2019, <https://www.recyclingtoday.com/article/department-justice-lawsuit-novelis-acquisition-aleris/>.

¹⁶ Gränges, "Gränges to invest USD 33 million to increase aluminium casting capacity in the US," March 25, 2021, <https://www.granges.com/newsroom/press-releases/2021/granges-to-invest-usd-33-million-to-increase-aluminium-casting-capacity-in-the-us/>.

Table III-4 presents U.S. producers' reported changes in operations since January 1, 2018.

Table III-4
Aluminum foil: U.S. producers' reported changes in operations, since January 1, 2018

Item	Firm name and accompanying narrative response
Plant openings	***
Plant closings	***
Expansions	***
Expansions	***
Expansions	***
Acquisitions	***
Prolonged shutdowns or curtailments	***
Prolonged shutdowns or curtailments	***
Revised labor agreements	***

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, capacity utilization, and share of production. U.S. producers' aggregate capacity increased from 2018 to 2019 by 5.1 percent but then decreased by 3.2 percent in 2020. Production capacity was lower by 8.4 percent in January to March 2021 compared to January to March 2020.¹⁷ Overall, production decreased in each year from 2018 to 2020 and was lower in January to March 2021 than in January to March 2020. Production declined by 11.6 percent between 2018 and 2020 and was lower in interim 2021 by 2.8 percent compared to same period in 2020.¹⁸ Aggregate capacity utilization rates ranged from a peak of 88.6 percent in 2018 to a low of 76.0 percent during January to March 2020.¹⁹

Table III-5
Aluminum foil: U.S. producers' capacity, by firm and period

Quantity in short tons

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	544,180	572,057	553,961	142,698	130,702

Table continued.

¹⁷ ***. ***. U.S. producer questionnaire responses, II-2a, and email from ***, August 11, 2021.

¹⁸ ***.

¹⁹ ***. U.S. producer questionnaire responses, II-5.

Table III-5 Continued
Aluminum foil: U.S. producers' production, by firm and period

Quantity in short tons

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	482,003	448,127	426,082	108,381	105,318

Table continued.

Table III-5 Continued
Aluminum foil: U.S. producers' capacity utilization, by firm and period

Capacity utilization ratio is production to production capacity in percent

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	88.6	78.3	76.9	76.0	80.6

Table continued.

Table III-5 Continued
Aluminum foil: U.S. producers' share of production, by firm and period

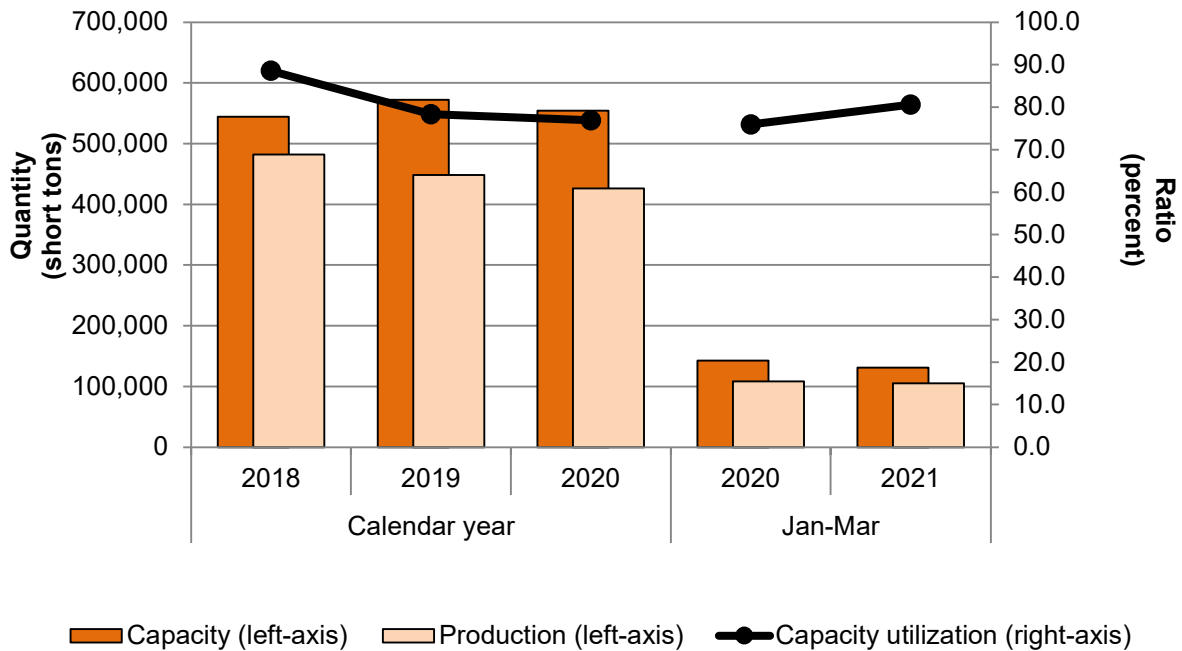
Share of production in percent

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	100.0	100.0	100.0	100.0	100.0

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

Note: ***. Email from ***, November 2, 2020.

Figure III-1
Aluminum foil: U.S. producers' production, capacity, and capacity utilization, by period



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

Alternative products

As shown in table III-6, aluminum foil production, as a share of all products produced on the same machinery, increased by 1.2 percentage points from 2018-20, and accounted for 74.1 percent in 2018, 73.1 percent in 2019, and 75.3 percent in 2020. The share of aluminum foil production during January to March 2020 and January to March 2021 was the same at 71.9 percent. Four firms (***) reported producing aluminum sheet, and one firm, ***, also reported producing other products, such as ***, on the same machinery used by U.S. producers to produce aluminum foil.

Table III-6
Aluminum foil: U.S. producers' overall plant capacity and production on the same equipment as subject production, by period

Quantity in short tons; ratio is production to production capacity in percent; share is share of total production in percent

Item	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Overall capacity	Quantity	716,431	745,931	728,962	186,616	174,991
Aluminum foil production	Quantity	482,003	448,127	426,082	108,381	105,318
Other production: Aluminum sheet	Quantity	***	***	***	***	***
Other production: Aluminum plate	Quantity	***	***	***	***	***
Other production: Other products	Quantity	***	***	***	***	***
Other production: All out-of-scope products	Quantity	168,329	164,507	139,596	42,461	41,096
Total production	Quantity	650,332	612,634	565,678	150,842	146,414
Overall capacity utilization	Ratio	90.8	82.1	77.6	80.8	83.7
Aluminum foil production	Share	74.1	73.1	75.3	71.9	71.9
Other production: Aluminum sheet	Share	***	***	***	***	***
Other production: Aluminum plate	Share	***	***	***	***	***
Other production: Other products	Share	***	***	***	***	***
Other production: All out-of-scope products	Share	25.9	26.9	24.7	28.1	28.1
Total production	Share	100.0	100.0	100.0	100.0	100.0

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

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

Table III-7 presents U.S. producers' U.S. shipments, export shipments, and total shipments. Table III-8 presents U.S. producers' U.S. commercial shipments, internal consumption, and U.S. shipments. Between 2018 and 2020, the quantity of U.S. producers' U.S. shipments decreased by 11.0 percent and by 22.2 percent by value and were lower in interim 2021 compared to interim 2020 by both quantity and value. During the same period, U.S. producers' U.S. shipments' unit values decreased by 12.6 percent but were higher by 3.6 percent in interim 2021 compared to interim 2020. During 2018-20, the quantity of export shipments increased by 1.0 percent but decreased by 13.0 by value, while the export shipments' unit values were down by 13.9 percent. In contrast, export shipments were higher in interim 2021 compared to interim 2020 by 45.4 percent by quantity, 54.2 percent by value, and 6.1 percent by unit value. U.S. producers *** reported exporting to Canada and *** also reported exporting to Mexico during 2018-20.

Table III-7
Aluminum foil: U.S. producers' U.S. shipments, export shipments and total shipments, by period

Quantity in short tons; value in 1,000 dollars; unit value in dollars per short tons; share of quantity is the share of total shipments by quantity in percent; share of value is the share of total shipments by value in percent

Item	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
U.S. shipments	Quantity	453,607	420,313	403,571	107,159	102,278
Export shipments	Quantity	26,469	24,859	26,740	5,185	7,537
Total shipments	Quantity	480,076	445,172	430,311	112,344	109,815
U.S. shipments	Value	1,580,263	1,378,585	1,229,008	340,039	336,259
Export shipments	Value	92,280	79,566	80,258	16,451	25,365
Total shipments	Value	1,672,543	1,458,151	1,309,266	356,490	361,624
U.S. shipments	Unit value	3,484	3,280	3,045	3,173	3,288
Export shipments	Unit value	3,486	3,201	3,001	3,173	3,365
Total shipments	Unit value	3,484	3,275	3,043	3,173	3,293
U.S. shipments	Share of quantity	94.5	94.4	93.8	95.4	93.1
Export shipments	Share of quantity	5.5	5.6	6.2	4.6	6.9
Total shipments	Share of quantity	100.0	100.0	100.0	100.0	100.0
U.S. shipments	Share of value	94.5	94.5	93.9	95.4	93.0
Export shipments	Share of value	5.5	5.5	6.1	4.6	7.0
Total shipments	Share of value	100.0	100.0	100.0	100.0	100.0

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

Table III-8
Aluminum foil: U.S. producers' U.S. commercial shipments, internal consumption, and U.S. shipments, by period

Quantity in short tons; value in 1,000 dollars; unit value in dollars per short tons; shares in percent

Item	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Commercial U.S. shipments	Quantity	***	***	***	***	***
Internal consumption	Quantity	***	***	***	***	***
U.S. shipments	Quantity	453,607	420,313	403,571	107,159	102,278
Commercial U.S. shipments	Value	***	***	***	***	***
Internal consumption	Value	***	***	***	***	***
U.S. shipments	Value	1,580,263	1,378,585	1,229,008	340,039	336,259
Commercial U.S. shipments	Unit value	***	***	***	***	***
Internal consumption	Unit value	***	***	***	***	***
U.S. shipments	Unit value	3,484	3,280	3,045	3,173	3,288
Commercial U.S. shipments	Share of quantity	***	***	***	***	***
Internal consumption	Share of quantity	***	***	***	***	***
U.S. shipments	Share of quantity	100.0	100.0	100.0	100.0	100.0
Commercial U.S. shipments	Share of value	***	***	***	***	***
Internal consumption	Share of value	***	***	***	***	***
U.S. shipments	Share of value	100.0	100.0	100.0	100.0	100.0

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "--".

U.S. producers' inventories

Table III-9 presents U.S. producers' end-of-period inventories and the ratio of these inventories to U.S. producers' production, U.S. shipments, and total shipments. Overall, U.S. producers maintained ending inventory levels at or below 8.1 percent of production and shipments in all periods. In 2020, U.S. producers' end-of-period inventories, as a ratio to U.S. production, U.S. shipments, and total shipments were 7.0 percent, 7.4 percent, and 6.9 percent, respectively. All inventory ratios were lower in January to March 2021 compared to the same interim period in 2020.

Table III-9
Aluminum foil: U.S. producers' inventories and their ratio to select items, by period

Quantity in short tons; ratio in percent

Item	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
End-of-period inventory quantity	31,070	34,025	29,796	30,062	25,299
Inventory ratio to U.S. production	6.4	7.6	7.0	6.9	6.0
Inventory ratio to U.S. shipments	6.8	8.1	7.4	7.0	6.2
Inventory ratio to total shipments	6.5	7.6	6.9	6.7	5.8

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

U.S. producers' imports and purchases

U.S. producers' imports of aluminum foil are presented in table III-10 through table III-12. The reasons for importing are presented in table III-13.

Of the five responding U.S. producers of aluminum foil, three firms, ***, reported importing aluminum foil during the period for which data were collected.

***, the *** known U.S. producer, reported decreasing import volumes from its affiliate in Sweden between 2018 and 2020, and those imports were equivalent to *** percent in 2018 and *** percent in 2019, and *** percent in 2020 of domestic production of aluminum foil. Import quantities were slightly higher in January-March 2021 than in January-March 2020, equivalent to *** percent and *** percent of production in interim 2020 and interim 2021, respectively. *** reported importing because ***.

***, the *** U.S. producer, reported importing *** short tons in 2019 and *** short tons in 2020 from *** as well as *** short tons in January to March 2021, equivalent to *** percent in 2019 and 2020, and *** percent in interim 2021 of domestic production of aluminum foil. These imports were ***.

The *** U.S. producer, ***, reported increasing import volumes of aluminum foil from subject sources during 2018-20, while nonsubject import volumes decreased irregularly during the same period. *** reported imports from subject sources were equivalent to *** percent of its U.S. production in 2018, *** percent in 2019, and *** percent in 2020. Import quantities from subject sources were higher in January to March 2021 than in January to March 2020, both absolutely and relative to U.S. production. *** import volumes from nonsubject sources were equivalent to *** percent to its U.S. production in 2018, *** percent in 2019, and *** percent in 2020. Imports from nonsubject sources were higher in January to March 2021 compared to January to March 2020, and were equivalent to *** percent and *** percent to U.S. production in interim 2020 and interim 2021, respectively. ***.

*** was the only firm to report purchases of aluminum foil, *** short tons in 2018, *** short tons in 2019, and *** shorts tons 2020 from Turkey from U.S. importers.²⁰ *** also reported purchasing *** short tons in 2020 and *** short tons in January to March 2021 from other sources.²¹

Table III-10
Aluminum foil: *'s U.S. production, imports, and ratio of imports to production, by period**

Quantity in short tons; ratios are ratios of imports to U.S. production in percent

Item	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
U.S. production	Quantity	***	***	***	***	***
Imports from nonsubject sources (***)	Quantity	***	***	***	***	***
Imports from nonsubject sources to U.S. production	Ratio	***	***	***	***	***

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

²⁰ ***. U.S. producer questionnaire response, II-14.

²¹ ***. U.S. producer questionnaire response, II-14.

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "--".

Table III-11
Aluminum foil: *'s U.S. production, U.S. imports, and ratio of imports to production, by period**

Quantity in short tons; ratios are ratios of imports to U.S. production in percent

Item	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
U.S. production	Quantity	***	***	***	***	***
Imports from nonsubject sources (***)	Quantity	***	***	***	***	***
Imports from nonsubject sources to U.S. production	Ratio	***	***	***	***	***

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

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

Table III-12**Aluminum foil: ***'s U.S. production, U.S. imports, and ratio of imports to production, by period**

Quantity in short tons; ratios are ratios of imports to U.S. production in percent

Item	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
U.S. production	Quantity	***	***	***	***	***
Imports from ***	Quantity	***	***	***	***	***
Imports from ***	Quantity	***	***	***	***	***
Imports from ***	Quantity	***	***	***	***	***
Imports from ***	Quantity	***	***	***	***	***
Imports from subject sources	Quantity	***	***	***	***	***
Imports from nonsubject sources (***)	Quantity	***	***	***	***	***
Imports from all import sources	Quantity	***	***	***	***	***
Imports from *** to U.S. production	Ratio	***	***	***	***	***
Imports from *** to U.S. production	Ratio	***	***	***	***	***
Imports from *** to U.S. production	Ratio	***	***	***	***	***
Imports from *** to U.S. production	Ratio	***	***	***	***	***
Imports from subject sources to U.S. production	Ratio	***	***	***	***	***
Imports from nonsubject sources to U.S. production	Ratio	***	***	***	***	***
Imports from all import sources to U.S. production	Ratio	***	***	***	***	***

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table III-13**Aluminum foil: U.S. producers' reasons for importing**

Item	Firm's narrative response
***'s reason for importing	***
***'s reason for importing	***
***'s reason for importing	***

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

U.S. employment, wages, and productivity

Table III-14 shows U.S. producers' employment-related data. In aggregate, the number of production and related workers (PRWs), total hours worked, hours worked per PRW, wages paid, declined during 2018-20. However, while most other employment trends increased from 2018 to 2019, productivity declined in 2019 and recovered to slightly above 2018 levels in 2020. Hourly wages, productivity, and unit labor costs increased from 2018 to 2020. PRWs, total hours worked, hours worked per PRW, wages paid, and unit labor costs were lower in January to March 2021 compared to January to March 2020. Hourly wages and productivity were higher in interim 2021, compared to interim 2020.

Table III-14
Aluminum foil: U.S. producers' employment related information, by period

Item	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Production and related workers (PRWs) (number)	1,514	1,526	1,368	1,484	1,315
Total hours worked (1,000 hours)	3,208	3,244	2,826	781	669
Hours worked per PRW (hours)	2,119	2,126	2,066	526	509
Wages paid (\$1,000)	114,643	116,322	105,594	30,261	27,044
Hourly wages (dollars per hour)	\$35.74	\$35.86	\$37.37	\$38.75	\$40.42
Productivity (short tons per 1000 hours)	150.3	138.1	150.8	138.8	157.4
Unit labor costs (dollars per short ton)	\$238	\$260	\$248	\$279	\$257

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

Note: **. Email from **, August 20, 2021.

Captive consumption

Section 771(7)(C)(iv) of the Act states that—²²

If domestic producers internally transfer significant production of the domestic like product for the production of a downstream article and sell significant production of the domestic like product in the merchant market, and the Commission finds that—

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

then the Commission, in determining market share and the factors affecting financial performance . . . , shall focus primarily on the merchant market for the domestic like product.

Transfers and sales

As reported in table III-8 above, internal consumption accounted for between *** percent and *** percent of U.S. producers' U.S. shipments of aluminum foil during 2018 to March 2021. *** accounted for all of U.S. producers' internal consumption. ***.²³

First statutory criterion in captive consumption

The first requirement for application of the captive consumption provision is that the domestic like product that is internally transferred for processing into that downstream article not enter the merchant market for the domestic like product. U.S. producers reported internal consumption of aluminum foil for the production of downstream aluminum foil. No U.S. producer, however, reported diverting aluminum foil intended for internal consumption to the merchant market.

²² Amended by PL 114-27 (as signed, June 29, 2015), Trade Preferences Extension Act of 2015.

²³ ***. U.S. producer questionnaire response, II-15.

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 small reels of aluminum foil.²⁴

*** also produces other downstream products, such as aluminum food containers. Aluminum foil accounts for *** percent by quantity and *** percent by value of the aluminum food containers.²⁵

²⁴ U.S. producer questionnaire response, II-16.

²⁵ 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 96 firms believed to be importers of aluminum foil, as well as to all U.S. producers of aluminum foil.¹ Usable questionnaire responses were received from 42 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 2020 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:

¹The Commission issued questionnaires to those firms identified in the petition, along with firms that, based on a review of data from third-party sources, 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 2020. Further, merchandise that falls within the scope of these proceedings may also be imported into the United States under HTSUS 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.

On January 1, 2019, HTSUS subheading 7607.11.60 was annotated to establish two new statistical reporting numbers – 7607.11.6010 and 7607.11.6090. HTSUS 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 imported under the former are nonsubject merchandise because they weigh less than 25 pounds. The Petitioners claim that all imports entered under HTSUS statistical reporting number 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 or misreported. 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. 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: *** percent
 Brazil: *** percent
 Oman: *** percent
 Russia: *** percent
 Turkey: *** percent
 Subject sources: *** percent
 All other sources: *** percent

Table IV-1 lists all responding U.S. importers of aluminum foil, their locations, sources, and shares of U.S. imports of aluminum foil in 2020.

**Table IV-1
 Aluminum foil: U.S. importers, their headquarters, and share of total imports by source, 2020**

Shares in percent

Firm	Headquarters	Subject sources	Nonsubject sources	All import sources
AA Metals	***	***	***	***
AKG	***	***	***	***
All Foils	***	***	***	***
Alufoil	***	***	***	***
Amcor	***	***	***	***
Berry Global	***	***	***	***
Brilliant	***	***	***	***
Commodity Foil	***	***	***	***
Custom Laminating	***	***	***	***
D&W	***	***	***	***
Durable	***	***	***	***
Global Foils	***	***	***	***
Goodman	***	***	***	***
Gränges International	***	***	***	***
Handi-foil	***	***	***	***
Johns Manville	***	***	***	***
Kataman	***	***	***	***
Kelvion	***	***	***	***
Kibar	***	***	***	***
Lamtec	***	***	***	***
LLFlex	***	***	***	***
MAHLE Behr	***	***	***	***
Manakin	***	***	***	***
Medalco	***	***	***	***
Midwest Metals	***	***	***	***

Table continued.

Table IV-1 Continued**Aluminum foil: U.S. importers, their headquarters, and share of total imports by source, 2020**

Shares in percent

Firm	Headquarters	Subject sources	Nonsubject sources	All import sources
New Process	***	***	***	***
Novelis	***	***	***	***
Novolex	***	***	***	***
Now Plastics	***	***	***	***
Pactiv	***	***	***	***
Penny Plate	***	***	***	***
ProAmpac	***	***	***	***
Reynolds	***	***	***	***
Sinobec	***	***	***	***
Smart USA	***	***	***	***
Tekni-Plex	***	***	***	***
Tetra Pak	***	***	***	***
Transcontinental	***	***	***	***
Trinidad	***	***	***	***
Valeo	***	***	***	***
Western Plastics	***	***	***	***
Winter-Wolff	***	***	***	***
All firms	Various	***	***	***

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

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 by 21.3 percent (16,075 short tons) between 2018 and 2020, and was 15.4 percent, (2,780 short tons) higher in January to March 2021, compared to January to March 2020. By quantity, U.S. imports of aluminum foil from nonsubject sources experienced upward trends during 2018-20, increasing by 5.7 percent (4,111 short tons) and were higher in interim 2021 by 38.3 percent, (6,577 short tons), compared to interim 2020. By share of quantity, U.S. imports of aluminum foil from subject sources accounted for 54.6 percent of all import sources, while nonsubject imports accounted for 45.4 percent of all import sources in 2020. Imports from *** had the largest shares of aluminum foil imports among the subject countries in 2020.

By value, U.S. imports of aluminum foil from subject sources fluctuated during 2018-20 and were higher in January to March 2021 than in January to March 2020. The value of imports of aluminum foil from nonsubject sources steadily declined 2018-20, but was higher in interim 2020 compared to interim 2021.

The average unit values of imports from subject sources decreased from \$3,344 to \$2,775 per short ton between 2018 and 2020. Subject average unit values were lower in January to March 2021 than in January to March 2020. Average unit values of nonsubject sources also decreased during 2018-20, from \$4,214 to \$3,615 per short ton, but ended slightly higher in interim 2021 than in interim 2020.

The ratio of subject aluminum foil imports to U.S. production increased during 2018-20 and was equivalent to 21.5 percent of U.S. production in 2020. The ratio of subject imports of aluminum foil to U.S. production ended higher in interim 2021 than in interim 2020 by 3.1 percentage points. The ratio of nonsubject aluminum foil imports to U.S. production increased during 2018-20 and was equivalent to 17.9 percent of U.S. production in 2020. The ratio of nonsubject imports of aluminum foil to U.S. production also ended higher in interim 2021 than in interim 2020 by 6.8 percentage points.

Table IV-2
Aluminum foil: U.S. imports, by source and period

Quantity in short tons; value in 1,000 dollars; unit value in dollars per short ton

Source	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Armenia	Quantity	***	***	***	***	***
Brazil	Quantity	***	***	***	***	***
Oman	Quantity	***	***	***	***	***
Russia	Quantity	***	***	***	***	***
Turkey	Quantity	***	***	***	***	***
Subject sources	Quantity	75,595	100,115	91,670	18,104	20,884
China	Quantity	***	***	***	***	***
Germany	Quantity	***	***	***	***	***
Korea	Quantity	***	***	***	***	***
All other sources	Quantity	***	***	***	***	***
Nonsubject sources	Quantity	72,111	71,342	76,222	17,176	23,753
All import sources	Quantity	147,706	171,457	167,892	35,280	44,637
Armenia	Value	***	***	***	***	***
Brazil	Value	***	***	***	***	***
Oman	Value	***	***	***	***	***
Russia	Value	***	***	***	***	***
Turkey	Value	***	***	***	***	***
Subject sources	Value	252,816	312,797	254,341	53,662	60,182
China	Value	***	***	***	***	***
Germany	Value	***	***	***	***	***
Korea	Value	***	***	***	***	***
All other sources	Value	***	***	***	***	***
Nonsubject sources	Value	303,859	284,692	275,565	64,267	89,825
All import sources	Value	556,675	597,489	529,906	117,929	150,007
Armenia	Unit value	***	***	***	***	***
Brazil	Unit value	***	***	***	***	***
Oman	Unit value	***	***	***	***	***
Russia	Unit value	***	***	***	***	***
Turkey	Unit value	***	***	***	***	***
Subject sources	Unit value	3,344	3,124	2,775	2,964	2,882
China	Unit value	***	***	***	***	***
Germany	Unit value	***	***	***	***	***
Korea	Unit value	***	***	***	***	***
All other sources	Unit value	***	***	***	***	***
Nonsubject sources	Unit value	4,214	3,991	3,615	3,742	3,782
All import sources	Unit value	3,769	3,485	3,156	3,343	3,361

Table continued.

Table IV-2 Continued
Aluminum foil: U.S. imports, by source and period

Share of quantity is the share of U.S. imports by quantity in percent; share of value is the share of U.S. imports by value in percent; ratios are U.S. imports to production in percent

Source	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Armenia	Share of quantity	***	***	***	***	***
Brazil	Share of quantity	***	***	***	***	***
Oman	Share of quantity	***	***	***	***	***
Russia	Share of quantity	***	***	***	***	***
Turkey	Share of quantity	***	***	***	***	***
Subject sources	Share of quantity	51.2	58.4	54.6	51.3	46.8
China	Share of quantity	***	***	***	***	***
Germany	Share of quantity	***	***	***	***	***
Korea	Share of quantity	***	***	***	***	***
All other sources	Share of quantity	***	***	***	***	***
Nonsubject sources	Share of quantity	48.8	41.6	45.4	48.7	53.2
All import sources	Share of quantity	100.0	100.0	100.0	100.0	100.0
Armenia	Share of value	***	***	***	***	***
Brazil	Share of value	***	***	***	***	***
Oman	Share of value	***	***	***	***	***
Russia	Share of value	***	***	***	***	***
Turkey	Share of value	***	***	***	***	***
Subject sources	Share of value	45.4	52.4	48.0	45.5	40.1
China	Share of value	***	***	***	***	***
Germany	Share of value	***	***	***	***	***
Korea	Share of value	***	***	***	***	***
All other sources	Share of value	***	***	***	***	***
Nonsubject sources	Share of value	54.6	47.6	52.0	54.5	59.9
All import sources	Share of value	100.0	100.0	100.0	100.0	100.0
Armenia	Ratio	***	***	***	***	***
Brazil	Ratio	***	***	***	***	***
Oman	Ratio	***	***	***	***	***
Russia	Ratio	***	***	***	***	***
Turkey	Ratio	***	***	***	***	***
Subject sources	Ratio	15.7	22.3	21.5	16.7	19.8
China	Ratio	***	***	***	***	***
Germany	Ratio	***	***	***	***	***
Korea	Ratio	***	***	***	***	***
All other sources	Ratio	***	***	***	***	***
Nonsubject sources	Ratio	15.0	15.9	17.9	15.8	22.6
All import sources	Ratio	30.6	38.3	39.4	32.6	42.4

Table continued.

Table IV-2 Continued
Aluminum foil: U.S. imports, by source and period

Change in quantity in short tons; quantity change in percent

Source	Measure	2018-20	2018-19	2019-20	Jan-Mar 2020-21
Armenia	Change in quantity	▲***	▼***	▲***	▲***
Brazil	Change in quantity	▼***	▼***	▼***	▲***
Oman	Change in quantity	▲***	▲***	▼***	▼***
Russia	Change in quantity	▲***	▲***	▼***	▲***
Turkey	Change in quantity	▲***	▲***	▼***	▲***
Subject sources	Change in quantity	▲16,075	▲24,520	▼(8,445)	▲2,780
China	Change in quantity	▼***	▼***	▼***	▼***
Germany	Change in quantity	▲***	▲***	▲***	▼***
Korea	Change in quantity	▲***	▲***	▼***	▲***
All other sources	Change in quantity	▲***	▲***	▲***	▲***
Nonsubject sources	Change in quantity	▲4,111	▼(769)	▲4,880	▲6,577
All import sources	Change in quantity	▲20,186	▲23,751	▼(3,565)	▲9,357
Armenia	Percent change in quantity	▲***	▼***	▲***	▲***
Brazil	Percent change in quantity	▼***	▼***	▼***	▲***
Oman	Percent change in quantity	▲***	▲***	▼***	▼***
Russia	Percent change in quantity	▲***	▲***	▼***	▲***
Turkey	Percent change in quantity	▲***	▲***	▼***	▲***
Subject sources	Percent change in quantity	▲21.3	▲32.4	▼(8.4)	▲15.4
China	Percent change in quantity	▼***	▼***	▼***	▼***
Germany	Percent change in quantity	▲***	▲***	▲***	▼***
Korea	Percent change in quantity	▲***	▲***	▼***	▲***
All other sources	Percent change in quantity	▲***	▲***	▲***	▲***
Nonsubject sources	Percent change in quantity	▲5.7	▼(1.1)	▲6.8	▲38.3
All import sources	Percent change in quantity	▲13.7	▲16.1	▼(2.1)	▲26.5

Table continued.

Table IV-2 Continued
Aluminum foil: U.S. imports, by source and period

Change in value in 1,000 dollars; quantity change in percent

Source	Measure	2018-20	2018-19	2019-20	Jan-Mar 2020-21
Armenia	Change in value	▲***	▼***	▲***	▲***
Brazil	Change in value	▼***	▼***	▼***	▼***
Oman	Change in value	▲***	▲***	▼***	▼***
Russia	Change in value	▲***	▲***	▼***	▲***
Turkey	Change in value	▲***	▲***	▼***	▲***
Subject sources	Change in value	▲1,525	▲59,981	▼(58,456)	▲6,520
China	Change in value	▼***	▼***	▼***	▼***
Germany	Change in value	▲***	▲***	▲***	▼***
Korea	Change in value	▲***	▲***	▼***	▲***
All other sources	Change in value	▲***	▲***	▲***	▲***
Nonsubject sources	Change in value	▼(28,294)	▼(19,167)	▼(9,127)	▲25,558
All import sources	Change in value	▼(26,769)	▲40,814	▼(67,583)	▲32,078
Armenia	Percent change in value	▲***	▼***	▲***	▲***
Brazil	Percent change in value	▼***	▼***	▼***	▼***
Oman	Percent change in value	▲***	▲***	▼***	▼***
Russia	Percent change in value	▲***	▲***	▼***	▲***
Turkey	Percent change in value	▲***	▲***	▼***	▲***
Subject sources	Percent change in value	▲0.6	▲23.7	▼(18.7)	▲12.2
China	Percent change in value	▼***	▼***	▼***	▼***
Germany	Percent change in value	▲***	▲***	▲***	▼***
Korea	Percent change in value	▲***	▲***	▼***	▲***
All other sources	Percent change in value	▲***	▲***	▲***	▲***
Nonsubject sources	Percent change in value	▼(9.3)	▼(6.3)	▼(3.2)	▲39.8
All import sources	Percent change in value	▼(4.8)	▲7.3	▼(11.3)	▲27.2

Table continued.

Table IV-2 Continued
Aluminum foil: U.S. imports, by source and period

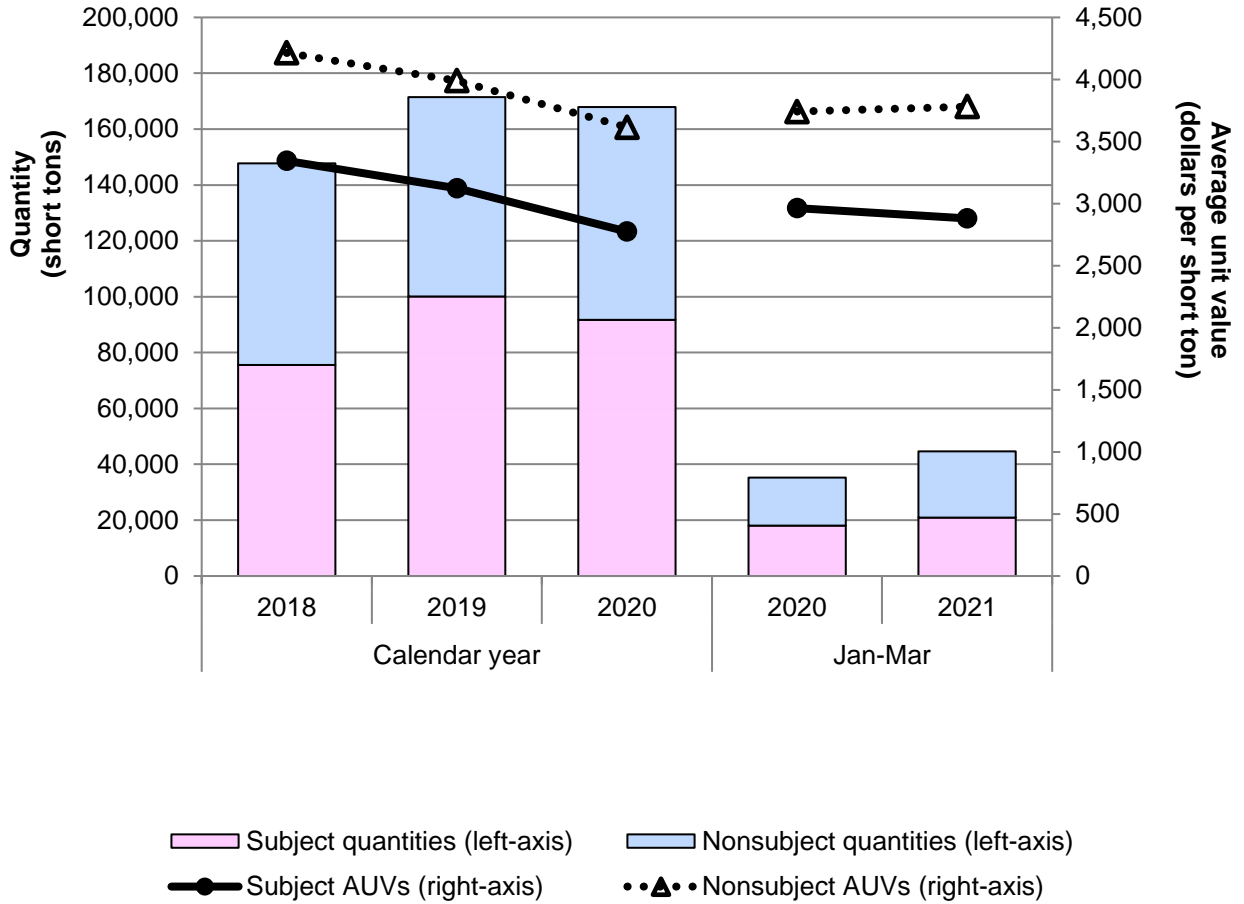
Change in average unit values (AUVs) in dollars per short ton; percent change in AUVs in percent

Source	Measure	2018-20	2018-19	2019-20	Jan-Mar 2020-21
Armenia	Change in AUVs	▼***	▼***	▼***	▼***
Brazil	Change in AUVs	▼***	▲***	▼***	▼***
Oman	Change in AUVs	▼***	▼***	▼***	▲***
Russia	Change in AUVs	▼***	▼***	▼***	▼***
Turkey	Change in AUVs	▼***	▼***	▼***	▲***
Subject sources	Change in AUVs	▼(570)	▼(220)	▼(350)	▼(82)
China	Change in AUVs	▼***	▼***	▲***	▲***
Germany	Change in AUVs	▼***	▼***	▼***	▲***
Korea	Change in AUVs	▼***	▼***	▼***	▲***
All other sources	Change in AUVs	▼***	▲***	▼***	▲***
Nonsubject sources	Change in AUVs	▼(598)	▼(223)	▼(375)	▲40
All import sources	Change in AUVs	▼(613)	▼(284)	▼(329)	▲18
Armenia	Percent change in AUVs	▼***	▼***	▼***	▼***
Brazil	Percent change in AUVs	▼***	▲***	▼***	▼***
Oman	Percent change in AUVs	▼***	▼***	▼***	▲***
Russia	Percent change in AUVs	▼***	▼***	▼***	▼***
Turkey	Percent change in AUVs	▼***	▼***	▼***	▲***
Subject sources	Percent change in AUVs	▼(17.0)	▼(6.6)	▼(11.2)	▼(2.8)
China	Percent change in AUVs	▼***	▼***	▲***	▲***
Germany	Percent change in AUVs	▼***	▼***	▼***	▲***
Korea	Percent change in AUVs	▼***	▼***	▼***	▲***
All other sources	Percent change in AUVs	▼***	▲***	▼***	▲***
Nonsubject sources	Percent change in AUVs	▼(14.2)	▼(5.3)	▼(9.4)	▲1.1
All import sources	Percent change in AUVs	▼(16.3)	▼(7.5)	▼(9.4)	▲0.5

Source: Compiled from data submitted in response to Commission questionnaires

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.

Figure IV-1
Aluminum foil: U.S. imports quantities and average unit values, by period



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 of aluminum foil 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

Quantity in short tons; share of quantity is the share of total imports by quantity in percent

Source of imports	Quantity	Share of quantity
Armenia	***	***
Brazil	***	***
Oman	***	***
Russia	***	***
Turkey	***	***
Subject sources	78,440	52.4
China	***	***
Germany	***	***
Korea	***	***
All other sources	***	***
Nonsubject sources	71,292	47.6
All import sources	149,732	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 2020.

As for shares within each source of U.S. shipments by thickness in 2020, U.S. producers' U.S. shipments were predominantly extra heavy (***) percent), followed by standard aluminum foil (***) percent). U.S. importers' U.S. shipments from Armenia were mostly standard (***) percent), with a small share of extra heavy (***) percent). U.S. importers' U.S. shipments from Brazil were primarily standard (***) percent), followed by ultra-thin and extra heavy. U.S. importers' U.S. shipments from Oman (***) extra heavy, and Russia's (***) standard. U.S. importers' U.S. shipments from Turkey were mostly extra heavy (***) percent) and standard (***) percent). U.S. importers' U.S. shipments from nonsubject sources were comprised of ultra-thin (***) percent) and nearly (***) were standard aluminum foil, with the remainder divided between extra heavy, heavy, and thin.

Regarding shares within thickness, by source, during 2020 U.S. producers' U.S. shipments accounted for (***) percent of extra-heavy aluminum foil, (***) percent of standard aluminum foil, and (***) percent of heavy aluminum foil. U.S. importers' U.S. shipments from subject sources in 2020 accounted for (***) percent of standard aluminum foil and less than (***) percent of each of the remaining thicknesses. U.S. importers' U.S. shipments of nonsubject aluminum foil accounted for (***) percent of ultra-thin, (***) percent of thin foil, and over (***) of heavy aluminum foil of U.S. shipments within thickness in 2020.

Table IV-4
Aluminum foil: Quantity of U.S. producers' and U.S. importers' U.S. shipments by thickness, 2020

Quantity in short tons

Source	Ultra-thin	Thin	Standard	Heavy	Extra heavy	All types
U.S. producers	***	***	***	***	***	***
Armenia	***	***	***	***	***	***
Brazil	***	***	***	***	***	***
Oman	***	***	***	***	***	***
Russia	***	***	***	***	***	***
Turkey	***	***	***	***	***	***
Subject sources	***	***	***	***	***	***
China	***	***	***	***	***	***
Germany	***	***	***	***	***	***
Korea	***	***	***	***	***	***
All other sources	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***
All sources	***	***	***	***	***	***
Combined U.S. shipments	***	***	***	***	***	***

Table continued.

Table IV-4 Continued
Aluminum foil: Share of U.S. producers' and U.S. importers' U.S. shipments within source by thickness, 2020

Share across in percent

Source	Ultra-thin	Thin	Standard	Heavy	Extra heavy	All types
U.S. producers	***	***	***	***	***	***
Armenia	***	***	***	***	***	***
Brazil	***	***	***	***	***	***
Oman	***	***	***	***	***	***
Russia	***	***	***	***	***	***
Turkey	***	***	***	***	***	***
Subject sources	***	***	***	***	***	***
China	***	***	***	***	***	***
Germany	***	***	***	***	***	***
Korea	***	***	***	***	***	***
All other sources	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***
All sources	***	***	***	***	***	***
Combined U.S. shipments	***	***	***	***	***	***

Table continued.

Table IV-4 Continued

Aluminum foil: Share of U.S. producers' and U.S. importers' U.S. shipments within thickness by source, 2020

Share down in percent

Source	Ultra-thin	Thin	Standard	Heavy	Extra heavy	All types
U.S. producers	***	***	***	***	***	***
Armenia	***	***	***	***	***	***
Brazil	***	***	***	***	***	***
Oman	***	***	***	***	***	***
Russia	***	***	***	***	***	***
Turkey	***	***	***	***	***	***
Subject sources	***	***	***	***	***	***
China	***	***	***	***	***	***
Germany	***	***	***	***	***	***
Korea	***	***	***	***	***	***
All other sources	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***
All sources	***	***	***	***	***	***
Combined U.S. shipments	***	***	***	***	***	***

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

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

Figure IV-2
Aluminum foil: U.S. producers' and U.S. importers' U.S. shipments by thickness, 2020

* * * * *

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

Geographical markets

Table IV-5 presents U.S. import quantities of aluminum foil by source and border of entry during 2020. Aluminum foil produced in and imported into the United States is shipped nationwide. In 2020, U.S. official import statistics show that the majority of aluminum foil from subject sources entered through the Eastern region, followed by the Northern and Southern borders. About a third of China's imports of aluminum foil entered through the Western border. Nonsubject sources entered mostly through the Northern and Eastern ports of entry.

Table IV-5
Aluminum foil: Quantity of U.S. imports by border of entry, 2020

Quantity in short tons

Source	East	North	South	West	All borders
Armenia	11,494	1,089	---	---	12,583
Brazil	15,170	3,516	605	---	19,291
Oman	123	---	14,166	15	14,304
Russia	10,019	5,581	---	---	15,600
Turkey	12,324	10,010	32	286	22,651
Subject sources	49,129	20,197	14,803	300	84,430
China	4,301	3,825	318	3,967	12,410
Germany	12,273	8,628	4,155	18	25,074
Korea	6,961	21,350	1,927	2,052	32,289
All other sources	27,625	21,004	4,666	6,070	59,365
Nonsubject sources	51,159	54,806	11,065	12,107	129,138
All import sources	100,288	75,004	25,869	12,407	213,568

Table continued.

Table IV-5 Continued
Aluminum foil: Share of quantity of U.S. imports by border of entry region, 2020

Share across in percent

Source	East	North	South	West	All borders
Armenia	91.3	8.7	---	---	100.0
Brazil	78.6	18.2	3.1	---	100.0
Oman	0.9	---	99.0	0.1	100.0
Russia	64.2	35.8	---	---	100.0
Turkey	54.4	44.2	0.1	1.3	100.0
Subject sources	58.2	23.9	17.5	0.4	100.0
China	34.7	30.8	2.6	32.0	100.0
Germany	48.9	34.4	16.6	0.1	100.0
Korea	21.6	66.1	6.0	6.4	100.0
All other sources	46.5	35.4	7.9	10.2	100.0
Nonsubject sources	39.6	42.4	8.6	9.4	100.0
All import sources	47.0	35.1	12.1	5.8	100.0

Table continued.

Table IV-5 Continued
Aluminum foil: Share of quantity of U.S. imports by border of entry, 2020

Share in percent

Source	East	North	South	West	All borders
Armenia	11.5	1.5	---	---	5.9
Brazil	15.1	4.7	2.3	---	9.0
Oman	0.1	---	54.8	0.1	6.7
Russia	10.0	7.4	---	---	7.3
Turkey	12.3	13.3	0.1	2.3	10.6
Subject sources	49.0	26.9	57.2	2.4	39.5
China	4.3	5.1	1.2	32.0	5.8
Germany	12.2	11.5	16.1	0.1	11.7
Korea	6.9	28.5	7.4	16.5	15.1
All other sources	27.5	28.0	18.0	48.9	27.8
Nonsubject sources	51.0	73.1	42.8	97.6	60.5
All import sources	100.0	100.0	100.0	100.0	100.0

Source: Official U.S. import statistics using HTS statistical reporting number 7607.11.3000, 7607.11.6090, 7607.11.9030, 7607.11.9060, 7607.11.9090, 7607.19.6000, accessed July 26, 2021.

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

Presence in the market

Table IV-6 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 2018 through May 2021. During that time period, imports of aluminum foil from Armenia were present in 31 of the 41 months, and imports of aluminum foil from Brazil and Turkey were present in all 41 months. U.S. imports of aluminum foil from Oman were present in 31 of the 41 instances. U.S. imports of aluminum foil from Russia were present in 37 and in all of the 41 months. After April 2019, all subject imports were present consistently in all months through May 2021, except for Armenia in September 2020.

Table IV-6
Aluminum foil: Quantity of U.S. imports, by year and month

Quantity in short tons

Year	Month	Armenia	Brazil	Oman	Russia	Turkey	Subject sources
2018	January	102	22	---	159	46	328
2018	February	14	38	2	24	234	313
2018	March	166	109	---	167	155	597
2018	April	102	231	---	58	272	662
2018	May	---	386	---	3	244	634
2018	June	---	144	---	4	338	485
2018	July	---	654	---	79	61	794
2018	August	---	427	---	6	283	716
2018	September	45	615	---	---	495	1,156
2018	October	14	893	---	120	282	1,309
2018	November	---	456	579	---	272	1,307
2018	December	---	837	---	---	142	979
2019	January	---	2,791	1,872	1,288	2,871	8,823
2019	February	---	2,150	1,157	---	1,662	4,969
2019	March	---	2,080	1,576	1,016	2,462	7,133
2019	April	857	1,455	2,133	2,088	3,055	9,587
2019	May	2,297	1,603	1,760	1,383	2,330	9,373
2019	June	241	1,192	2,120	807	2,372	6,733
2019	July	646	1,579	2,730	951	2,762	8,668
2019	August	514	1,069	1,884	1,256	2,083	6,805
2019	September	535	1,280	322	1,121	2,470	5,729
2019	October	124	597	266	871	1,681	3,539
2019	November	871	584	1,553	2,101	1,398	6,508
2019	December	386	475	823	1,340	998	4,021
2020	January	528	824	1,004	658	1,278	4,292
2020	February	989	749	1,469	1,014	862	5,083
2020	March	1,009	1,108	991	1,063	1,673	5,844
2020	April	1,612	916	1,268	886	1,755	6,437
2020	May	1,421	1,299	1,688	1,140	1,514	7,063
2020	June	1,253	1,239	1,945	1,665	1,533	7,635
2020	July	705	2,350	904	1,780	1,970	7,709
2020	August	1,477	1,432	344	1,135	1,861	6,249
2020	September	---	2,288	1,685	2,303	2,787	9,063
2020	October	1,941	2,374	911	899	2,567	8,693
2020	November	559	2,156	395	1,859	1,954	6,922
2020	December	1,090	2,557	1,700	1,198	2,898	9,442
2021	January	1,028	799	731	1,116	2,416	6,090
2021	February	720	1,674	933	1,198	2,029	6,554
2021	March	1,319	852	177	1,777	3,263	7,388
2021	April	1,612	1,373	2,062	2,478	3,169	10,695
2021	May	1,065	708	756	605	1,803	4,937

Table continued.

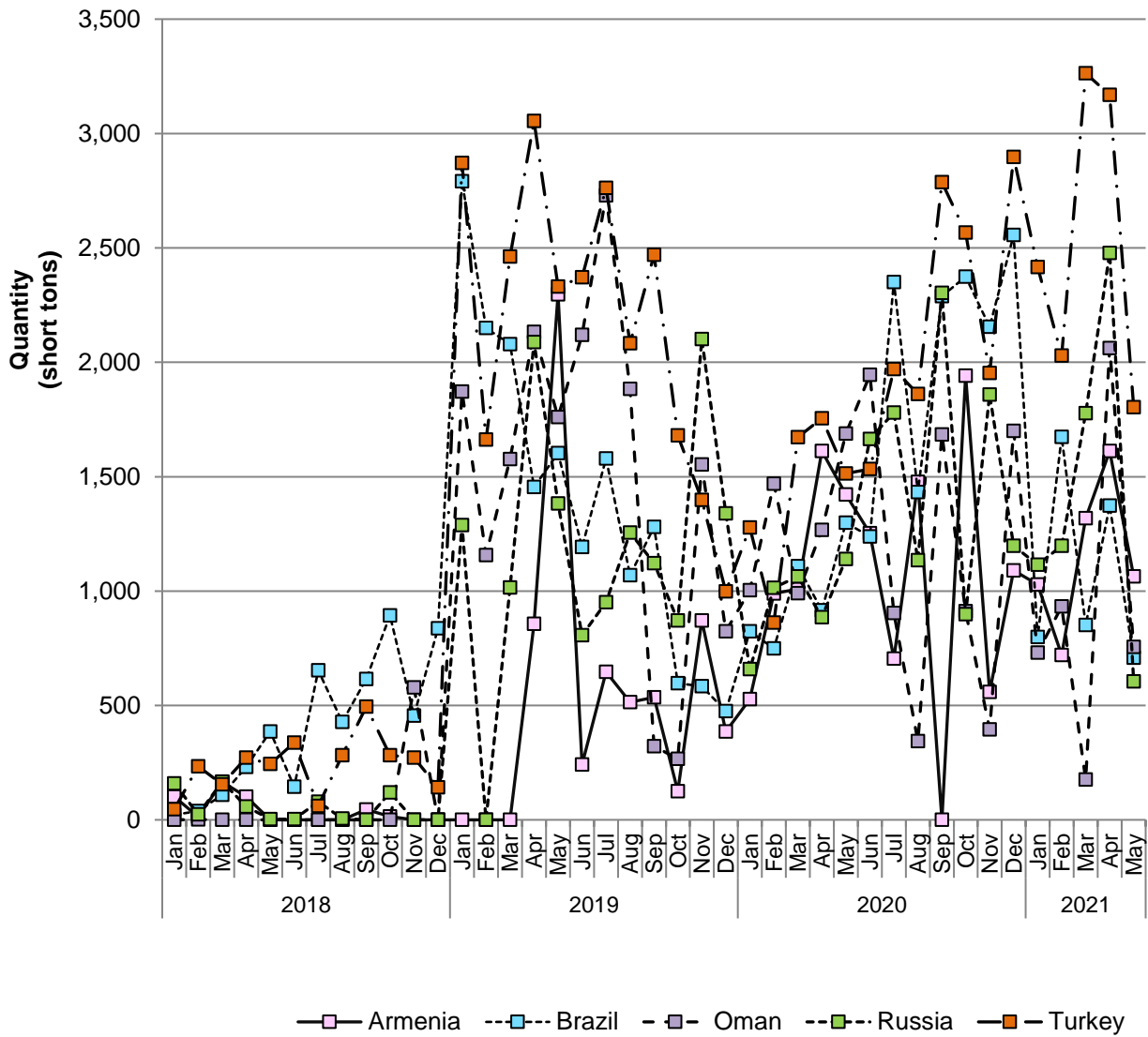
Table IV-6 Continued
Aluminum foil: U.S. imports, by year and month

Quantity in short tons

Year	Month	China	Germany	Korea	All other sources	Nonsubject	All import sources
2018	January	2,988	1,371	1,191	2,094	7,645	7,973
2018	February	1,649	1,284	1,502	2,218	6,653	6,966
2018	March	2,908	1,523	2,150	3,026	9,607	10,204
2018	April	3,051	946	1,691	3,444	9,132	9,794
2018	May	2,363	1,323	1,794	2,501	7,981	8,614
2018	June	2,840	1,351	1,543	2,797	8,531	9,017
2018	July	2,801	1,652	2,581	2,953	9,988	10,782
2018	August	2,949	1,665	2,003	3,246	9,863	10,579
2018	September	2,617	1,422	1,225	3,682	8,946	10,101
2018	October	1,936	1,340	2,144	4,419	9,840	11,149
2018	November	1,889	1,754	1,517	3,284	8,445	9,752
2018	December	1,540	1,705	1,843	3,366	8,454	9,433
2019	January	2,429	1,535	2,297	6,322	12,582	21,405
2019	February	1,476	1,846	1,801	5,555	10,677	15,646
2019	March	1,640	1,817	2,776	6,047	12,280	19,414
2019	April	1,393	2,136	2,142	6,076	11,748	21,335
2019	May	1,521	1,771	1,996	5,479	10,766	20,139
2019	June	1,482	1,636	1,807	4,917	9,843	16,576
2019	July	1,138	1,726	1,693	5,201	9,758	18,426
2019	August	1,251	2,068	2,380	4,624	10,323	17,128
2019	September	804	2,116	1,357	4,558	8,835	14,564
2019	October	712	1,817	1,857	5,196	9,582	13,121
2019	November	1,036	1,916	1,698	4,433	9,083	15,591
2019	December	1,401	1,565	1,957	4,838	9,760	13,781
2020	January	1,234	1,643	2,294	4,473	9,645	13,936
2020	February	624	1,562	1,844	4,200	8,230	13,313
2020	March	667	1,938	2,872	5,366	10,844	16,688
2020	April	878	2,449	2,459	4,377	10,163	16,600
2020	May	1,106	2,082	2,647	4,293	10,128	17,191
2020	June	1,202	2,568	2,908	4,513	11,191	18,826
2020	July	1,154	2,498	2,826	5,227	11,706	19,415
2020	August	1,211	2,459	3,097	5,232	11,999	18,248
2020	September	937	2,032	2,275	5,458	10,703	19,766
2020	October	1,210	2,070	2,945	5,617	11,842	20,535
2020	November	1,037	1,805	2,917	5,608	11,366	18,288
2020	December	1,149	1,966	3,204	5,001	11,321	20,763
2021	January	1,365	1,872	2,803	6,768	12,809	18,899
2021	February	1,281	1,662	2,548	5,886	11,377	17,931
2021	March	878	2,066	4,830	9,218	16,992	24,380
2021	April	648	2,848	2,646	8,462	14,603	25,298
2021	May	869	3,137	3,424	9,966	17,396	22,334

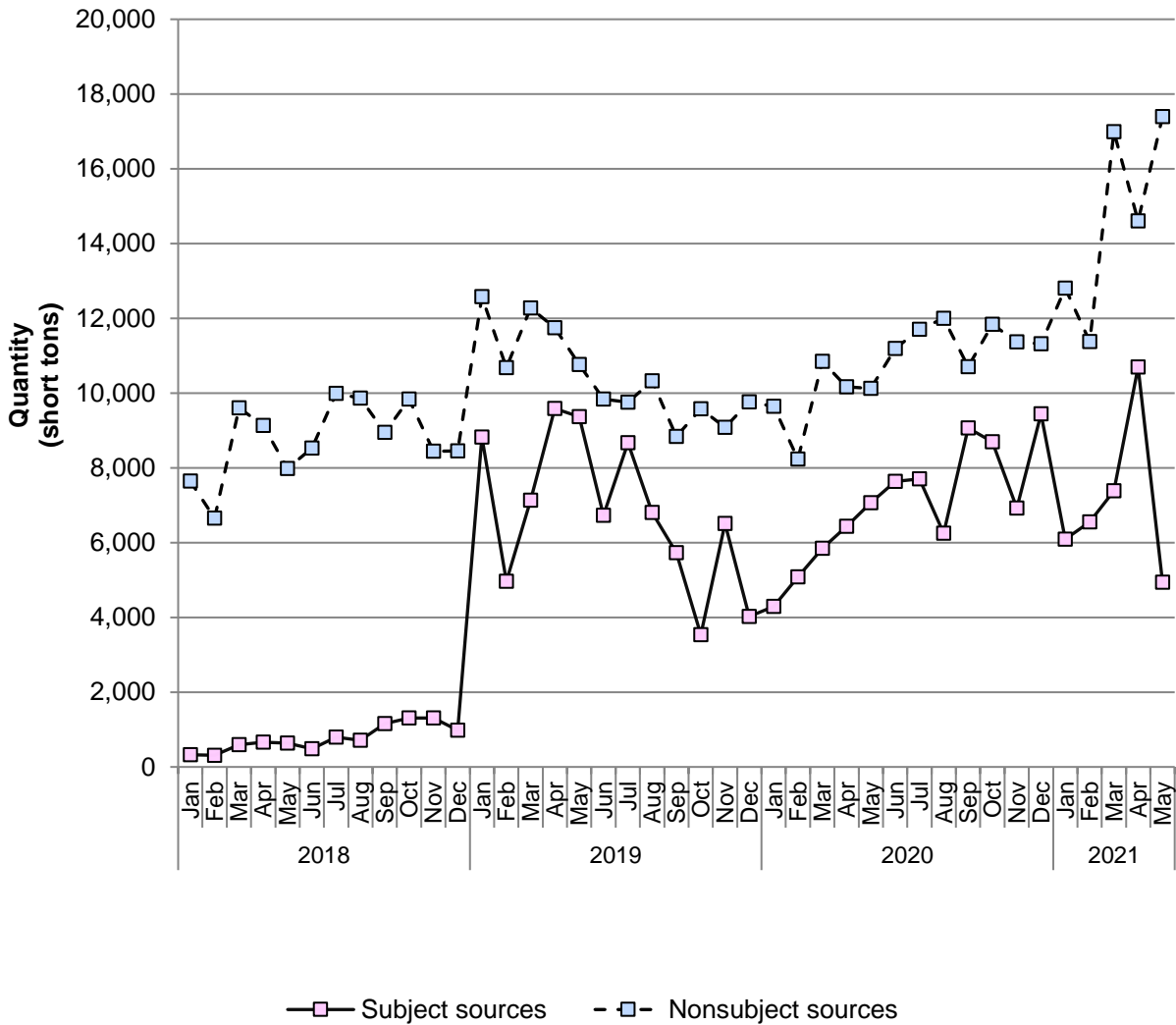
Source: Compiled from official U.S. import statistics using statistical reporting numbers 7607.11.3000, 7607.11.6090, 7607.11.9030, 7607.11.9060, 7607.11.9090, 7607.19.6000, accessed July 26, 2021.

Figure IV-3
Aluminum foil: U.S. imports from individual subject sources, by year and month



Source: Official U.S. import statistics using HTS statistical reporting number 7607.11.3000, 7607.11.6090, 7607.11.9030, 7607.11.9060, 7607.11.9090, 7607.19.6000, accessed July 26, 2021.

Figure IV-4
Aluminum foil: U.S. imports from aggregated subject and nonsubject sources, by year and month



Source: Official U.S. import statistics using HTS statistical reporting number 7607.11.3000, 7607.11.6090, 7607.11.9030, 7607.11.9060, 7607.11.9090, 7607.19.6000, accessed July 26, 2021.

Apparent U.S. consumption (total market)

Table IV-7 presents data on apparent U.S. consumption for aluminum foil. Apparent consumption generally decreased by quantity during 2018-20, by 6.3 percent, but ended higher in interim 2021 compared to interim 2020, by 4.7 percent. By value, apparent consumption decreased by 18.7 percent and ended higher in interim 2021 compared to interim 2020 by 8.1 percent.

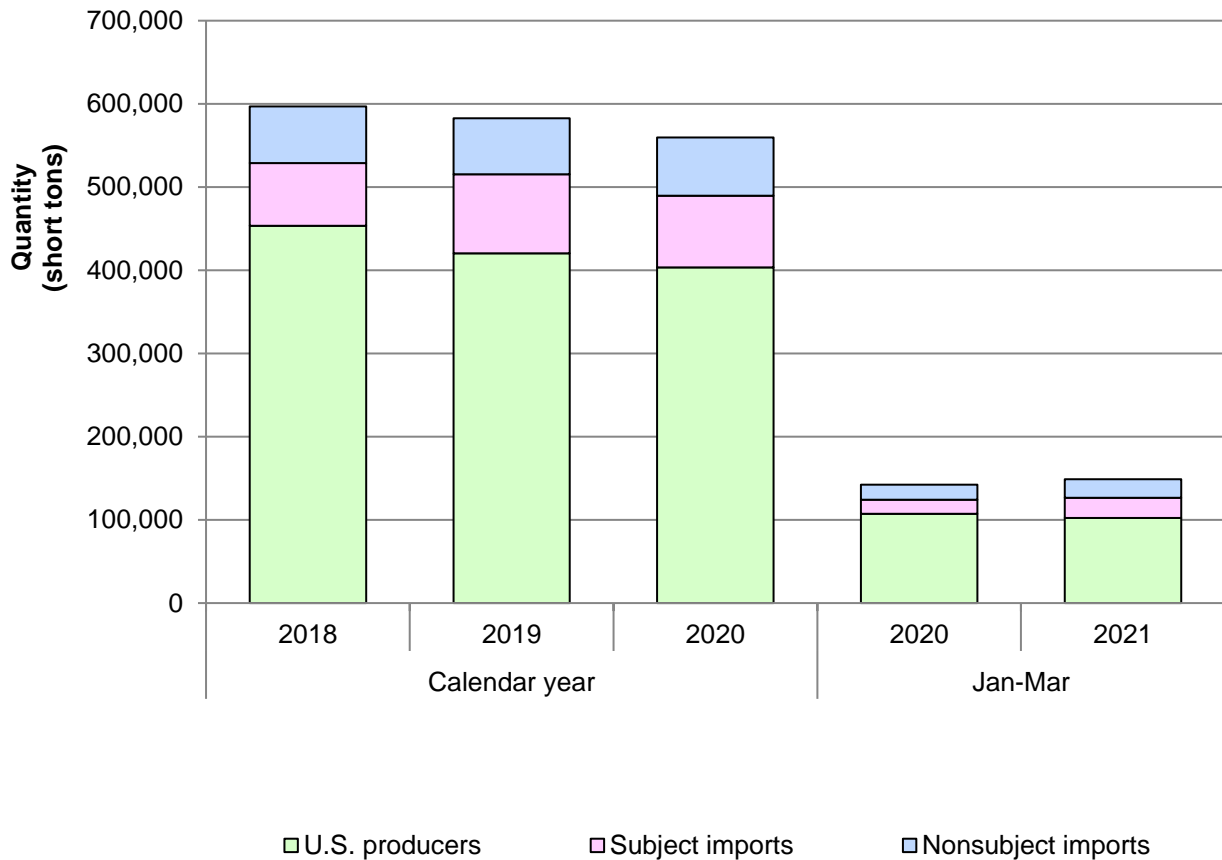
Table IV-7
Aluminum foil: Apparent U.S. consumption by period, total market

Quantity in short tons; value in 1,000 dollars, unit values in dollars per short ton

Source	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
U.S. producers	Quantity	453,607	420,313	403,571	107,159	102,278
Armenia	Quantity	***	***	***	***	***
Brazil	Quantity	***	***	***	***	***
Oman	Quantity	***	***	***	***	***
Russia	Quantity	***	***	***	***	***
Turkey	Quantity	***	***	***	***	***
Subject sources	Quantity	75,377	95,003	85,891	17,149	24,113
China	Quantity	***	***	***	***	***
Germany	Quantity	***	***	***	***	***
Korea	Quantity	***	***	***	***	***
All other sources	Quantity	***	***	***	***	***
Nonsubject sources	Quantity	67,921	67,528	69,998	17,877	22,524
All import sources	Quantity	143,298	162,531	155,889	35,026	46,637
All sources	Quantity	596,905	582,844	559,460	142,185	148,915
U.S. producers	Value	1,580,263	1,378,585	1,229,008	340,039	336,259
Armenia	Value	***	***	***	***	***
Brazil	Value	***	***	***	***	***
Oman	Value	***	***	***	***	***
Russia	Value	***	***	***	***	***
Turkey	Value	***	***	***	***	***
Subject sources	Value	250,758	297,711	239,125	49,582	70,089
China	Value	***	***	***	***	***
Germany	Value	***	***	***	***	***
Korea	Value	***	***	***	***	***
All other sources	Value	***	***	***	***	***
Nonsubject sources	Value	297,561	278,995	261,939	67,917	88,047
All import sources	Value	548,319	576,706	501,064	117,499	158,136
All sources	Value	2,128,582	1,955,291	1,730,072	457,538	494,395

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

Figure IV-5
Aluminum foil: Apparent U.S. consumption, by period, total market



Source: Compiled from data submitted in response to Commission questionnaires

U.S. market shares (total market)

U.S. market share data are presented in table IV-8. By quantity, U.S. producers' market shares of aluminum foil decreased between 2018 and 2020 from 76.0 percent in 2018 to 72.1 percent in 2020, and were lower in January to March 2021 at 68.7 percent, compared to 75.4 percent in January to March 2020. In contrast, U.S. importers' market shares of aluminum foil from subject sources increased irregularly by quantity from 12.6 percent in 2018 to 15.4 percent in 2020, and were higher in January to March 2021 at 16.2 percent compared to 12.1 percent in January to March 2020. The share of quantity of nonsubject sources increased from 11.4 percent in 2018 to 12.5 percent in 2020 and was higher in January to March 2021 at 15.1 percent, compared to 12.6 percent in January to March 2020.

Table IV-8
Aluminum foil: Market shares by period, total market

Quantity in short tons; value in 1,000 dollars; share of quantity is the share of apparent U.S. consumption by quantity in percent; share of value is the share of apparent U.S. consumption by value in percent

Source	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
U.S. producers	Share of quantity	76.0	72.1	72.1	75.4	68.7
Armenia	Share of quantity	***	***	***	***	***
Brazil	Share of quantity	***	***	***	***	***
Oman	Share of quantity	***	***	***	***	***
Russia	Share of quantity	***	***	***	***	***
Turkey	Share of quantity	***	***	***	***	***
Subject sources	Share of quantity	12.6	16.3	15.4	12.1	16.2
China	Share of quantity	***	***	***	***	***
Germany	Share of quantity	***	***	***	***	***
Korea	Share of quantity	***	***	***	***	***
All other sources	Share of quantity	***	***	***	***	***
Nonsubject sources	Share of quantity	11.4	11.6	12.5	12.6	15.1
All import sources	Share of quantity	24.0	27.9	27.9	24.6	31.3
All sources	Share of quantity	100.0	100.0	100.0	100.0	100.0
U.S. producers	Share of value	74.2	70.5	71.0	74.3	68.0
Armenia	Share of value	***	***	***	***	***
Brazil	Share of value	***	***	***	***	***
Oman	Share of value	***	***	***	***	***
Russia	Share of value	***	***	***	***	***
Turkey	Share of value	***	***	***	***	***
Subject sources	Share of value	11.8	15.2	13.8	10.8	14.2
China	Share of value	***	***	***	***	***
Germany	Share of value	***	***	***	***	***
Korea	Share of value	***	***	***	***	***
All other sources	Share of value	***	***	***	***	***
Nonsubject sources	Share of value	14.0	14.3	15.1	14.8	17.8
All import sources	Share of value	25.8	29.5	29.0	25.7	32.0
All sources	Share of value	100.0	100.0	100.0	100.0	100.0

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

Apparent U.S. consumption (merchant market)

Table IV-9 and figure IV-6 present data on apparent U.S. consumption for aluminum foil for the merchant market. Apparent consumption generally decreased by quantity in all periods, by *** percent during 2018-20, but ended higher in interim 2021 compared to interim 2020 by *** percent. By value, apparent consumption decreased by *** percent during 2018-20 and ended higher in interim 2021 compared to interim 2020 by *** percent.

Table IV-9
Aluminum foil: Apparent U.S. consumption by period, merchant market

Quantity in short tons; value in 1,000 dollars

Source	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
U.S. producers	Quantity	***	***	***	***	***
Armenia	Quantity	***	***	***	***	***
Brazil	Quantity	***	***	***	***	***
Oman	Quantity	***	***	***	***	***
Russia	Quantity	***	***	***	***	***
Turkey	Quantity	***	***	***	***	***
Subject sources	Quantity	75,377	95,003	85,891	17,149	24,113
China	Quantity	***	***	***	***	***
Germany	Quantity	***	***	***	***	***
Korea	Quantity	***	***	***	***	***
All other sources	Quantity	***	***	***	***	***
Nonsubject sources	Quantity	67,921	67,528	69,998	17,877	22,524
All import sources	Quantity	143,298	162,531	155,889	35,026	46,637
All sources	Quantity	***	***	***	***	***
U.S. producers	Value	***	***	***	***	***
Armenia	Value	***	***	***	***	***
Brazil	Value	***	***	***	***	***
Oman	Value	***	***	***	***	***
Russia	Value	***	***	***	***	***
Turkey	Value	***	***	***	***	***
Subject sources	Value	250,758	297,711	239,125	49,582	70,089
China	Value	***	***	***	***	***
Germany	Value	***	***	***	***	***
Korea	Value	***	***	***	***	***
All other sources	Value	***	***	***	***	***
Nonsubject sources	Value	297,561	278,995	261,939	67,917	88,047
All import sources	Value	548,319	576,706	501,064	117,499	158,136
All sources	Value	***	***	***	***	***

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

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

Figure IV-6
Aluminum foil: Apparent U.S. consumption by period, merchant market

* * * * *

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

U.S. market shares (merchant market)

U.S. market share data for the merchant market are presented in table IV-10. By quantity, U.S. producers' market shares of aluminum foil decreased between 2018 and 2020 by *** percentage points, from *** percent in 2018 to *** percent in 2020, and were lower in January to March 2021 at *** percent, compared to *** percent in January to March 2020. In contrast, U.S. importers' market shares of aluminum foil from subject sources increased irregularly by quantity from *** percent in 2018 to *** percent in 2020, and were higher in January to March 2021 at *** percent, compared to *** percent in January to March 2020. The share of quantity of nonsubject sources increased from *** percent in 2018 to *** percent in 2020 and was higher in January to March 2021 at *** percent, compared to *** percent in January to March 2020.

Table IV-10
Aluminum foil: Market shares by period, merchant market

Shares in percent

Source	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
U.S. producers	Share of quantity	***	***	***	***	***
Armenia	Share of quantity	***	***	***	***	***
Brazil	Share of quantity	***	***	***	***	***
Oman	Share of quantity	***	***	***	***	***
Russia	Share of quantity	***	***	***	***	***
Turkey	Share of quantity	***	***	***	***	***
Subject sources	Share of quantity	***	***	***	***	***
China	Share of quantity	***	***	***	***	***
Germany	Share of quantity	***	***	***	***	***
Korea	Share of quantity	***	***	***	***	***
All other sources	Share of quantity	***	***	***	***	***
Nonsubject sources	Share of quantity	***	***	***	***	***
All import sources	Share of quantity	***	***	***	***	***
All sources	Share of quantity	***	***	***	***	***
U.S. producers	Share of value	***	***	***	***	***
Armenia	Share of value	***	***	***	***	***
Brazil	Share of value	***	***	***	***	***
Oman	Share of value	***	***	***	***	***
Russia	Share of value	***	***	***	***	***
Turkey	Share of value	***	***	***	***	***
Subject sources	Share of value	***	***	***	***	***
China	Share of value	***	***	***	***	***
Germany	Share of value	***	***	***	***	***
Korea	Share of value	***	***	***	***	***
All other sources	Share of value	***	***	***	***	***
Nonsubject sources	Share of value	***	***	***	***	***
All import sources	Share of value	***	***	***	***	***
All sources	Share of value	***	***	***	***	***

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

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

Part V: Pricing data

Factors affecting prices

Aluminum foil prices are largely determined by three factors: the raw material cost, the Platts Midwest Premium, and the conversion price.¹

Raw material costs

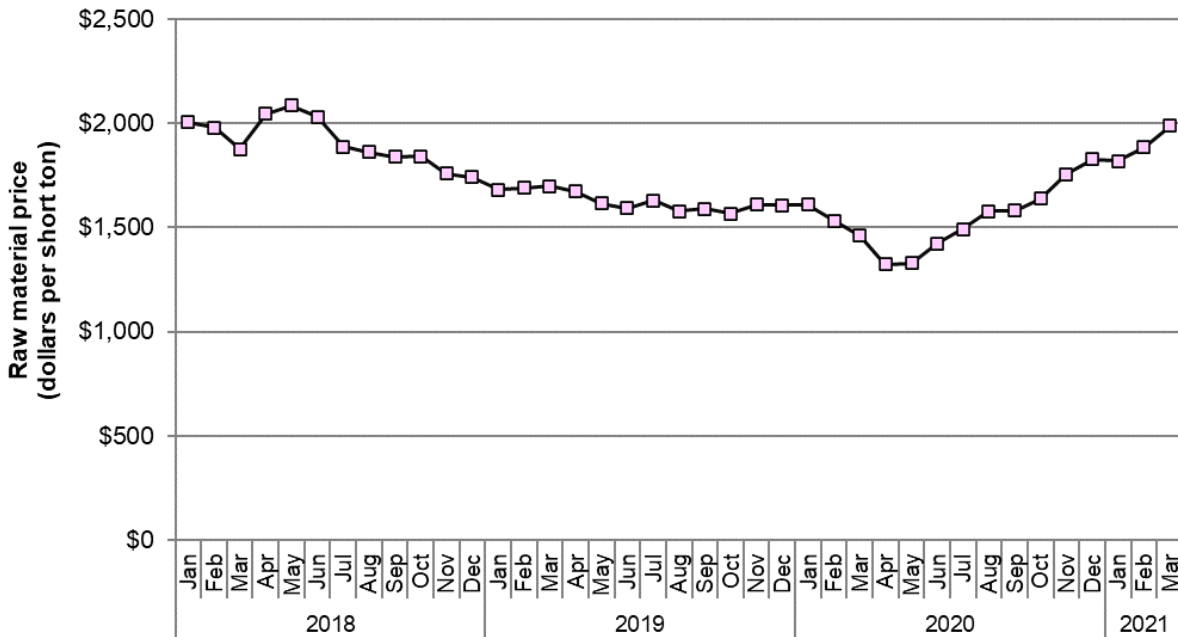
Aluminum foil is primarily made of re-roll stock, primary aluminum, and secondary aluminum. Raw material costs are the largest component of the total costs of goods sold (“COGS”) for aluminum foil, accounting for between *** and *** percent during 2018 to 2020 (see part VI). The majority of U.S. producers (3 of 5) reported that raw material prices fluctuated during the period of investigation. The majority of importers reported that raw material prices increased (22 of 33) or fluctuated (8 of 33). Importers ***, ***, and *** reported that additional duties on aluminum from China had increased raw material prices.

The price of aluminum fluctuated throughout the period, decreasing from \$2,005 per short ton in January 2018 to \$1,324 per metric ton in April 2020. The price of aluminum then increased to \$1,987 per short ton in March 2021 (figure V-1).²

¹ 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.

² Staff presented raw material data from FRED instead of the London Metal Exchange because there was more data available which displayed the same trends in the months where data overlapped.

Figure V-1
Raw materials: Price in USD per short ton of aluminum, by month January 2018-March 2021



Source: Federal Reserve Economic Data (FRED), St. Louis Federal Reserve Bank, retrieved August 13, 2021.

Note: Underlying data for figure V-1 is in appendix G.

Platts Midwest Premium

The Platts Midwest Premium is a daily premium added to the raw materials price applicable to U.S. producers of primary unwrought aluminum (figure V-2). Platts Midwest Premium increased from January 2018 to May 2018. Platts Midwest Premium decreased starting in June 2018 until June 2020 when the price began to generally increase throughout the remainder of 2020. Platts Midwest Premium increased over *** percent over the period.

Figure V-2
Aluminum foil: High price per pound for Platts Midwest Premium by month January 2018-
December 2020

* * * * *

Source: ***.

Note: Underlying data for figure V-2 is in appendix G.

Conversion prices

U.S. producers were asked to report the average conversion price of ultra-thin, thin, standard, heavy, and extra-heavy gauges of aluminum foil. The conversion prices were generally highest for ultra-thin and thin gauges and lowest for extra-heavy gauges during January 2018-March 2021. The range of conversion prices for each of the requested gauge of aluminum foil are presented in table V-1.³

Table V-1
Aluminum foil: U.S. producers' reported merchant market conversion price by aluminum thickness and by period

Dollars per pound

Thickness	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Ultra-thin	***	***	***	***	***
Thin	***	***	***	***	***
Standard	***	***	***	***	***
Heavy	***	***	***	***	***
Extra heavy	***	***	***	***	***
All thicknesses	***	***	***	***	***

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

Transportation costs to the U.S. market

Transportation costs, as a share of landed duty-paid value, for aluminum foil shipped from subject countries to the United States averaged 4.8 percent for Armenia, Brazil, Oman, Russia, and Turkey during 2020. Transportation costs, as a share of landed duty-paid value, ranged from 2.8 percent for aluminum foil from Brazil to 5.9 percent for aluminum foil from Oman. These estimates were derived from official import data and represent the transportation and other charges on imports.⁴

U.S. inland transportation costs

The majority of 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 2.1 to 3.0 percent while most importers reported costs of 1.0

³ Quarterly conversion prices are presented in appendix J.

⁴ The estimated transportation costs were obtained by subtracting the customs value from the c.i.f. value of the imports for 2020 and then dividing by the customs value based on the HTS statistical reporting number 7607.11.3000, 7607.11.6090, 7607.11.9030, 7607.11.9060, 7607.11.9090, 7607.19.600.

to 8.0 percent. The majority of responding importers (10 of 17) reported that they shipped aluminum foil from storage while the remaining six reported shipping aluminum foil from the point of importation.

Pricing practices

Pricing methods

U.S. producers reported setting prices using transaction-by-transaction negotiations and contracts. Importers reported setting prices using transaction-by-transaction negotiations, contracts, price lists, and other methods (table V-2). Other methods reported included quarterly adjustments.

Table V-2
Aluminum foil: U.S. producers' and importers' reported price setting methods, count

Method	U.S. producers	Importers
Transaction-by-transaction	4	17
Contract	4	10
Set price list	0	2
Other	0	4
Responding firms	4	24

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

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.

U.S. producers reported selling most aluminum foil using long-term contracts and importers reported selling the vast majority of aluminum foil using long-term contracts (table V-3).

Table V-3
Aluminum foil: U.S. producers' and importers' shares of U.S. commercial shipments by type of sale, 2020

Share in percent

Method	U.S. producers	Importers
Long-term contracts	***	***
Annual contracts	***	***
Short-term contracts	***	***
Spot sales	***	***
Total	100.0	100.0

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

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

The majority of U.S. producers (3 of 4) reported that they renegotiate price during long-term contracts. Half of U.S. producers reported renegotiating price during annual contracts.

None of the responding U.S. producers reported that they offer short-term contracts. All responding U.S. producers (4 of 4) reported that contracts fix both price and quantity and indexing the price to raw material costs. The majority of U.S. producers (3 of 4) reported that they base their raw material index to the London Metal Exchange or the Midwest Premium while all responding U.S. producers also reported using other methods to index raw material costs. All responding U.S. producers reported that they did not include changes in the conversion price as a factor in the contract price. U.S. producers reported that long-term contracts typically last two to three years.

The majority of responding importers reported that they did not renegotiate price for short-term (3 of 4), annual (3 of 3), or long-term contracts (2 of 3). Two importers reported fixing price for short-term contracts and one reported fixing both price and quantity. One importer reported fixing quantity for annual contracts and one reported fixing both price and quantity for annual contracts. One importer reported fixing quantity for long-term contracts, one importer reported fixing price for long-term contracts, and one importer reported fixing both price and quantity. Half of responding importers (2 of 4) reported indexing prices to raw materials for short-term contracts and the majority of responding importers reported indexing prices to raw materials for annual contracts (3 of 3) and long-term contracts (3 of 4). The majority of responding importers (11 of 21) reported that they did not base their raw material index on the London Metal Exchange or the Midwest Premium but the majority of responding importers reported using other raw material costs as a base for the raw material index. Importer *** reported that it indexed prices to the European Metal Premium or Shanghai Futures Exchange (SHFE) The majority of responding U.S. importers (19 of 23) reported excluding the conversion price as a factor of pricing. Half of responding importers reported using factors in the price of aluminum foil. Other factors include transportation costs and energy costs. Importers report that short-term contracts typically last one to three months and that long-term contracts typically last two years.

Four purchasers reported that they purchase product daily, 7 purchase weekly, 12 purchase monthly, two purchase quarterly, and one annually. Twenty-four of 28 responding purchasers reported that their purchasing frequency had not changed since 2018. Most (25 of 28) purchasers contact 1 to 15 suppliers before making a purchase.

Sales terms and discounts

U.S. producers typically quote prices on a delivered basis while importers typically quote prices on an f.o.b. basis. The majority of responding U.S. producers and importers reported that they do not have discount policies. U.S. producer *** reported offering both quantity and total volume discounts.

Price leadership

Purchasers reported that Gränges (6 firms), Novelis (4 firms), Reynolds, Rusal, CBA, and JW aluminum (1 firm each) were price leaders. Purchaser *** reported that JW was the only source for 5000 series foil so it had a significant impact of pricing. Purchaser *** reported that Novelis was usually the first to put through an increase and are one of the main players in this market. Purchaser *** reported that Gränges is a leading producer of automotive foil. Purchaser *** reported that Novelis and Gränges of 3003 aluminum foil and their pricing impacts the pricing across all firms in the industry.

Price and purchase cost data

The Commission requested U.S. producers and importers to provide quarterly data for the total quantity and f.o.b. value of the following aluminum foil products shipped to unrelated U.S. customers during January 2018-March 2021. Firms that imported these products from Armenia, Brazil, Oman, Russia, and Turkey for their own use or retail sale were requested to provide import purchase cost data.

Product 1.-- Aluminum in the 8XXX or 1XXX series, standard tempers, 0.000235ga – 0.00025ga, all widths, 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, 0.00039-0.001 inch thickness, width 12-18", mill finish.

Product 4.-- Aluminum in the 3XXX series, standard tempers, 0.0016-0.0032 inch thickness, width 0.5-15", mill finish.

Price data

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.⁵ Pricing data reported by these firms accounted for approximately 9.6 percent of U.S. producers' shipments of aluminum foil in 2020. There was no reported pricing data reported for imports in 2020.^{6 7}

Price data for products 1-4 are presented in tables V-4 to V-7 and figures V-3 to V-6. Nonsubject country prices are presented in Appendix J.

⁵ 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.

⁶ No import price data was reported for products 2, 3, and 4. Only importers from Brazil reported import price data for product 1, and only in Q1 and Q2 2018.

⁷ Due to the lack of price and purchase cost data reported for Oman, staff sent a supplemental data request for the equivalent product 1 from the preliminary investigation. This data and aggregated price and purchase cost comparison tables are present in appendix H.

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

Price in dollars per pound, quantity in pounds, margin in percent.

Period	US price	US quantity	Armenia price	Armenia quantity	Armenia margin	Brazil price	Brazil quantity	Brazil margin
2018 Q1	***	***	***	***	***	***	***	***
2018 Q2	***	***	***	***	***	***	***	***
2018 Q3	***	***	***	***	***	***	***	***
2018 Q4	***	***	***	***	***	***	***	***
2019 Q1	***	***	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***	***	***

Period	Oman price	Oman quantity	Oman margin	Russia price	Russia quantity	Russia margin	Turkey price	Turkey quantity	Turkey margin
2018 Q1	***	***	***	***	***	***	***	***	***
2018 Q2	***	***	***	***	***	***	***	***	***
2018 Q3	***	***	***	***	***	***	***	***	***
2018 Q4	***	***	***	***	***	***	***	***	***
2019 Q1	***	***	***	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***	***	***	***

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

Note: Product 1: Aluminum in the 8XXX or 1XXX series, standard tempers, 0.000235ga – 0.00025ga, all widths, mill finish

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

Price of product 1						
*	*	*	*	*	*	*

Volume of product 1						
*	*	*	*	*	*	*

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

Note: Product 1: Aluminum in the 8XXX or 1XXX series, standard tempers, 0.000235ga – 0.00025ga, all widths, mill finish

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

Price in dollars per pound, quantity in pounds, margin in percent.

Period	US price	US quantity	Armenia price	Armenia quantity	Armenia margin	Brazil price	Brazil quantity	Brazil margin
2018 Q1	***	***	***	***	***	***	***	***
2018 Q2	***	***	***	***	***	***	***	***
2018 Q3	***	***	***	***	***	***	***	***
2018 Q4	***	***	***	***	***	***	***	***
2019 Q1	***	***	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***	***	***

Period	Oman price	Oman quantity	Oman margin	Russia price	Russia quantity	Russia margin	Turkey price	Turkey quantity	Turkey margin
2018 Q1	***	***	***	***	***	***	***	***	***
2018 Q2	***	***	***	***	***	***	***	***	***
2018 Q3	***	***	***	***	***	***	***	***	***
2018 Q4	***	***	***	***	***	***	***	***	***
2019 Q1	***	***	***	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***	***	***	***

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

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

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

Price of product 2						
*	*	*	*	*	*	*

Volume of product 2						
*	*	*	*	*	*	*

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

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

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

Price in dollars per pound, quantity in pounds, margin in percent.

Period	US price	US quantity	Armenia price	Armenia quantity	Armenia margin	Brazil price	Brazil quantity	Brazil margin
2018 Q1	***	***	***	***	***	***	***	***
2018 Q2	***	***	***	***	***	***	***	***
2018 Q3	***	***	***	***	***	***	***	***
2018 Q4	***	***	***	***	***	***	***	***
2019 Q1	***	***	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***	***	***

Period	Oman price	Oman quantity	Oman margin	Russia price	Russia quantity	Russia margin	Turkey price	Turkey quantity	Turkey margin
2018 Q1	***	***	***	***	***	***	***	***	***
2018 Q2	***	***	***	***	***	***	***	***	***
2018 Q3	***	***	***	***	***	***	***	***	***
2018 Q4	***	***	***	***	***	***	***	***	***
2019 Q1	***	***	***	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***	***	***	***

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

Note: Product 3: Aluminum in the 8XXX series, standard tempers, 0.00039-0.001 inch thickness, width 12-18", mill finish.

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

Price of product 3

* * * * *

Volume of product 3

* * * * *

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

Note: Product 3: Aluminum in the 8XXX series, standard tempers, 0.00039-0.001 inch thickness, width 12-18", mill finish.

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

Price in dollars per pound, quantity in pounds, margin in percent.

Period	US price	US quantity	Armenia price	Armenia quantity	Armenia margin	Brazil price	Brazil quantity	Brazil margin
2018 Q1	***	***	***	***	***	***	***	***
2018 Q2	***	***	***	***	***	***	***	***
2018 Q3	***	***	***	***	***	***	***	***
2018 Q4	***	***	***	***	***	***	***	***
2019 Q1	***	***	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***	***	***

Period	Oman price	Oman quantity	Oman margin	Russia price	Russia quantity	Russia margin	Turkey price	Turkey quantity	Turkey margin
2018 Q1	***	***	***	***	***	***	***	***	***
2018 Q2	***	***	***	***	***	***	***	***	***
2018 Q3	***	***	***	***	***	***	***	***	***
2018 Q4	***	***	***	***	***	***	***	***	***
2019 Q1	***	***	***	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***	***	***	***

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

Note: Product 4: Aluminum in the 3XXX series, standard tempers, 0.0016-0.0032 inch thickness, width 0.5-15", mill finish.

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

Price of product 4

* * * * *

Volume of product 4

* * * * *

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

Note: Product 4: Aluminum in the 3XXX series, standard tempers, 0.0016-0.0032 inch thickness, width 0.5-15", mill finish.

Import purchase cost data

Eleven importers reported useable import purchase cost data for products 1-4. Purchase cost data reported by these firms accounted for 60.5 percent of imports from subject countries in 2020. Purchase cost data from Armenia accounted for 86.8 percent of imports from Armenia. Purchase cost data from Russia accounted for 94.3 percent of imports from Russia. Purchase cost data from Turkey accounted for 41.5 percent of imports from Turkey. Landed duty-paid (“LDP”) purchase cost data for imports from Armenia, Brazil, Oman, Russia, and Turkey are presented in tables V-8 to V-11 and figures V-7 to V-10, along with U.S. producers’ sales prices.⁸

Importers reporting import purchase cost data were asked to provide additional information regarding the costs and benefits of directly importing aluminum foil.

Four of 11 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 7 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 freight costs, duties, and storage costs.

Firms were also asked to describe how these additional costs incurred by importing aluminum foil directly compare with additional costs incurred when purchasing from a U.S. producer or U.S. importer. Firms stated that they typically pay for imported aluminum foil at the time of landing whereas they have 30 days to pay U.S. producers. Importers reported that there is a risk of damaging the aluminum foil in transit, longer transit times, and the cost of clearing customs. Importers also reported that prices of imported aluminum foil were subject to changes in the London Metal Exchange index while U.S.-produced aluminum foil prices were subject to changes in the Midwest Premium.

Eight importers reported that they compare costs of importing to the cost of purchasing from a U.S. producer in determining whether to import aluminum foil, five importers compare costs to purchasing from a U.S. importer, and seven importers do not compare costs of purchasing from either U.S. producers or importers.

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 differences are based on LDP import values whereas margins of underselling/overselling are based on importer sales prices.

Twelve importers identified benefits from importing aluminum foil directly instead of purchasing from U.S. producers or importers, including mitigating the risk of having only one supplier and accessing types of aluminum foil that U.S. producers do not supply or supply in limited quantities, namely lighter gauges or ultra-thin foil.

Firms were also asked whether the import cost (both excluding and including additional costs) of aluminum foil they imported are lower than the price of purchasing aluminum foil from a U.S. producer or importer. Two importers estimated that they saved between ***⁹ percent from importing rather than to purchasing the product from a U.S. producer.¹⁰

⁹ The remaining six firms did not provide estimates of savings from importing aluminum foil instead of purchasing the product from a U.S. producer

¹⁰ Eight firms reported that they based their estimates on previous company transactions, four reported basing their estimates on market research, and three reported other bases for their estimates, including order management costs.

Table V-8
Aluminum foil: Import landed duty-paid purchase costs and domestic prices, quantities of product 1, and price-cost differentials, by quarter

Price and LDP value in dollars per pound, quantity in pounds, margin and price-cost differential in percent.

Period	US price	US quantity	Armenia unit LDP value	Armenia quantity	Armenia margin	Brazil unit LDP value	Brazil quantity	Brazil margin
2018 Q1	***	***	***	***	***	***	***	***
2018 Q2	***	***	***	***	***	***	***	***
2018 Q3	***	***	***	***	***	***	***	***
2018 Q4	***	***	***	***	***	***	***	***
2019 Q1	***	***	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***	***	***

Period	Oman Unit LDP value	Oman quantity	Oman margin	Russia unit LDP value	Russia quantity	Russia margin	Turkey unit LDP value	Turkey quantity	Turkey margin
2018 Q1	***	***	***	***	***	***	***	***	***
2018 Q2	***	***	***	***	***	***	***	***	***
2018 Q3	***	***	***	***	***	***	***	***	***
2018 Q4	***	***	***	***	***	***	***	***	***
2019 Q1	***	***	***	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***	***	***	***

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

Note: Product 1: Aluminum in the 8XXX or 1XXX series, standard tempers, 0.000235ga – 0.00025ga, all widths, mill finish.

Note: U.S. producer price data is the same as that presented in table V-4.

Figure V-7

Aluminum foil: U.S. producer prices and import purchase costs, and quantities, of product 1, by quarter

U.S. price and import purchase cost of product 1

* * * * *

Volume of product 1

* * * * *

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

Note: Product 1: Aluminum in the 8XXX or 1XXX series, standard tempers, 0.000235ga – 0.00025ga, all widths, mill finish.

Table V-9**Aluminum foil: Import landed duty-paid purchase costs and domestic prices, quantities of product 2, and price-cost differentials, by quarter**

Price and LDP value in dollars per pound, quantity in pounds, margin and price-cost differential in percent.

Period	US price	US quantity	Armenia unit LDP value	Armenia quantity	Armenia margin	Brazil unit LDP value	Brazil quantity	Brazil margin
2018 Q1	***	***	***	***	***	***	***	***
2018 Q2	***	***	***	***	***	***	***	***
2018 Q3	***	***	***	***	***	***	***	***
2018 Q4	***	***	***	***	***	***	***	***
2019 Q1	***	***	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***	***	***

Period	Oman Unit LDP value	Oman quantity	Oman margin	Russia unit LDP value	Russia quantity	Russia margin	Turkey unit LDP value	Turkey quantity	Turkey margin
2018 Q1	***	***	***	***	***	***	***	***	***
2018 Q2	***	***	***	***	***	***	***	***	***
2018 Q3	***	***	***	***	***	***	***	***	***
2018 Q4	***	***	***	***	***	***	***	***	***
2019 Q1	***	***	***	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***	***	***	***

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

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

Note: U.S. producer price data is the same as that presented in table V-5.

Figure V-8
Aluminum foil: U.S. producer prices and import purchase costs, and quantities, of product 2, by quarter

U.S. price and import purchase cost of product 2

* * * * *

Volume of product 2

* * * * *

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

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

Table V-10**Aluminum foil: Import landed duty-paid purchase costs and domestic prices, quantities of product 3, and price-cost differentials, by quarter**

Price and LDP value in dollars per pound, quantity in pounds, margin and price-cost differential in percent.

Period	US price	US quantity	Armenia unit LDP value	Armenia quantity	Armenia margin	Brazil unit LDP value	Brazil quantity	Brazil margin
2018 Q1	***	***	***	***	***	***	***	***
2018 Q2	***	***	***	***	***	***	***	***
2018 Q3	***	***	***	***	***	***	***	***
2018 Q4	***	***	***	***	***	***	***	***
2019 Q1	***	***	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***	***	***

Period	Oman Unit LDP value	Oman quantity	Oman margin	Russia unit LDP value	Russia quantity	Russia margin	Turkey unit LDP value	Turkey quantity	Turkey margin
2018 Q1	***	***	***	***	***	***	***	***	***
2018 Q2	***	***	***	***	***	***	***	***	***
2018 Q3	***	***	***	***	***	***	***	***	***
2018 Q4	***	***	***	***	***	***	***	***	***
2019 Q1	***	***	***	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***	***	***	***

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

Note: Product 3: Aluminum in the 8XXX series, standard tempers, 0.00039-0.001 inch thickness, width 12-18”, mill finish.

Note: U.S. producer price data is the same as that presented in table V-6.

Figure V-9
Aluminum foil: U.S. producer prices and import purchase costs, and quantities, of product 3, by quarter

U.S. price and import purchase cost of product 3

* * * * *

Volume of product 3

* * * * *

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

Note: Product 3: Aluminum in the 8XXX series, standard tempers, 0.00039-0.001 inch thickness, width 12-18", mill finish.

Table V-11**Aluminum foil: Import landed duty-paid purchase costs and domestic prices, quantities of product 4, and price-cost differentials, by quarter**

Price and LDP value in dollars per pound, quantity in pounds, margin and price-cost differential in percent.

Period	US price	US quantity	Armenia unit LDP value	Armenia quantity	Armenia margin	Brazil unit LDP value	Brazil quantity	Brazil margin
2018 Q1	***	***	***	***	***	***	***	***
2018 Q2	***	***	***	***	***	***	***	***
2018 Q3	***	***	***	***	***	***	***	***
2018 Q4	***	***	***	***	***	***	***	***
2019 Q1	***	***	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***	***	***

Period	Oman Unit LDP value	Oman quantity	Oman margin	Russia unit LDP value	Russia quantity	Russia margin	Turkey unit LDP value	Turkey quantity	Turkey margin
2018 Q1	***	***	***	***	***	***	***	***	***
2018 Q2	***	***	***	***	***	***	***	***	***
2018 Q3	***	***	***	***	***	***	***	***	***
2018 Q4	***	***	***	***	***	***	***	***	***
2019 Q1	***	***	***	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***	***	***	***

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

Note: Product 4: Aluminum in the 3XXX series, standard tempers, 0.0016-0.0032 inch thickness, width 0.5-15", mill finish.

Note: U.S. producer price data is the same as that presented in table V-7.

Figure V-10

Aluminum foil: U.S. producer prices and import purchase costs, and quantities, of product 4, by quarter

U.S. price and import purchase cost of product 4

* * * * *

Volume of product 4

* * * * *

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

Note: Product 4: Aluminum in the 3XXX series, standard tempers, 0.0016-0.0032 inch thickness, width 0.5-15", mill finish.

Price and purchase cost trends

Prices for products 3 and 4 from the United States increased while prices for product 2 from the United States decreased during January 2018 – March 2021. Pricing increases for domestic aluminum foil ranged from *** to *** percent, while price decreases for product 2 were *** percent. There was insufficient data to determine price trends for subject imports (Table V-12).

There was only sufficient purchase-cost data to establish trends for products 1, 3 and 4. Landed duty-paid costs decreased during January 2018 – March 2021 for these products. Landed duty-paid cost decreases ranged from *** to *** percent (Table V-13).

Table V-12**Aluminum foil: Number of quarters containing observations low price, high price, and change in price over period, by product and source, January 2018 through March 2021**

Quantity in pounds; prices and unit LDP values in dollars per pound; change in percent

Product	Source	Number of quarters	Quantity	Low price	High price	First quarter price	Last quarter price	Change over period
Product 1	United States	***	***	***	***	***	***	***
Product 1	Armenia	***	***	***	***	***	***	***
Product 1	Brazil	***	***	***	***	***	***	***
Product 1	Oman	***	***	***	***	***	***	***
Product 1	Russia	***	***	***	***	***	***	***
Product 1	Turkey	***	***	***	***	***	***	***
Product 2	United States	***	***	***	***	***	***	***
Product 2	Armenia	***	***	***	***	***	***	***
Product 2	Brazil	***	***	***	***	***	***	***
Product 2	Oman	***	***	***	***	***	***	***
Product 2	Russia	***	***	***	***	***	***	***
Product 2	Turkey	***	***	***	***	***	***	***
Product 3	United States	***	***	***	***	***	***	***
Product 3	Armenia	***	***	***	***	***	***	***
Product 3	Brazil	***	***	***	***	***	***	***
Product 3	Oman	***	***	***	***	***	***	***
Product 3	Russia	***	***	***	***	***	***	***
Product 3	Turkey	***	***	***	***	***	***	***
Product 4	United States	***	***	***	***	***	***	***
Product 4	Armenia	***	***	***	***	***	***	***
Product 4	Brazil	***	***	***	***	***	***	***
Product 4	Oman	***	***	***	***	***	***	***
Product 4	Russia	***	***	***	***	***	***	***
Product 4	Turkey	***	***	***	***	***	***	***

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

Table V-13

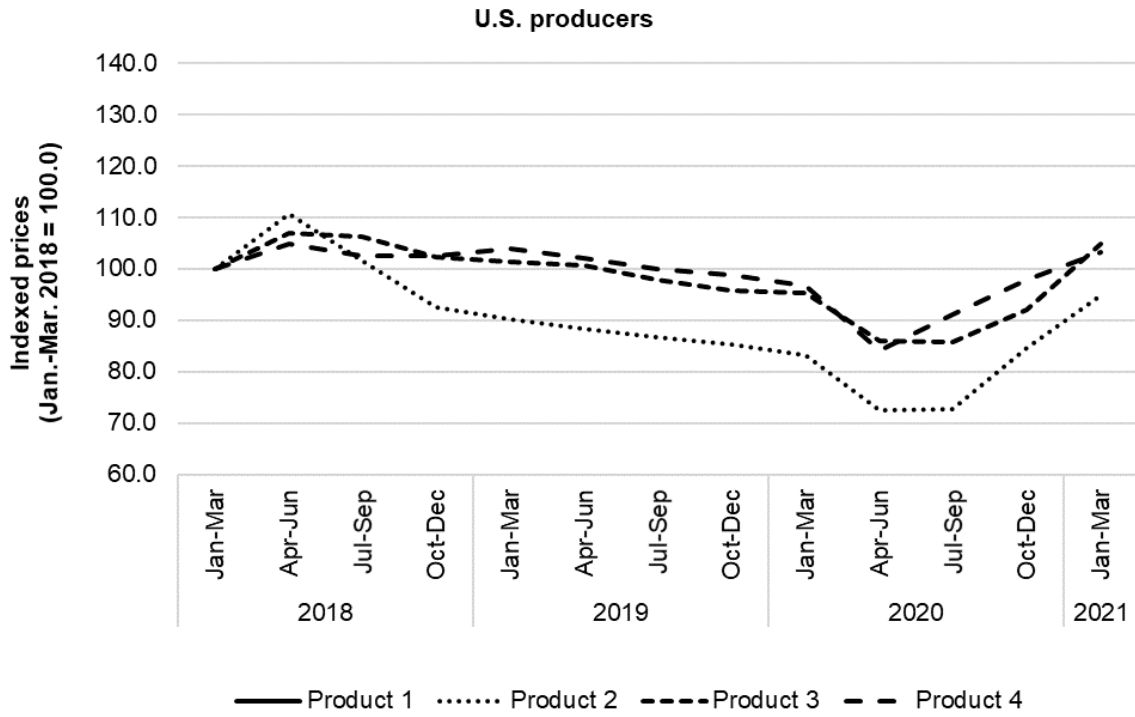
Aluminum foil: Number of quarters containing observations low price/costs, high price/costs, and change in price/cost over period, by product and source, January 2018 through March 2021

Quantity in pounds; prices and unit LDP values in dollars per pound; change in percent

Product	Source	Number of quarters	Quantity	Low price/costs	High price/costs	First quarter price	Last quarter price	Change over period
Product 1	United States	***	***	***	***	***	***	***
Product 1	Armenia	***	***	***	***	***	***	***
Product 1	Brazil	***	***	***	***	***	***	***
Product 1	Oman	***	***	***	***	***	***	***
Product 1	Russia	***	***	***	***	***	***	***
Product 1	Turkey	***	***	***	***	***	***	***
Product 2	United States	***	***	***	***	***	***	***
Product 2	Armenia	***	***	***	***	***	***	***
Product 2	Brazil	***	***	***	***	***	***	***
Product 2	Oman	***	***	***	***	***	***	***
Product 2	Russia	***	***	***	***	***	***	***
Product 2	Turkey	***	***	***	***	***	***	***
Product 3	United States	***	***	***	***	***	***	***
Product 3	Armenia	***	***	***	***	***	***	***
Product 3	Brazil	***	***	***	***	***	***	***
Product 3	Oman	***	***	***	***	***	***	***
Product 3	Russia	***	***	***	***	***	***	***
Product 3	Turkey	***	***	***	***	***	***	***
Product 4	United States	***	***	***	***	***	***	***
Product 4	Armenia	***	***	***	***	***	***	***
Product 4	Brazil	***	***	***	***	***	***	***
Product 4	Oman	***	***	***	***	***	***	***
Product 4	Russia	***	***	***	***	***	***	***
Product 4	Turkey	***	***	***	***	***	***	***

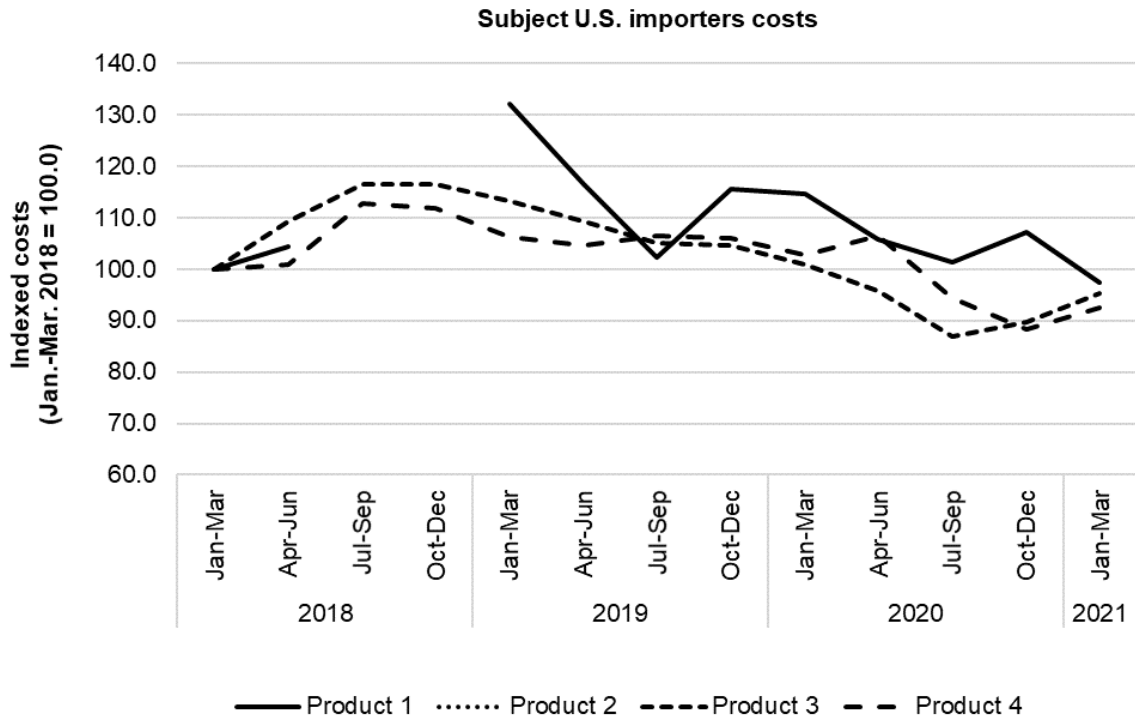
Source: Compiled from data submitted in response to Commission questionnaires.

Figure V-11
Aluminum foil: Indexed U.S. producer prices, January 2018 through March 2021



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

Figure V-12
Aluminum foil: Indexed subject U.S. importer purchase costs by quarter, January 2018 through March 2021



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

Price and purchase cost comparisons

Price comparisons

There was insufficient pricing data for pricing products from Armenia, Brazil, Oman, Russia, and Turkey to provide any pricing comparisons. There was no pricing data provided by U.S. producers for the same quarter as any subject country.

Price-cost comparisons

As shown in tables V-14 and V-15, landed duty-paid costs for aluminum foil imported from Armenia, Brazil, Oman, Russia, and Turkey were below the sales price for U.S.-produced product in 72 of 91 instances (274.9 million pounds); price-cost differentials ranged from 0.2 to 35.9 percent. In the remaining 19 instances (70.2 million pounds), landed duty-paid costs for aluminum foil from Armenia, Brazil, Oman, Russia, and Turkey were between 0.1 and 15.9 percent above sales prices for the domestic product.

Table V-14**Aluminum foil: Instances of lower import purchase costs and the range and average of price-cost differentials, by product**

Quantity in pounds; price-cost differential in percent

Item	Type	Number of quarters	Quantity	Average differential	Minimum differential	Maximum differential
Product 1	Lower	***	***	***	***	***
Product 2	Lower	***	***	***	***	***
Product 3	Lower	***	***	***	***	***
Product 4	Lower	***	***	***	***	***
Total, lower	Lower	72	274,867,010	11.8	0.2	35.9
Product 1	Higher	***	***	***	***	***
Product 2	Higher	***	***	***	***	***
Product 3	Higher	***	***	***	***	***
Product 4	Higher	***	***	***	***	***
Total, higher	Higher	19	70,234,375	(5.0)	(0.1)	(15.9)

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

Note: These data include only quarters in which there is a comparison between the U.S. and subject product.

Table V-15**Aluminum foil: Instances of higher import purchase costs and the range and average of price-cost differentials, by product**

Quantity in pounds; price-cost differential in percent

Item	Type	Number of quarters	Quantity	Average differential	Minimum differential	Maximum differential
Armenia	Lower	***	***	***	***	***
Brazil	Lower	***	***	***	***	***
Oman	Lower	***	***	***	***	***
Russia	Lower	***	***	***	***	***
Turkey	Lower	***	***	***	***	***
Total, lower	Lower	72	274,867,010	11.8	0.2	35.9
Armenia	Higher	***	***	***	***	***
Brazil	Higher	***	***	***	***	***
Oman	Higher	***	***	***	***	***
Russia	Higher	***	***	***	***	***
Turkey	Higher	***	***	***	***	***
Total, higher	Higher	19	70,234,375	(5.0)	(0.1)	(15.9)

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

Note: These data include only quarters in which there is a comparison between the U.S. and subject product.

Lost sales and lost revenue

In the preliminary phase of the investigation, 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 during January 2018 -June 2020. Four U.S. producers submitted lost sales and lost revenue allegations. The four responding U.S. producers identified 15 firms with which they lost sales or revenue (14 consisting of lost sales allegations, one consisting of a lost revenue allegation).

In the final phase of the investigation, four of the five responding U.S. producers reported that they had to either reduce prices or roll back announced price increases, and four firms reported that they had lost sales.

Staff contacted 88 purchasers and received responses from 28 purchasers.¹¹ Responding purchasers reported purchasing 2.14 billion pounds of aluminum foil during January 2018-December 2020 (table V-16).

Of the 28 responding purchasers, 16 reported that, since 2018, they had purchased imported aluminum foil from Armenia, Brazil, Oman, Russia, and Turkey instead of U.S.-produced product. Twelve of these purchasers reported that subject import prices were lower than U.S.-produced product, and three of these purchasers reported that price was a primary reason for the decision to purchase imported product rather than U.S.-produced product. Two purchasers estimated the quantity of aluminum foil from Armenia, Brazil, Oman, Russia, and Turkey purchased instead of domestic product; quantities ranged from *** pounds to *** pounds (tables V-17 and V-18). Purchasers identified a lack of domestic capacity to produce the required product as non-price reasons for purchasing imported rather than U.S.-produced product.

Of the 26 responding purchasers, none reported that U.S. producers had reduced prices in order to compete with lower-priced imports from subject countries; 16 reported that they did not know (table V-19).

¹¹ Two purchasers submitted lost sales lost revenue survey responses in the preliminary phase but did not submit purchaser questionnaire responses in the final phase.

Table V-17

Aluminum foil: Purchasers' responses to purchasing subject imports instead of domestic product

Quantity in pounds

Firm	Purchased subject imports instead of domestic	Imports priced lower	Choice based on price	Quantity	Explanation
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	See footnote ¹²

12 ***

Firm	Purchased subject imports instead of domestic	Imports priced lower	Choice based on price	Quantity	Explanation
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	See footnote ¹³

13 ***

Firm	Purchased subject imports instead of domestic	Imports priced lower	Choice based on price	Quantity	Explanation
***	***	***	***	***	***
***	***	***	***	***	***

Firm	Purchased subject imports instead of domestic	Imports priced lower	Choice based on price	Quantity	Explanation
***	***	***	***	***	***
All firms	Yes--16; No--10	Yes--12; No--15	Yes--3; No--15	37,039,259	NA

Table V-18

Aluminum foil: Purchasers' responses to purchasing subject imports instead of domestic product, by country

Quantity in pounds

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
Armenia	***	***	***	***
Brazil	***	***	***	***
Oman	***	***	***	***
Russia	***	***	***	***
Turkey	***	***	***	***
Any subject source	16	12	3	37,039,259

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

Part VI: Financial experience of U.S. producers

Background¹

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, ***, that 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 GAAP.^{2 3 4}

Commercial sales accounted for *** percent of net sales volume in 2020. The remainder consisted of internal consumption by ***.⁵ Figure VI-1 presents each responding firm's share of the net sales quantity in 2020 for the total market.

Staff verified the results of JW Aluminum with its corporate records. The verification adjustments were incorporated into this report. ***.⁶

¹ The following abbreviations may be used in the tables and/or text of this section: generally accepted accounting principles ("GAAP"), fiscal year ("FY"), net sales ("NS"), commercial sales ("CS"), cost of goods sold ("COGS"), selling, general, and administrative expenses ("SG&A expenses"), average unit values ("AUVs"), research and development expenses ("R&D expenses"), and return on assets ("ROA").

² ***.

³ ***.

⁴ 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.

⁵ *** U.S. producer questionnaire response, section II-15.

⁶ Staff verification report, JW Aluminum, September 20, 2021.

Figure VI-1
Aluminum foil: Share of net sales quantity in 2020, by firm

* * * * *

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.⁷ Table VI-2 presents corresponding changes in 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 for the merchant market. This table includes revenue and cost data for commercial sales only. Table VI-4 presents the changes in AUVs for the merchant market data presented in table VI-3. Table VI-5 presents selected company-specific financial data for the merchant market.⁸

⁷ 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.

⁸ Company-specific data for the total market are included in Appendix K.

Table VI-1

Aluminum foil: Results of U.S. producers' total market operations, by item and period

Quantity in short tons; value in 1,000 dollars; ratios in percent and represent ratios to net sales value

Item	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Commercial sales	Quantity	***	***	***	***	***
Internal consumption	Quantity	***	***	***	***	***
Total net sales	Quantity	480,076	445,172	430,311	112,344	109,815
Commercial sales	Value	***	***	***	***	***
Internal consumption	Value	***	***	***	***	***
Total net sales	Value	1,672,543	1,458,151	1,309,266	356,491	361,625
Raw material costs	Value	1,163,969	972,673	813,629	225,281	242,362
Direct labor costs	Value	120,844	118,539	104,532	29,819	26,026
Other factory costs	Value	299,220	282,386	303,092	80,468	71,477
COGS	Value	1,584,033	1,373,598	1,221,253	335,568	339,865
Gross profit or (loss)	Value	88,510	84,553	88,013	20,923	21,760
SG&A expenses	Value	56,067	84,333	64,887	13,630	11,355
Operating income or (loss)	Value	32,443	220	23,126	7,293	10,405
Interest expense	Value	***	***	***	***	***
All other expenses/(income), net	Value	***	***	***	***	***
Net income or (loss)	Value	1,454	(25,845)	191	1,051	9,563
Depreciation/amortization	Value	55,403	63,932	60,850	14,946	14,412
Cash flow	Value	56,857	38,087	61,041	15,997	23,975
Raw material costs	Ratio to NS	69.6	66.7	62.1	63.2	67.0
Direct labor costs	Ratio to NS	7.2	8.1	8.0	8.4	7.2
Other factory costs	Ratio to NS	17.9	19.4	23.1	22.6	19.8
COGS	Ratio to NS	94.7	94.2	93.3	94.1	94.0
Gross profit	Ratio to NS	5.3	5.8	6.7	5.9	6.0
SG&A expense	Ratio to NS	3.4	5.8	5.0	3.8	3.1
Operating income or (loss)	Ratio to NS	1.9	0.0	1.8	2.0	2.9
Net income or (loss)	Ratio to NS	0.1	(1.8)	0.0	0.3	2.6

Table continued on next page.

Table VI-1 Continued
Aluminum foil: Results of U.S. producers' total market operations, by item and period

Shares in percent and represent share of cost of goods sold; unit values in dollars per short ton; count in number of firms reporting

Item	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Raw material costs	Share	73.5	70.8	66.6	67.1	71.3
Direct labor costs	Share	7.6	8.6	8.6	8.9	7.7
Other factory costs	Share	18.9	20.6	24.8	24.0	21.0
COGS	Share	100.0	100.0	100.0	100.0	100.0
Commercial sales	Unit value	***	***	***	***	***
Internal consumption	Unit value	***	***	***	***	***
Total net sales	Unit value	3,484	3,275	3,043	3,173	3,293
Raw material costs	Unit value	2,425	2,185	1,891	2,005	2,207
Direct labor costs	Unit value	252	266	243	265	237
Other factory costs	Unit value	623	634	704	716	651
COGS	Unit value	3,300	3,086	2,838	2,987	3,095
Gross profit or (loss)	Unit value	184	190	205	186	198
SG&A expenses	Unit value	117	189	151	121	103
Operating income or (loss)	Unit value	68	0	54	65	95
Net income or (loss)	Unit value	3	(58)	0	9	87
Operating losses	Count	1	3	3	2	3
Net losses	Count	3	4	3	3	3
Data	Count	5	5	5	5	5

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

Note: Ratios shown as "0.0" represent values greater than zero but less than 0.05 percent. Unit values shown as "0" represent non-zero values greater than zero but less than \$0.50.

Table VI-2
Aluminum foil: Changes in total market AUVs between comparison periods

Changes in percent

Item	2018-20	2018-19	2019-20	Jan-Mar 2020-21
Commercial sales	***	***	***	***
Internal consumption	***	***	***	***
Total net sales	▼(12.7)	▼(6.0)	▼(7.1)	▲3.8
Raw material costs	▼(22.0)	▼(9.9)	▼(13.5)	▲10.1
Direct labor costs	▼(3.5)	▲5.8	▼(8.8)	▼(10.7)
Other factory costs	▲13.0	▲1.8	▲11.0	▼(9.1)
COGS	▼(14.0)	▼(6.5)	▼(8.0)	▲3.6

Table continued.

Table VI-2 Continued
Aluminum foil: Changes in total market AUVs between comparison periods

Changes in dollars per short ton

Item	2018-20	2018-19	2019-20	Jan-Mar 2020-21
Commercial sales	***	***	***	***
Internal consumption	***	***	***	***
Total net sales	▼(441)	▼(208)	▼(233)	▲120
Raw material costs	▼(534)	▼(240)	▼(294)	▲202
Direct labor costs	▼(9)	▲15	▼(23)	▼(28)
Other factory costs	▲81	▲11	▲70	▼(65)
COGS	▼(461)	▼(214)	▼(247)	▲108
Gross profit or (loss)	▲20	▲6	▲15	▲12
SG&A expense	▲34	▲73	▼(39)	▼(18)
Operating income or (loss)	▼(14)	▼(67)	▲53	▲30
Net income or (loss)	▼(3)	▼(61)	▲59	▲78

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

Table VI-3**Aluminum foil: Results of U.S. producers' merchant market operations, by item and period**

Quantity in short tons; value in 1,000 dollars; ratios in percent and represent ratio to commercial sales value

Item	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Commercial sales	Quantity	***	***	***	***	***
Commercial sales: Metal revenue	Value	***	***	***	***	***
Commercial sales: Conversion revenue	Value	***	***	***	***	***
Commercial sales: Total	Value	***	***	***	***	***
Raw material costs: Aluminum	Value	***	***	***	***	***
Raw material costs: All other	Value	***	***	***	***	***
Raw material costs: Total	Value	***	***	***	***	***
Direct labor costs	Value	***	***	***	***	***
Other factory costs	Value	***	***	***	***	***
Conversion costs	Value	***	***	***	***	***
COGS	Value	***	***	***	***	***
Gross profit or (loss)	Value	***	***	***	***	***
SG&A expenses	Value	***	***	***	***	***
Operating income or (loss)	Value	***	***	***	***	***
Interest expense	Value	***	***	***	***	***
All other expenses/(income), net	Value	***	***	***	***	***
Net income or (loss)	Value	***	***	***	***	***
Depreciation/amortization	Value	***	***	***	***	***
Cash flow	Value	***	***	***	***	***
Raw material costs: Total	Ratio to CS	***	***	***	***	***
Direct labor costs	Ratio to CS	***	***	***	***	***
Other factory costs	Ratio to CS	***	***	***	***	***
COGS	Ratio to CS	***	***	***	***	***
Gross profit	Ratio to CS	***	***	***	***	***
SG&A expenses	Ratio to CS	***	***	***	***	***
Operating income or (loss)	Ratio to CS	***	***	***	***	***
Net income or (loss)	Ratio to CS	***	***	***	***	***

Table continued on next page.

Table VI-3 Continued**Aluminum foil: Results of U.S. producers' merchant market operations, by item and period**

Shares in percent and represent share of cost of goods sold; unit values in dollars per short ton; count in number of firms reporting

Item	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Raw materials: Aluminum cost	Share	***	***	***	***	***
Raw materials: All other costs	Share	***	***	***	***	***
Raw materials: Total costs	Share	***	***	***	***	***
Direct labor costs	Share	***	***	***	***	***
Other factory costs	Share	***	***	***	***	***
COGS	Share	***	***	***	***	***
Commercial sales: Metal revenue	Unit value	***	***	***	***	***
Commercial sales: Conversion revenue	Unit value	***	***	***	***	***
Commercial sales: Total	Unit value	***	***	***	***	***
Raw materials: Aluminum cost	Unit value	***	***	***	***	***
Raw materials: All other costs	Unit value	***	***	***	***	***
Raw materials: Total costs	Unit value	***	***	***	***	***
Direct labor costs	Unit value	***	***	***	***	***
Other factory costs	Unit value	***	***	***	***	***
Conversion costs	Unit value	***	***	***	***	***
COGS	Unit value	***	***	***	***	***
Gross profit or (loss)	Unit value	***	***	***	***	***
SG&A expenses	Unit value	***	***	***	***	***
Operating income or (loss)	Unit value	***	***	***	***	***
Net income or (loss)	Unit value	***	***	***	***	***
Operating losses	Count	***	***	***	***	***
Net losses	Count	***	***	***	***	***
Data	Count	***	***	***	***	***

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

Note: Conversion costs are typically defined as direct labor and other factory costs. However, for simplicity, the term conversion costs in this section of the report also includes all other raw material costs (i.e., conversion costs are total COGS less the cost of aluminum).

Table VI-4
Aluminum foil: Changes in merchant market AUVs between comparison periods

Changes in percent

Item	2018-20	2018-19	2019-20	Jan-Mar 2020-21
Commercial sales: Metal revenue	***	***	***	***
Commercial sales: Conversion revenue	***	***	***	***
Commercial sales: Total	***	***	***	***
Raw materials: Aluminum cost	***	***	***	***
Raw materials: All other costs	***	***	***	***
Raw materials: Total costs	***	***	***	***
Direct labor costs	***	***	***	***
Other factory costs	***	***	***	***
Conversion costs	***	***	***	***
COGS	***	***	***	***

Table continued.

Table VI-4 Continued
Aluminum foil: Changes in merchant market AUVs between comparison periods

Changes in dollars per short ton

Item	2018-20	2018-19	2019-20	Jan-Mar 2020-21
Commercial sales: Metal revenue	***	***	***	***
Commercial sales: Conversion revenue	***	***	***	***
Commercial sales: Total	***	***	***	***
Raw materials: Aluminum cost	***	***	***	***
Raw materials: All other costs	***	***	***	***
Raw material costs	***	***	***	***
Direct labor costs	***	***	***	***
Other factory costs	***	***	***	***
Conversion costs	***	***	***	***
Cost of goods sold	***	***	***	***
Gross profit or (loss)	***	***	***	***
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: Merchant market firm-by-firm total commercial sales quantity, by period

Commercial sales quantity

Quantity in short tons

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-5 Continued
Aluminum foil: Merchant market firm-by-firm total metal revenue, by period

Metal revenue

Value in 1,000 dollars

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-5 Continued
Aluminum foil: Merchant market firm-by-firm total conversion revenue, by period

Conversion revenue

Value in 1,000 dollars

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-5 Continued**Aluminum foil: Merchant market firm-by-firm total commercial sales value, by period****Total commercial sales value**

Value in 1,000 dollars

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-5 Continued**Aluminum foil: Merchant market firm-by-firm COGS, by period****COGS**

Value in 1,000 dollars

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-5 Continued**Aluminum foil: Merchant market firm-by-firm conversion costs, by period****Conversion costs**

Value in 1,000 dollars

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-5 Continued
Aluminum foil: Merchant market firm-by-firm gross profit or (loss), by period

Gross profit or (loss)

Value in 1,000 dollars

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-5 Continued
Aluminum foil: Merchant market firm-by-firm SG&A expenses, by period

SG&A expenses

Value in 1,000 dollars

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-5 Continued
Aluminum foil: Merchant market firm-by-firm operating income or (loss), by period

Operating income or (loss)

Value in 1,000 dollars

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-5 Continued**Aluminum foil: Merchant market firm-by-firm commercial income or (loss), by period****Net income or (loss)**

Value in 1,000 dollars

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-5 Continued**Aluminum foil: Merchant market firm-by-firm ratio of COGS to commercial sales value, by period****COGS to sales ratio**

Ratios in percent

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-5 Continued**Aluminum foil: Merchant market firm-by-firm ratio of gross profit or (loss) to commercial sales value, by period****Gross profit or (loss) to sales ratio**

Ratios in percent

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-5 Continued

Aluminum foil: Merchant market firm-by-firm ratio of SG&A expenses to commercial sales value, by period

SG&A expenses to sales ratio

Ratios in percent

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-5 Continued

Aluminum foil: Merchant market firm-by-firm ratio of operating income or (loss) to commercial sales value, by period

Operating income or (loss) to sales ratio

Ratios in percent

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-5 Continued

Aluminum foil: Merchant market firm-by-firm ratio of net income or (loss) to commercial sales value, by period

Net income or (loss) to sales ratio

Ratios in percent

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-5 Continued**Aluminum foil: Merchant market firm-by-firm ratio of conversion costs to conversion revenue, by period****Conversion costs to conversion revenue ratio**

Ratios in percent

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-5 Continued**Aluminum foil: Merchant market firm-by-firm unit metal revenue value, by period****Unit metal revenue value**

Unit values in dollars per short ton

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-5 Continued**Aluminum foil: Merchant market firm-by-firm unit conversion revenue value, by period****Unit conversion revenue value**

Unit values in dollars per short ton

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-5 Continued**Aluminum foil: Merchant market firm-by-firm unit commercial sales value, by period****Unit commercial sales value**

Unit values in dollars per short ton

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-5 Continued**Aluminum foil: Merchant market firm-by-firm unit aluminum costs, by period****Unit aluminum costs**

Unit values in dollars per short ton

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-5 Continued**Aluminum foil: Merchant market firm-by-firm unit all other raw material costs, by period****Unit all other raw material costs**

Unit values in dollars per short ton

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-5 Continued
Aluminum foil: Merchant market firm-by-firm unit raw material costs, by period

Unit raw material costs

Unit values in dollars per short ton

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-5 Continued
Aluminum foil: Merchant market firm-by-firm unit direct labor cost, by period

Unit direct labor costs

Unit values in dollars per short ton

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-5 Continued
Aluminum foil: Merchant market firm-by-firm unit other factory costs, by period

Unit other factory costs

Unit values in dollars per short ton

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-5 Continued
Aluminum foil: Merchant market firm-by-firm unit COGS, by period

Unit COGS

Unit values in dollars per short ton

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-5 Continued
Aluminum foil: Merchant market firm-by-firm unit conversion costs, by period

Unit conversion costs

Unit values in dollars per short ton

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-5 Continued
Aluminum foil: Merchant market firm-by-firm unit gross profit or (loss), by period

Unit gross profit or (loss)

Unit values in dollars per short ton

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-5 Continued**Aluminum foil: Merchant market firm-by-firm unit SG&A expenses, by period****Unit SG&A expenses**

Unit values in dollars per short ton

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-5 Continued**Aluminum foil: Merchant market firm-by-firm unit operating income or (loss), by period****Unit operating income or (loss)**

Unit values in dollars per short ton

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-5 Continued**Aluminum foil: Merchant market firm-by-firm unit net income or (loss), by period****Unit net income or (loss)**

Unit values in dollars per short ton

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
All firms	***	***	***	***	***

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

Net sales

As seen in table VI-3, commercial sales quantity and value decreased from 2018 to 2020 and were lower in interim 2021 than interim 2020.⁹ The commercial sales value for aluminum foil is typically comprised of two components. The first component, commonly referred to as the metal price or revenue, is the portion of the sales value that covers, and fluctuates with, the indexed cost of aluminum.¹⁰ The other portion of the commercial sales value is the fabrication or conversion revenue. This is the amount charged for converting primary aluminum, scrap, and alloying elements into finished aluminum foil and includes a profit margin.¹¹

As seen in table VI-3, the metal revenue AUV decreased from 2018 to 2020 and was higher in interim 2021 than during interim 2020. It generally tracked the per-short ton cost of aluminum reported by the industry. The per-short ton conversion revenue increased from 2018 to 2019 and decreased in 2020, but remained higher than the 2018 AUV; it was lower in the first quarter of 2021 than in the first quarter of 2020. On a company-specific basis, *** of the merchant market firms' conversion revenue AUVs increased from 2018 and 2019, *** of four decreased from 2019 to 2020, and *** of four were higher overall in 2020 compared to 2018. *** of four firms had lower conversion revenue AUVs in interim 2021 than in interim 2020.

⁹ As shown in table VI-1, total market net sales quantity and value had mostly similar directional trends as the merchant market sales, however the total market net sales value was higher in interim 2021 than in interim 2020.

¹⁰ Conference transcript, pp. 69-70 (Roush) and p. 71 (D'Amico).

¹¹ Petitioner's postconference brief, p. 30 n.17.

Cost of goods sold and gross profit or loss

Raw materials accounted for the largest share of overall COGS in each annual and partial year period; aluminum, in turn, accounted for the large majority of raw material costs. ¹² ¹³ Table VI-6 presents the major raw materials used, by type.

Table VI-6
Aluminum foil: Raw material costs for the merchant market in 2020

Value in 1,000 dollars; unit values in dollars per short ton; share of value in percent

Item	Value	Unit value	Share of value
Re-roll stock	***	***	***
Primary aluminum	***	***	***
Secondary aluminum	***	***	***
Other material inputs	***	***	***
All raw materials	***	***	***

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

Note: Unit values for the separate types of aluminum without the corresponding quantity of aluminum foil produced with each are not meaningful and, therefore, not shown.

¹² U.S. producer questionnaire responses, section III-9d.

¹³ ^{***}. U.S. producer questionnaire responses, section III-7.

As mentioned previously, companies charge a metal price to cover the cost of aluminum, which fluctuates with the indexed cost of aluminum.¹⁴ On a per-short ton basis, the merchant market cost of aluminum decreased from \$*** in 2018 to \$*** in 2020, but was higher in interim 2021 (\$***) than during the same period in 2020 (\$***).¹⁵ The per-short ton cost of total raw materials (i.e., aluminum and all other) for the merchant market decreased from \$*** in 2018 to \$*** in 2020, but was higher in interim 2021 than during the same period in 2020.

Direct labor was the smallest component of COGS, accounting for between *** and *** percent of the merchant market COGS during the period examined. The per-short ton cost of direct labor increased from \$*** in 2018 to \$*** in 2019, but decreased to \$*** in 2020, and was lower in interim 2021 than in interim 2020.^{16 17}

Other factory costs, which are composed of both variable and fixed facility overhead costs, were the second largest component of total COGS, representing between *** percent and *** percent of merchant market COGS during the period examined. On a per-unit basis,

¹⁴ *** originally reported aluminum costs that were *** than their reported metal revenue in each year and partial year period. The companies explained that all of their aluminum is ***. Email from ***; email from ***. This is consistent with the fact that ***. ***. U.S. producer questionnaire responses, sections III-7 and III-9d.

In order to examine the U.S. industry's performance exclusive of the effects of the fluctuations in the cost of aluminum, staff asked these companies to report ***.

¹⁵ The trends in the merchant market aluminum cost AUVs were similar to the merchant market metal revenue AUVs, which decreased from \$*** in 2018 to \$*** in 2020, but were higher in interim 2021 (\$***) than in interim 2020 (\$***).

¹⁶ ***. ***, October 21, 2020; *** U.S. producer questionnaire response, section II-11.

¹⁷ ***. Email from ***, October 29, 2020.

the merchant market’s other factory costs increased from \$*** per short ton in 2018 to \$*** per short ton in 2020, but were lower in interim 2021 than in interim 2020.¹⁸

The COGS to sales ratio for the merchant market decreased overall from *** percent in 2018 to *** percent in 2020 and was lower in interim 2021 than in interim 2020.¹⁹ As previously discussed, the metal revenue portion of the industry’s net sales covers the cost of aluminum. In order to analyze the industry’s COGS to sales ratio without the influence of the fluctuations in the cost of aluminum, table VI-7 shows the ratio of conversion costs to conversion revenue.²⁰

Table VI-7
Aluminum foil: Conversion costs to conversion revenue for the merchant market, by period

Ratios in percent

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
All other raw materials	***	***	***	***	***
Direct labor costs	***	***	***	***	***
Other factory costs	***	***	***	***	***
Total conversion costs	***	***	***	***	***

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

The ratio of conversion costs to conversion revenue increased from *** percent in 2018 to *** percent in 2020 but was lower in interim 2021 (*** percent) than during the same period in 2020 (*** percent). In the merchant market, gross profit increased from \$*** in 2018 to \$*** in 2019 but decreased to \$*** in 2020; it was higher in interim 2021 than during the same period in 2020.²¹

¹⁸ *** was responsible for the majority of the increase in other factory costs between 2018 and 2020. The company reported that ***. In its original questionnaire response, the company’s other factory costs ***. Emails from ***, October 20, 2020 and July 26, 2021; ***.

¹⁹ As shown in table VI-1, the COGS to net sales ratio in the total market also decreased from 2018 to 2020. However, unlike in the merchant market, it was higher in interim 2021 than in interim 2020.

²⁰ Removing a large share of the industry’s costs results in ratios that are lower than the COGS to sales ratios. Therefore, this analysis should be used for trends rather than magnitude.

²¹ The gross profit for the total market also decreased overall between 2018 and 2020, however the year-to-year trends differed from the merchant market. ***. The total market’s gross profit was higher in interim 2021 than it was in 2020.

SG&A expenses and operating income or loss

As shown in table VI-3, the merchant market's SG&A expenses increased *** from 2018 to 2019 and decreased in 2020, but remained above the 2018 level.²² The SG&A expense ratio (i.e., total SG&A expenses divided by total revenue) increased irregularly from *** percent in 2018 to *** percent in 2020, but was lower in interim 2021 than in interim 2020.²³

Operating income for the merchant market decreased from \$*** in 2018 to \$*** in 2020, with the majority of the decrease occurring between 2018 and 2019; it was higher in interim 2021 (\$***) than in interim 2020 (\$***). The number of companies reporting operating losses in the merchant market increased from *** in 2018 to *** in 2020. *** company reported operating losses in interim 2020 and *** reported operating loss in interim 2021.²⁴

²² ***.

²³ The total market's SG&A trends were similar to those of the merchant market.

²⁴ As seen in table VI-1, total market operating income decreased from 2018 to 2019 and increased in 2020 but remained below the 2018 level. ***. Total market operating income was higher in interim 2021 than in interim 2020.

All other expenses and net income or loss

Classified below the operating income level are interest expense and all other expenses/income, which are often allocated to the product line from high levels in the corporation. Interest expense, which was reported by *** of the merchant market firms, decreased from 2018 to 2020, and was *** lower in interim 2021 than in interim 2020. All other expenses/income, which was reported by *** merchant market firms, decreased irregularly from 2018 to 2020. In interim 2021 all other expenses/(income) was a negative number, which indicates that all other income was higher than all other expenses during that period (i.e., it had a positive effect on net income). The *** change between all other expenses/income in interim 2021 compared to interim 2020 was the result of ***.²⁵

By definition, items classified at this level in the income statement only affect net income. Merchant market net income worsened irregularly from *** in 2018 to *** in 2020, but was higher in interim 2021 (\$***) than in interim 2020 (\$***).²⁶

²⁵ ***.

²⁶ ***.

Variance analysis

Table VI-8 presents a variance analysis for the merchant market, which is derived from the merchant market information in table VI-3.²⁷ The analysis shows that the decrease in the merchant market's operating income from 2018 to 2020 was primarily the result of a negative price variance despite a positive cost variance (i.e., net sales AUVs decreased more than the decrease in cost/expense AUVs). The analysis also shows that the higher merchant market operating income in interim 2021 compared to interim 2020 was mainly the result of a positive price variance despite a negative cost variance (i.e., net sales AUVs increased more than the increase in cost/expense AUVs).²⁸

²⁷ 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.

²⁸ The trends in the total market's operating income were influenced by the same combination of positive and negative variances as those in the merchant market (i.e., between 2018 and 2020 the decrease in total market operating income was primarily from a negative price (AUV) variance despite a positive cost variance; between the interim periods the higher interim 2021 operating income was mainly the result of a positive price (AUV) variance despite a negative cost variance).

Table VI-8
Aluminum foil: Variance analysis on the merchant market operations of U.S. producers between comparison periods

Value in 1,000 dollars

Item	2018-20	2018-19	2019-20	Jan-Mar 2020-21
Net sales price variance	***	***	***	***
Net sales volume variance	***	***	***	***
Net sales total variance	***	***	***	***
COGS cost variance	***	***	***	***
COGS volume variance	***	***	***	***
COGS total variance	***	***	***	***
Gross profit variance	***	***	***	***
SG&A cost variance	***	***	***	***
SG&A volume variance	***	***	***	***
SG&A total variance	***	***	***	***
Operating income price variance	***	***	***	***
Operating income cost variance	***	***	***	***
Operating income volume variance	***	***	***	***
Operating income total variance	***	***	***	***

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

Capital expenditures and research and development expenses

Table VI-9 presents capital expenditures, by firm, and table VI-10 presents the firms' narrative explanations of the nature, focus, and significance of their capital expenditures. Capital expenditures for merchant market firms decreased irregularly between 2018 and 2020, and were lower in interim 2021 compared to interim 2020. The changes in capital expenditures were largely attributable to ***. The company reported that the majority of its increase in capital expenditures between 2018 and 2019 was from ***.

Table VI-9
Aluminum foil: U.S. producers' capital expenditures, by firm and period

Value in 1,000 dollars

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Gränges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
All merchant market firms	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	81,545	130,263	38,579	10,213	8,297

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

Table VI-10
Aluminum foil: Narrative description of U.S. producers' capital expenditures, by firm

Firm	Narrative explanation
Aleris	***
Gränges	***
JW Aluminum	***
Novelis	***
Reynolds	***

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

Table VI-11 presents R&D expenses, by firm, and table VI-12 presents the firms' narrative explanations of the nature, focus, and significance of their R&D expenses. R&D expenses, which were reported by ***, increased from 2018 to 2020 but were lower in interim 2021 than in interim 2020.

Table VI-11
Aluminum foil: U.S. producers' R&D expenses, by firm and period

Value in 1,000 dollars

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
***	***	***	***	***	***
***	***	***	***	***	***
All firms	***	***	***	***	***

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

Table VI-12
Aluminum foil: Narrative descriptions of U.S. producers' R&D expenses, by firm

Firm	Narrative explanation
***	***
***	***

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

Assets and return on assets

Table VI-13 presents data on the U.S. producers' total assets while table VI-14 presents their operating ROA.²⁹ Table VI-15 presents U.S. producers' narrative responses explaining their major asset categories and any significant changes in asset levels over time. Total assets for merchant market firms increased irregularly from 2018 to 2020.³⁰ The increase in the industry's total assets between 2018 and 2019 was largely attributable to ***. As seen in table VI-15, the company reported that this increase was ***. The decrease in total merchant market assets between 2019 and 2020 was mostly attributable to ***.³¹

²⁹ The operating 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 aluminum foil.

³⁰ The assets for all firms followed a similar trend.

³¹ *** U.S. producer questionnaire response, section II-2a.

Table VI-13
Aluminum foil: U.S. producers' total net assets, by firm and period

Value in 1,000 dollars

Firm	2018	2019	2020
Aleris	***	***	***
Gränges	***	***	***
JW Aluminum	***	***	***
Novelis	***	***	***
All merchant market firms	***	***	***
Reynolds	***	***	***
All firms	660,034	753,065	737,311

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

Table VI-14
Aluminum foil: U.S. producers' ROA, by firm and period

Ratio in percent

Firm	2018	2019	2020
Aleris	***	***	***
Gränges	***	***	***
JW Aluminum	***	***	***
Novelis	***	***	***
All merchant market firms	***	***	***
Reynolds	***	***	***
All firms	4.9	0.0	3.1

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

Note: Ratios shown as "0.0" represent non-zero values greater than zero but less than 0.05 percent.

Table VI-15
Aluminum foil: Narrative descriptions of U.S. producers' total net assets, by firm

Firm	Narrative explanation
Aleris	***
Gränges	***
JW Aluminum	***
Novelis	***
Reynolds	***

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

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-16 presents the number of firms reporting an impact in each category and table VI-17 provides the U.S. producers' narrative responses.

Table VI-16
Aluminum foil: Count of firms indicating actual and anticipated negative effects of imports from subject sources on investment, growth, and development since January 1, 2018, by effect

Number of firms reporting

Effect	Category	Count
Cancellation, postponement, or rejection of expansion projects	Investment	1
Denial or rejection of investment proposal	Investment	1
Reduction in the size of capital investments	Investment	3
Return on specific investments negatively impacted	Investment	3
Other investment effects	Investment	2
Any negative effects on investment	Investment	5
Rejection of bank loans	Growth	0
Lowering of credit rating	Growth	0
Problem related to the issue of stocks or bonds	Growth	0
Ability to service debt	Growth	3
Other growth and development effects	Growth	4
Any negative effects on growth and development	Growth	5
Anticipated negative effects of imports	Future	5

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

Table VI-17**Aluminum foil: Narratives relating to actual and anticipated negative effects of imports on investment, growth, and development, since January 1, 2018**

Item	Firm name and accompanying narrative response
Cancellation, postponement, or rejection of expansion projects	***
Denial or rejection of investment proposal	***
Reduction in the size of capital investments	***
Reduction in the size of capital investments	***
Reduction in the size of capital investments	***
Return on specific investments negatively impacted	***
Return on specific investments negatively impacted	***
Return on specific investments negatively impacted	***
Other negative effects on investments	***
Other negative effects on investments	***
Ability to service debt	***
Ability to service debt	***
Ability to service debt	***
Other effects on growth and development	***
Other effects on growth and development	***

Item	Firm name and accompanying narrative response
Other effects on growth and development	***
Other effects on growth and development	***
Anticipated effects of imports	***
Anticipated effects of imports	***
Anticipated effects of imports	***
Anticipated effects of imports	***
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 factors¹--

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

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

- (VI) the potential for product-shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products,*
- (VII) in any investigation under this title which involves imports of both a raw agricultural product (within the meaning of paragraph (4)(E)(iv)) and any product processed from such raw agricultural product, the likelihood that there will be increased imports, by reason of product shifting, if there is an affirmative determination by the Commission under section 705(b)(1) or 735(b)(1) with respect to either the raw agricultural product or the processed agricultural product (but not both),*
- (VIII) the actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product, and*
- (IX) any other demonstrable adverse trends that indicate the probability that there is likely to be material injury by reason of imports (or sale for importation) of the subject merchandise (whether or not it is actually being imported at the time).²*

Information on the nature of the subsidies 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 believed to produce and/or export aluminum foil from Armenia.³ A usable response to the Commission's questionnaire was received from the firm, Rusal Armenal Closed Joint Company ("Rusal Armenal"). The firm's exports to the United States accounted for approximately *** percent of U.S. imports of aluminum foil from Armenia in 2020. According to estimates requested of the responding producer in Armenia, 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 producers and exporters in Armenia.

Table VII-1
Aluminum foil: Summary data for producers in Armenia, 2020

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	***	***	***	***	***	***

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

Changes in operations

The producer in Armenia reported ***

³ These firms were identified through a review of information submitted in the petition and presented in third-party sources.

Operations on aluminum foil

Table VII-2 presents information on the aluminum foil operations of the responding producer and exporter in Armenia. In 2020, Rusal Armenal reported production of *** short tons, the second consecutive annual increase in production volumes and a *** percent increase from 2018. Total production capacity for aluminum foil increased *** percent during this period, with Rusal Armenal operating at an aluminum foil production capacity of *** short tons in 2020. Rusal Armenal reported an expected decline in production from *** short tons in 2020 to *** short tons in 2021 and 2022, a *** percent decrease. These 2021 and 2022 expected production levels represent a *** percent increase from 2018.

Capacity utilization during the 2018-2020 period increased from *** percent to *** percent. The projected capacity utilization for 2021-2022 is *** percent, a decline of *** percentage points from 2020. The ratio of inventory to production levels decreased in the reported 2018-2020 period, from *** percent to *** percent. In the projected 2021-2022 period, the ratio of inventory to production is stable, at *** percent in 2021 and *** percent in 2022.

Rusal Armenal's exports as a share of total shipments exceeded *** percent for the POI. In 2020, Rusal Armenal reported *** short tons of U.S. exports of aluminum foil, the second consecutive year-on-year increase and a *** percent increase from 2018 U.S. export levels. For the reported 2018-2020 period, U.S. exports as a share of total shipments grew from *** percent to *** percent.

Projections for U.S. exports of aluminum foil in 2021 show a *** percent decrease from 2020 levels, falling to *** short tons exported to the U.S. in 2021. This decline in U.S. export levels is projected to be temporary, with an estimated *** short tons of U.S. exports in 2022, a *** percent increase from 2021 and a *** percent overall increase from 2018.⁴ The projected increase in U.S. export levels in 2021-2022 represents an increase from *** percent of total shipments to *** percent over the 2021-2022 period, while exports to all other markets as a share of total shipments is projected to fall from *** percent to *** percent over the same period.

⁴ *** Rusal Armenal response to foreign producer questionnaire, II-8.

Table VII-2
Aluminum foil: Data on industry in Armenia, by period

Quantity in short tons

Item	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021	Projection 2021	Projection 2022
Capacity	***	***	***	***	***	***	***
Production	***	***	***	***	***	***	***
End-of-period inventories	***	***	***	***	***	***	***
Internal consumption	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Home market shipments	***	***	***	***	***	***	***
Exports to the United States	***	***	***	***	***	***	***
Exports to all other markets	***	***	***	***	***	***	***
Export shipments	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***

Table continued

Table VII-2 Continued
Aluminum foil: Data on industry in Armenia, by period

Shares and ratios in percent

Item	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021	Projection 2021	Projection 2022
Capacity utilization ratio	***	***	***	***	***	***	***
Inventory ratio to production	***	***	***	***	***	***	***
Inventory ratio to total shipments	***	***	***	***	***	***	***
Internal consumption share	***	***	***	***	***	***	***
Commercial home market shipments share	***	***	***	***	***	***	***
Home market shipments share	***	***	***	***	***	***	***
Exports to the United States share	***	***	***	***	***	***	***
Exports to all other markets share	***	***	***	***	***	***	***
Export shipments share	***	***	***	***	***	***	***
Total shipments share	***	***	***	***	***	***	***

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

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

Alternative products

As shown in table VII-3, Rusal Armenal produced other products on the same equipments and machinery used to produce aluminum foil. These products ***. In 2020, aluminum foil production accounted for *** percent of total production on the same machinery. For the reported period 2018 through March 2021, total out-of-scope production using the same machinery did not exceed *** percent.⁵

⁵ ***. Rusal Armenal response to foreign producer questionnaire, II-4b.

Table VII-3**Aluminum foil: Overall capacity and production on the same equipment as in-scope production by producers in Armenia by period**

Quantities in short tons; shares and ratios in percent

Item	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Overall capacity	Quantity	***	***	***	***	***
Aluminum foil production	Quantity	***	***	***	***	***
Aluminum sheet production	Quantity	***	***	***	***	***
Aluminum plate production	Quantity	***	***	***	***	***
Other products production	Quantity	***	***	***	***	***
Out-of-scope production	Quantity	***	***	***	***	***
Total production	Quantity	***	***	***	***	***
Overall capacity utilization	Ratio	***	***	***	***	***
Aluminum foil production	Share	***	***	***	***	***
Aluminum sheet production	Share	***	***	***	***	***
Aluminum plate production	Share	***	***	***	***	***
Other products production	Share	***	***	***	***	***
Out-of-scope production	Share	***	***	***	***	***
Total production	Share	***	***	***	***	***

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

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

Exports

According to GTA, the leading export markets for aluminum foil from Armenia are the United States, Germany, and Poland (table VII-4). During 2020, the United States was the top export market for aluminum foil from Armenia, accounting for 34.8 percent, followed by Germany, accounting for 30.4 percent, and Poland, accounting for 9.7 percent.

Table VII-4
Aluminum foil: Quantity and value of exports from Armenia by destination market by year

Quantity in short tons; value in 1,000 dollars

Destination market	Measure	2018	2019	2020
United States	Quantity	8,133	10,661	13,499
Germany	Quantity	13,306	11,403	11,793
Poland	Quantity	2,064	3,884	3,775
Netherlands	Quantity	2,668	3,759	3,011
Italy	Quantity	652	1,933	1,601
Spain	Quantity	---	99	1,446
Austria	Quantity	1,968	1,172	1,216
United Kingdom	Quantity	578	543	1,156
France	Quantity	1,284	1,813	1,061
All other destination markets	Quantity	552	636	180
All destination markets	Quantity	31,206	35,903	38,738
United States	Value	23,999	27,953	32,511
Germany	Value	39,501	29,903	28,606
Poland	Value	6,276	10,673	9,605
Netherlands	Value	7,906	9,857	7,327
Italy	Value	1,968	5,175	3,948
Spain	Value	---	262	3,487
Austria	Value	5,981	3,244	3,192
United Kingdom	Value	1,704	1,429	2,890
France	Value	3,830	4,844	2,647
All other destination markets	Value	1,627	1,735	478
All destination markets	Value	92,792	95,076	94,691

Table continued

Table VII-4 Continued**Aluminum foil: Unit value and share of quantity from Armenia by destination market by year**

Unit values in dollars per short ton; shares in percent

Destination market	Measure	2018	2019	2020
United States	Unit value	2,951	2,622	2,408
Germany	Unit value	2,969	2,622	2,426
Poland	Unit value	3,041	2,748	2,544
Netherlands	Unit value	2,963	2,622	2,433
Italy	Unit value	3,017	2,677	2,466
Spain	Unit value	---	2,647	2,412
Austria	Unit value	3,039	2,768	2,626
United Kingdom	Unit value	2,946	2,630	2,499
France	Unit value	2,983	2,671	2,495
All other destination markets	Unit value	2,948	2,729	2,657
All destination markets	Unit value	2,974	2,648	2,444
United States	Share of quantity	26.1	29.7	34.8
Germany	Share of quantity	42.6	31.8	30.4
Poland	Share of quantity	6.6	10.8	9.7
Netherlands	Share of quantity	8.5	10.5	7.8
Italy	Share of quantity	2.1	5.4	4.1
Spain	Share of quantity	---	0.3	3.7
Austria	Share of quantity	6.3	3.3	3.1
United Kingdom	Share of quantity	1.9	1.5	3.0
France	Share of quantity	4.1	5.1	2.7
All other destination markets	Share of quantity	1.8	1.8	0.5
All destination markets	Share of quantity	100.0	100.0	100.0

Source: Official exports statistics under HS subheading 7607.11 as reported by UN Comtrade in the Global Trade Atlas database, accessed July 27, 2021.

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 2020 data.

The industry in Brazil

The Commission issued foreign producers' or exporters' questionnaires to eight firms believed to produce and/or export aluminum foil from Brazil.⁶ Usable responses to the Commission's questionnaire were received from three firms: Companhia Brasileira de Alumino ("CBA"), CBA Itapissuma Ltda ("CBA Itapissuma"), and MG NE Hamburg Brazil ("MG NE Brazil").⁷ These firms' exports to the United States accounted for approximately *** percent of U.S. imports of aluminum foil from Brazil in 2020. According to estimates requested of the responding producers in Brazil, the production of aluminum foil in Brazil reported in questionnaires accounts for approximately *** percent of overall production of aluminum foil

⁶ These firms were identified through a review of information submitted in the petition and presented in third-party sources

⁷ MG NE Brazil ***. MG NE Brazil foreign producer questionnaire at II-8-II-10.

in Brazil. Table VII-5 presents information on the aluminum foil operations of the responding producers in Brazil.

Table VII-5
Aluminum foil: Summary data on producers in Brazil, 2020

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)
CBA	***	***	***	***	***	***
CBA Itapissuma	***	***	***	***	***	***
All firms	***	***	***	***	***	***

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

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

Changes in operations

As presented in table VII-6 producers in Brazil reported several operational and organizational changes since January 1, 2018.

Table VII-6
Aluminum foil: Reported changes in operations by producers in Brazil, since January 1, 2018

Item	Firm name and accompanying narrative response
***	***
***	***
***	***
***	***

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. Brazilian producers reported a combined aluminum foil production capacity increase of *** percent from 2018 to a combined total capacity of *** short tons in 2020. This growth is projected to continue in the 2021-2022 period, with a further *** percent capacity increase from 2020 to 2022. This capacity growth is accounted for solely by increases in *** over the period 2018-2022. Production volumes over the reported period did not increase alongside total capacity, showing a *** percent decline from 2018 to 2020, and a projected *** percent increase in 2020-2021, and a *** percent decrease from 2021-2022.

Capacity utilization fell from *** percent in 2018 to *** percent in 2020, and after a projected increase to *** percent in 2021, a further decrease to *** percent capacity utilization in 2022. The ratio of inventory to production levels increased by *** percentage points in 2019 before declining back to *** percent in 2020. Inventories relative to production are to increase in both 2021 and 2022.

Responding producers shipped *** of their aluminum foil production to the domestic Brazilian market for all years reported and projected, with combined home market shipments as a share of total shipments increasing from *** percent in 2018 to *** percent in 2020. Projections for 2021-2022 show a further increase for home markets shipments as a share of total shipments rise to *** percent in 2021 and 2022. This increase in home market shipments is comprised ***.⁸ This growth in the ratio of home market shipments is accounted for largely by an increase of *** short tons in home market shipments in the projected 2021-2022 period, a *** percent increase compared to 2020 levels. At the same time, exports to the U.S. market dropped by *** percent from 2018-2020, and the projected 2021-2022 period shows a further decline of *** percent from 2020 levels. Exports to all other markets grew *** percent 2018-2020 and are expected to increase a further *** percent in 2021-2022 compared to 2020 levels.

⁸ ***. *** response to foreign producer questionnaire, II-2b, II-3f.

Table VII-7
Aluminum foil: Data on industry in Brazil by period

Quantity in short tons

Item	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021	Projection 2021	Projection 2022
Capacity	***	***	***	***	***	***	***
Production	***	***	***	***	***	***	***
End-of-period inventories	***	***	***	***	***	***	***
Internal consumption	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Home market shipments	***	***	***	***	***	***	***
Exports to the United States	***	***	***	***	***	***	***
Exports to all other markets	***	***	***	***	***	***	***
Export shipments	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
Resales exported to the United States	***	***	***	***	***	***	***
Adjusted total exports to the United States	***	***	***	***	***	***	***

Table continued

Table VII-7
Aluminum foil: Data on industry in Brazil by period

Shares and ratios in percent

Item	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021	Projection 2021	Projection 2022
Capacity utilization ratio	***	***	***	***	***	***	***
Inventory ratio to production	***	***	***	***	***	***	***
Inventory ratio to total shipments	***	***	***	***	***	***	***
Internal consumption share	***	***	***	***	***	***	***
Commercial home market shipments share	***	***	***	***	***	***	***
Home market shipments share	***	***	***	***	***	***	***
Exports to the United States share	***	***	***	***	***	***	***
Exports to all other markets share	***	***	***	***	***	***	***
Export shipments share	***	***	***	***	***	***	***
Total shipments share	***	***	***	***	***	***	***
Producers share of adjusted exports to the United States	***	***	***	***	***	***	***
Resellers share of adjusted exports to the United States	***	***	***	***	***	***	***
Adjusted exports to the United States share of total shipments	***	***	***	***	***	***	***

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

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

Alternative products

As shown in table VII-8, responding firms in Brazil produced other products on the same equipment and machinery used to produce aluminum foil. *** out-of-scope production is comprised solely of ***.⁹ *** out-of-scope production is comprised solely of ***.¹⁰ The combined out-of-scope production for all responding Brazilian producers did not exceed *** percent during the reported period from 2018 to 2020.

⁹ *** response to foreign producer questionnaire, II-4b.

¹⁰ *** response to foreign producer questionnaire, II-4b.

Table VII-8**Aluminum foil: Overall capacity and production on the same equipment as in-scope production by producers in Brazil by period**

Quantities in short tons; shares and ratios in percent

Item	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Overall capacity	Quantity	***	***	***	***	***
Aluminum foil production	Quantity	***	***	***	***	***
Aluminum sheet production	Quantity	***	***	***	***	***
Aluminum plate production	Quantity	***	***	***	***	***
Other products production	Quantity	***	***	***	***	***
Out-of-scope production	Quantity	***	***	***	***	***
Total production	Quantity	***	***	***	***	***
Overall capacity utilization	Ratio	***	***	***	***	***
Aluminum foil production	Share	***	***	***	***	***
Aluminum sheet production	Share	***	***	***	***	***
Aluminum plate production	Share	***	***	***	***	***
Other products production	Share	***	***	***	***	***
Out-of-scope production	Share	***	***	***	***	***
Total production	Share	***	***	***	***	***

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

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

Exports

According to GTA, the leading export markets for aluminum foil from Brazil are the United States, Argentina, and Colombia (table VII-9). During 2020, the United States was the top export market for aluminum foil from Brazil, accounting for 78.3 percent, followed by Argentina, accounting for 11.2 percent., and Colombia, accounting for 2.2 percent.

Table VII-9
Aluminum foil: Quantity and value of exports from Brazil by destination market by year

Quantity in short tons; value in 1,000 dollars

Destination market	Measure	2018	2019	2020
United States	Quantity	23,275	23,573	20,630
Argentina	Quantity	2,262	2,555	2,937
Colombia	Quantity	847	183	566
Paraguay	Quantity	634	267	522
Mexico	Quantity	935	737	512
Chile	Quantity	657	221	496
Canada	Quantity	23	46	258
Uruguay	Quantity	122	103	191
Poland	Quantity	---	---	110
All other destination markets	Quantity	322	97	116
All destination markets	Quantity	29,077	27,782	26,339
United States	Value	75,303	71,852	56,067
Argentina	Value	8,727	9,756	10,149
Colombia	Value	2,863	542	1,514
Paraguay	Value	2,317	948	1,577
Mexico	Value	3,022	2,274	1,453
Chile	Value	2,197	779	1,532
Canada	Value	90	146	729
Uruguay	Value	470	362	544
Poland	Value	---	---	285
All other destination markets	Value	1,312	598	546
All destination markets	Value	96,301	87,257	74,396

Table continued

Table VII-9 Continued**Aluminum foil: Unit value and share of quantity from Brazil by destination market by year**

Unit values in dollars per short ton; shares in percent

Destination market	Measure	2018	2019	2020
United States	Unit value	3,235	3,048	2,718
Argentina	Unit value	3,858	3,818	3,455
Colombia	Unit value	3,380	2,969	2,673
Paraguay	Unit value	3,653	3,555	3,019
Mexico	Unit value	3,230	3,084	2,837
Chile	Unit value	3,346	3,525	3,092
Canada	Unit value	3,876	3,207	2,823
Uruguay	Unit value	3,851	3,508	2,848
Poland	Unit value	---	---	2,592
All other destination markets	Unit value	4,075	6,143	4,687
All destination markets	Unit value	3,312	3,141	2,825
United States	Share of quantity	80.0	84.9	78.3
Argentina	Share of quantity	7.8	9.2	11.2
Colombia	Share of quantity	2.9	0.7	2.2
Paraguay	Share of quantity	2.2	1.0	2.0
Mexico	Share of quantity	3.2	2.7	1.9
Chile	Share of quantity	2.3	0.8	1.9
Canada	Share of quantity	0.1	0.2	1.0
Uruguay	Share of quantity	0.4	0.4	0.7
Poland	Share of quantity	---	---	0.4
All other destination markets	Share of quantity	1.1	0.4	0.4
All destination markets	Share of quantity	100.0	100.0	100.0

Source: Official exports statistics under HS subheading 7607.11 as reported by SECEX-Foreign Trade Secretariat in the Global Trade Atlas database, accessed July 27, 2021.

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 2020 data.

The industry in Oman

The Commission issued foreign producers' or exporters' questionnaires to three firms believed to produce and/or export aluminum foil from Oman.¹¹ Usable responses to the Commission's questionnaire were received from one firm: Oman Aluminum Rolling Company LLC ("OARC"). This firm's exports to the United States accounted for approximately *** percent of U.S. imports of aluminum foil from Oman in 2020. According to estimates requested of the responding producer in Oman, the production of aluminum foil in Oman reported in its questionnaire accounts for approximately *** percent of overall production of aluminum foil in

¹¹ These firms were identified through a review of information submitted in the petition and presented in third-party sources.

Oman. Table VII-10 presents information on the aluminum foil operations of the responding producers and exporters in Oman.

Table VII-10
Aluminum foil: Summary data for producers in Oman, 2020

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	***	***	***	***	***	***

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

Changes in operations

***.

Operations on aluminum foil

Table VII-11 presents information on the aluminum foil operations of the responding producer and exporter in Oman. Production of aluminum foil increased from a reported *** short tons in 2018 to *** short tons in 2019 before declining to *** short tons in 2020. Production is projected to increase *** percent from 2020 levels to *** short tons in 2022. Capacity did not change 2018-2020, and there are no projected changes in capacity for 2021-2022.

Capacity utilization levels rose from *** percent in 2018 to *** percent in 2019, before falling back to *** percent in 2020. In the projected 2021-2022 period, capacity utilization shows an increase of *** percentage points compared to the reported 2020 level, at *** percent capacity utilization in 2022. The ratio of inventory to production levels did not exceed *** percent from 2018-2020 and is projected to remain at similar levels in 2021 and 2022.

Exports to all markets as a share of total shipments exceeded *** percent from 2018-2020 and are projected to be *** percent in the period 2021-2022. Exports to the U.S. market tracked changes in production from 2018-2020, with an increase of *** percent 2018-2019, and a subsequent *** percent decrease 2019-2020.¹² During the same 2018-2020 period, exports to all other markets did not exceed *** percent of total shipments.

¹² ***. OARC response to foreign producer questionnaire, II-2b.

OARC projects an increase in exports to all other markets from 2018-2020 levels of *** short tons, respectively, to a total of *** short tons to all other markets in 2021.¹³ This increase is expected to continue through 2022, with the projected 2022 total of *** short tons exported to all other markets. This projected growth in exports to all other markets results in a projected *** percentage point drop for exports to the U.S. market as a share of total shipments in 2022, as compared to reported 2020 levels, with U.S. exports projected to be *** percent of total shipments in 2022. Home market shipments did not exceed *** short tons for the 2018-2020 period, with *** short tons of home market shipments projected for 2012-2022.

Table VII-11
Aluminum foil: Data on industry in Oman, by period

Quantity in short tons

Item	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021	Projection 2021	Projection 2022
Capacity	***	***	***	***	***	***	***
Production	***	***	***	***	***	***	***
End-of-period inventories	***	***	***	***	***	***	***
Internal consumption	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Home market shipments	***	***	***	***	***	***	***
Exports to the United States	***	***	***	***	***	***	***
Exports to all other markets	***	***	***	***	***	***	***
Export shipments	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***

Table continued

¹³ ***. OARC response to foreign producer questionnaire, II-8.

Table VII-11 Continued
Aluminum foil: Data on industry in Oman, by period

Shares and ratios in percent

Item	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021	Projection 2021	Projection 2022
Capacity utilization ratio	***	***	***	***	***	***	***
Inventory ratio to production	***	***	***	***	***	***	***
Inventory ratio to total shipments	***	***	***	***	***	***	***
Internal consumption share	***	***	***	***	***	***	***
Commercial home market shipments share	***	***	***	***	***	***	***
Home market shipments share	***	***	***	***	***	***	***
Exports to the United States share	***	***	***	***	***	***	***
Exports to all other markets share	***	***	***	***	***	***	***
Export shipments share	***	***	***	***	***	***	***
Total shipments share	***	***	***	***	***	***	***

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

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

Alternative products

As shown in table VII-12, OARC produced other products on the same equipment and machinery used to produce aluminum foil. OARC ***, with total out-of-scope production for the reported period 2018 through March 2021 ranging from a low of *** percent for the interim period January-March 2020 to a high of *** percent for the interim period January-March 2021. OARC's out-of-scope production consists entirely of ***. The share of aluminum foil as a percentage of total subject and non-subject production was higher at *** percent in 2018, than in the interim period January-March 2021, when it was *** percent.

Table VII-12**Aluminum foil: Overall capacity and production on the same equipment as in-scope production by producers in Oman by period**

Quantities in short tons; shares and ratios in percent

Item	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Overall capacity	Quantity	***	***	***	***	***
Aluminum foil production	Quantity	***	***	***	***	***
Aluminum sheet production	Quantity	***	***	***	***	***
Aluminum plate production	Quantity	***	***	***	***	***
Other products production	Quantity	***	***	***	***	***
Out-of-scope production	Quantity	***	***	***	***	***
Total production	Quantity	***	***	***	***	***
Overall capacity utilization	Ratio	***	***	***	***	***
Aluminum foil production	Share	***	***	***	***	***
Aluminum sheet production	Share	***	***	***	***	***
Aluminum plate production	Share	***	***	***	***	***
Other products production	Share	***	***	***	***	***
Out-of-scope production	Share	***	***	***	***	***
Total production	Share	***	***	***	***	***

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

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

Exports

According to GTA, the leading export markets for aluminum foil from Oman over the POI were the United States, Mexico, and Qatar. (table VI-13). During 2020, the United States was the sole export market for aluminum foil from Oman, accounting for 100 percent of aluminum foil exports.

Table VII-13**Aluminum foil: Quantity and value of constructed exports from Oman by destination market by year**

Quantity in short tons; value in 1,000 dollars

Destination market	Measure	2018	2019	2020
United States	Quantity	8,882	18,197	14,304
Mexico	Quantity	18	---	---
Qatar	Quantity	11	3	---
Yemen	Quantity	5	---	---
United Arab Emirates	Quantity	2	106	---
All other destination markets	Quantity	0	101	0
All destination markets	Quantity	8,919	18,406	14,304
United States	Value	24,463	48,149	35,123
Mexico	Value	57	---	---
Qatar	Value	52	17	---
Yemen	Value	9	---	---
United Arab Emirates	Value	2	220	---
All other destination markets	Value	0	221	1
All destination markets	Value	24,583	48,606	35,124

Table continued

Table VII-13 Continued**Aluminum foil: Unit value and share of quantity from Oman by destination market by year**

Unit values in dollars per short ton; shares in percent

Destination market	Measure	2018	2019	2020
United States	Unit value	2,754	2,646	2,455
Mexico	Unit value	3,112	---	---
Qatar	Unit value	4,579	6,492	---
Yemen	Unit value	1,816	---	---
United Arab Emirates	Unit value	1,099	2,085	---
All other destination markets	Unit value	---	2,188	---
All destination markets	Unit value	2,756	2,641	2,455
United States	Share of quantity	99.6	98.9	100.0
Mexico	Share of quantity	0.2	---	---
Qatar	Share of quantity	0.1	0.0	---
Yemen	Share of quantity	0.1	---	---
United Arab Emirates	Share of quantity	0.0	0.6	---
All other destination markets	Share of quantity	---	0.5	---
All destination markets	Share of quantity	100.0	100.0	100.0

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 July 27, 2021.

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 2020 data.

The industry in Russia

The Commission issued foreign producers' or exporters' questionnaires to four firms believed to produce and/or export aluminum foil from Russia.¹⁴ One usable response to the Commission's questionnaire was received with a consolidated response from two firms: JSC Ural Foil and Joint Stock Company Rusal Sayanal ("Ural Foil"). The exports to the United States reported in this questionnaire accounted for approximately *** percent of U.S. imports of aluminum foil from Russia in 2020. According to estimates provided, the production of aluminum foil in Russia reported in this questionnaire 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 producer and exporter in Russia.

Table VII-14
Aluminum foil: Summary data for producers in Russia, 2020

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	***	***	***	***	***	***

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

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

¹⁴ These firms were identified through a review of information submitted in the petition and presented in third-party sources.

Changes in operations

As presented in table VII-15 producers in Russia reported operational and organizational changes since January 1, 2018.¹⁵

Table VII-15
Aluminum foil: Reported changes in operations by producers in Russia, since January 1, 2018

Item	Firm name and accompanying narrative response
***	***

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 producer in Russia. Ural Foil's total aluminum foil production capacity is not projected to increase in 2021-2022 from reported 2018-2020 figures, falling from a reported high of *** short tons in 2018 to a low of *** short tons in 2020, before leveling out at a projected *** in 2021-2022. During this same period, reported and projected production of aluminum foil showed larger fluctuations, with a *** percent increase from 2018 to a reported high of *** short tons in 2020. This growth trajectory for aluminum foil production is not projected to continue in 2021-2022, with production leveling off at *** short tons, an *** percent increase from 2018.

Changes to capacity and production for the period 2018-2020 led to an increase from *** percent to *** percent capacity utilization over the same period. Over the projected 2021-2022 period, capacity utilization is projected to decrease *** percentage points from 2020 levels, to *** percent utilization in 2022. The ratio of inventory to production levels increased from *** percent to *** percent from 2018-2020 and is projected to drop from *** percent to *** percent from 2021-2022.

¹⁵ These firms were identified through a review of information submitted in the petition and presented in third-party sources. ***. Ural Foil response to foreign producer questionnaire, II-2c.

Ural Foil's total exports as a share of total shipments grew from *** percent in 2018 to *** percent in 2020 and are projected to decrease to *** percent as a share of total shipments in 2022. Exports to the U.S. market in the years 2018-2020 showed an increase of *** percent, and in 2019 reached a high of *** short tons, which comprised *** percent of total shipments and *** percent of total exports. Following this increase in U.S. exports from 2018-2020, Ural Foil projects a decrease in 2021-2022, falling to *** short tons of aluminum foil exported to the U.S. in 2022, down *** percent from 2020 levels.

Ural Foil's home market shipments comprised *** percent of total shipments in 2018, decreasing to *** percent in 2020. The decline in exports to the U.S. market in the projected 2021-2022 period corresponds to projected growth in home market shipments, which are projected to grow to *** short tons in 2022, a *** percent increase compared to 2020 levels. Total shipments in 2021-2022 are projected to be only *** percent lower than 2020 levels. Exports to all other markets did not exceed *** percent for the POI.

Table VII-16
Aluminum foil: Data on industry in Russia, by period

Quantity in short tons

Item	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021	Projection 2021	Projection 2022
Capacity	***	***	***	***	***	***	***
Production	***	***	***	***	***	***	***
End-of-period inventories	***	***	***	***	***	***	***
Internal consumption	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Home market shipments	***	***	***	***	***	***	***
Exports to the United States	***	***	***	***	***	***	***
Exports to all other markets	***	***	***	***	***	***	***
Export shipments	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***

Table continued

Table VII-16 Continued
Aluminum foil: Data on industry in Russia, by period

Shares and ratios in percent

Item	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021	Projection 2021	Projection 2022
Capacity utilization ratio	***	***	***	***	***	***	***
Inventory ratio to production	***	***	***	***	***	***	***
Inventory ratio to total shipments	***	***	***	***	***	***	***
Internal consumption share	***	***	***	***	***	***	***
Commercial home market shipments share	***	***	***	***	***	***	***
Home market shipments share	***	***	***	***	***	***	***
Exports to the United States share	***	***	***	***	***	***	***
Exports to all other markets share	***	***	***	***	***	***	***
Export shipments share	***	***	***	***	***	***	***
Total shipments share	***	***	***	***	***	***	***

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

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

Alternative products

As shown in table VII-17, Ural Foil produced other products on the same equipment and machinery used to produce aluminum foil. These products include ***. Ural Foil *** produces in-scope aluminum foil using the same machinery as other products, with aluminum foil production for the reported period 2018 through March 2021 ranging from a low of *** percent for the interim period January-March 2021 to a high of *** percent in 2020. The share of out-of-scope production as a percentage of total subject and non-subject production was higher for the interim period January-March 2021, at *** percent, compared to *** percent in 2018. No change in overall capacity was reported for the period 2018-2020, and there are no plans to expand aluminum foil production capacity. Overall capacity reported for the interim period January-March 2021 was higher than in other periods, corresponding with investments to expand capacity for certain out-of-scope products.¹⁶

¹⁶ Ural Foil response to foreign producer questionnaire, II-2c.

Table VII-17**Aluminum foil: Overall capacity and production on the same equipment as in-scope production by producers in Russia by period**

Quantities in short tons; shares and ratios in percent

Item	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Overall capacity	Quantity	***	***	***	***	***
Aluminum foil production	Quantity	***	***	***	***	***
Aluminum sheet production	Quantity	***	***	***	***	***
Aluminum plate production	Quantity	***	***	***	***	***
Other products production	Quantity	***	***	***	***	***
Out-of-scope production	Quantity	***	***	***	***	***
Total production	Quantity	***	***	***	***	***
Overall capacity utilization	Ratio	***	***	***	***	***
Aluminum foil production	Share	***	***	***	***	***
Aluminum sheet production	Share	***	***	***	***	***
Aluminum plate production	Share	***	***	***	***	***
Other products production	Share	***	***	***	***	***
Out-of-scope production	Share	***	***	***	***	***
Total production	Share	***	***	***	***	***

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

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

Exports

According to GTA, the leading export markets for aluminum foil from Russia are the United States, Canada, and Germany (table VII-18). During 2020, the United States was the top export market for aluminum foil from Russia, accounting for 81.0 percent, followed by Canada, accounting for 4.3 percent, and Germany, accounting for 3.7 percent.

Table VII-18**Aluminum foil: Quantity and value of exports from Russia by destination market by year**

Quantity in short tons; value in 1,000 dollars

Destination market	Measure	2018	2019	2020
United States	Quantity	13,937	23,687	19,274
Canada	Quantity	387	---	1,024
Germany	Quantity	529	452	873
Kazakhstan	Quantity	353	444	683
Mexico	Quantity	---	36	640
Belarus	Quantity	373	523	584
Ukraine	Quantity	330	501	269
Serbia	Quantity	---	18	118
France	Quantity	---	13	99
All other destination markets	Quantity	256	311	223
All destination markets	Quantity	16,164	25,986	23,789
United States	Value	40,145	60,013	46,418
Canada	Value	1,094	---	2,476
Germany	Value	1,394	1,047	2,056
Kazakhstan	Value	1,406	1,630	2,474
Mexico	Value	---	92	1,570
Belarus	Value	1,325	1,564	1,688
Ukraine	Value	1,117	1,449	820
Serbia	Value	---	69	462
France	Value	---	28	223
All other destination markets	Value	814	876	840
All destination markets	Value	47,296	66,768	59,027

Table continued

Table VII-18 Continued
Aluminum foil: Quantity and value of exports from Russia by destination market by year

Unit values in dollars per short ton; shares in percent

Destination market	Measure	2018	2019	2020
United States	Unit value	2,881	2,534	2,408
Canada	Unit value	2,826	---	2,417
Germany	Unit value	2,635	2,314	2,355
Kazakhstan	Unit value	3,981	3,671	3,620
Mexico	Unit value	---	2,533	2,452
Belarus	Unit value	3,558	2,991	2,892
Ukraine	Unit value	3,388	2,895	3,043
Serbia	Unit value	---	3,810	3,911
France	Unit value	---	2,131	2,249
All other destination markets	Unit value	3,179	2,814	3,776
All destination markets	Unit value	2,926	2,569	2,481
United States	Share of quantity	86.2	91.2	81.0
Canada	Share of quantity	2.4	---	4.3
Germany	Share of quantity	3.3	1.7	3.7
Kazakhstan	Share of quantity	2.2	1.7	2.9
Mexico	Share of quantity	---	0.1	2.7
Belarus	Share of quantity	2.3	2.0	2.5
Ukraine	Share of quantity	2.0	1.9	1.1
Serbia	Share of quantity	---	0.1	0.5
France	Share of quantity	---	0.1	0.4
All other destination markets	Share of quantity	1.6	1.2	0.9
All destination markets	Share of quantity	100.0	100.0	100.0

Source: Official exports statistics under HS subheading 7607.11 as reported by Customs Committee in Russia in the Global Trade Atlas database, accessed July 27, 2021.

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 2020 data.

The industry in Turkey

The Commission issued foreign producers' or exporters' questionnaires to eleven firms believed to produce and/or export aluminum foil from Turkey.¹⁷ Usable responses to the Commission's questionnaire were received from four firms: ASAS Aluminyum Sanayi ve Ticaret A.S. ("ASAS"), Assan Aluminyum Sanayi ve Ticaret A.S. ("Assan"), Mg NE Hamburg Turkey ("MG NE Turkey"), and Panda Aluminyum A.S. ("Panda"). These firms' exports to the United States accounted for approximately *** percent of U.S. imports of aluminum foil from Turkey in 2020. According to estimates requested of the responding producers in Turkey, the production of aluminum foil in Turkey reported in questionnaires accounts for approximately *** percent of

¹⁷ These firms were identified through a review of information submitted in the petition and presented in third-party sources.

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, 2020

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	***	***	***	***	***	***
Assan	***	***	***	***	***	***
Panda	***	***	***	***	***	***
All firms	***	***	***	***	***	***

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

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

Changes in operations

As presented in table VII-20 producers in Turkey reported several operational and organizational changes since January 1, 2018.

Table VII-20
Aluminum foil: Reported changes in operations by producers in Turkey, since January 1, 2018

Item	Firm name and accompanying narrative response
Expansions	***
Expansions	***
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. Producers reported a combined *** percent production capacity increase from 2018-2020, and project a further *** percent increase from 2018 levels by 2022. Aluminum foil production increased by *** percent from 2018 to 2019, followed by a *** percent decrease to *** short tons produced in 2020. Producers project an *** increase by 2022 compared to 2020 levels. Capacity utilization fell from *** percent to *** percent 2018-

2020, and is projected to increase to *** percent by 2022. Inventory as a ratio to production levels grew from *** percent to *** percent in 2020 and is projected to increase to *** percent for the period 2021-2022.

Total exports as a share of total shipments stayed within a range of *** percent to *** percent for years 2018-2020, and between *** percent and *** percent for the projected period 2021-2022. Exports to the U.S. market experienced a year-on-year growth of *** percent from 2018-2019, followed by a decrease of *** percent from 2019-2020, with U.S. exports accounting for *** percent of total shipments in 2020. For the period 2021-2022, exports to the U.S. market in 2022 are projected to increase by *** percent compared to 2020 levels, with 2022 exports to the U.S. market accounting for *** percent of total shipments. Exports to the U.S. and exports to all other markets are not projected to match the projected growth in overall production and capacity in 2021 and 2022, neither as a share of total exports nor in terms of absolute quantity.¹⁸

¹⁸ ***. *** response to foreign producer questionnaire, II-2c.

Table VII-21
Aluminum foil: Data on industry in Turkey, by period

Quantity in short tons

Item	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021	Projection 2021	Projection 2022
Capacity	***	***	***	***	***	***	***
Production	***	***	***	***	***	***	***
End-of-period inventories	***	***	***	***	***	***	***
Internal consumption	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Home market shipments	***	***	***	***	***	***	***
Exports to the United States	***	***	***	***	***	***	***
Exports to all other markets	***	***	***	***	***	***	***
Export shipments	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
Resales exported to the United States	***	***	***	***	***	***	***
Adjusted total exports to the United States	***	***	***	***	***	***	***

Table continued

Table VII-21 Continued
Aluminum foil: Data on industry in Turkey, by period

Shares and ratios in percent

Item	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021	Projection 2021	Projection 2022
Capacity utilization ratio	***	***	***	***	***	***	***
Inventory ratio to production	***	***	***	***	***	***	***
Inventory ratio to total shipments	***	***	***	***	***	***	***
Internal consumption share	***	***	***	***	***	***	***
Commercial home market shipments share	***	***	***	***	***	***	***
Home market shipments share	***	***	***	***	***	***	***
Exports to the United States share	***	***	***	***	***	***	***
Exports to all other markets share	***	***	***	***	***	***	***
Export shipments share	***	***	***	***	***	***	***
Total shipments share	***	***	***	***	***	***	***
Producers share of adjusted exports to the United States	***	***	***	***	***	***	***
Resellers share of adjusted exports to the United States	***	***	***	***	***	***	***
Adjusted exports to the United States share of total shipments	***	***	***	***	***	***	***

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

Alternative products

As shown in table VII-22, *** produced other products on the same equipment and machinery used to produce aluminum foil. Total out-of-scope production *** did not exceed *** percent as a share of total production for the reported period 2018 through March 2021, ranging between *** percent and *** percent for the reported years. All out-of-scope production was concentrated in the category of ***.

Table VII-22**Aluminum foil: Turkey producers' overall capacity and production on the same equipment as subject production, by period**

Quantities in short tons; shares and ratios in percent

Item	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Overall capacity	Quantity	***	***	***	***	***
Aluminum foil production	Quantity	***	***	***	***	***
Aluminum sheet production	Quantity	***	***	***	***	***
Aluminum plate production	Quantity	***	***	***	***	***
Other products production	Quantity	***	***	***	***	***
Out-of-scope production	Quantity	***	***	***	***	***
Total production	Quantity	***	***	***	***	***
Overall capacity utilization	Ratio	***	***	***	***	***
Aluminum foil production	Share	***	***	***	***	***
Aluminum sheet production	Share	***	***	***	***	***
Aluminum plate production	Share	***	***	***	***	***
Other products production	Share	***	***	***	***	***
Out-of-scope production	Share	***	***	***	***	***
Total production	Share	***	***	***	***	***

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

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

Exports

According to GTA, the leading export markets for aluminum foil from Turkey are the United States, Poland, and Italy (table VII-23). During 2020, the United States was the top export market for aluminum foil from Turkey, accounting for 21.2 percent, followed by Poland, accounting for 13.7 percent, and Italy, which accounted for 12.7 percent.

Table VII-23
Aluminum foil: Exports from Turkey, by period

Quantity in short tons; value in 1,000 dollars

Destination market	Measure	2018	2019	2020
United States	Quantity	23,131	32,065	24,787
Poland	Quantity	19,069	18,336	16,017
Italy	Quantity	16,102	16,216	14,919
United Kingdom	Quantity	11,495	13,157	14,859
Germany	Quantity	6,171	7,766	9,854
France	Quantity	8,874	8,940	8,813
Netherlands	Quantity	7,977	7,789	6,766
Spain	Quantity	3,901	4,095	5,330
Denmark	Quantity	2,357	2,241	1,956
All other destination markets	Quantity	14,972	15,356	13,811
All destination markets	Quantity	114,049	125,960	117,114
United States	Value	67,242	81,024	61,366
Poland	Value	56,816	49,648	40,154
Italy	Value	47,035	42,363	36,974
United Kingdom	Value	34,354	35,423	37,544
Germany	Value	18,641	21,270	25,489
France	Value	25,639	23,658	22,305
Netherlands	Value	24,742	21,810	17,302
Spain	Value	11,452	10,925	13,562
Denmark	Value	7,105	5,973	4,944
All other destination markets	Value	45,177	42,203	37,193
All destination markets	Value	338,204	334,298	296,834

Table continued

Table VII-23 Continued
Aluminum foil: Exports from Turkey, by period

Unit values in dollars per short ton; shares in percent

Destination market	Measure	2018	2019	2020
United States	Unit value	2,907	2,527	2,476
Poland	Unit value	2,980	2,708	2,507
Italy	Unit value	2,921	2,612	2,478
United Kingdom	Unit value	2,989	2,692	2,527
Germany	Unit value	3,021	2,739	2,587
France	Unit value	2,889	2,646	2,531
Netherlands	Unit value	3,102	2,800	2,557
Spain	Unit value	2,936	2,668	2,544
Denmark	Unit value	3,014	2,665	2,527
All other destination markets	Unit value	3,017	2,748	2,693
All destination markets	Unit value	2,965	2,654	2,535
United States	Share of quantity	20.3	25.5	21.2
Poland	Share of quantity	16.7	14.6	13.7
Italy	Share of quantity	14.1	12.9	12.7
United Kingdom	Share of quantity	10.1	10.4	12.7
Germany	Share of quantity	5.4	6.2	8.4
France	Share of quantity	7.8	7.1	7.5
Netherlands	Share of quantity	7.0	6.2	5.8
Spain	Share of quantity	3.4	3.3	4.6
Denmark	Share of quantity	2.1	1.8	1.7
All other destination markets	Share of quantity	13.1	12.2	11.8
All destination markets	Share of quantity	100.0	100.0	100.0

Source: Official exports statistics under HS subheading 7607.11 as reported by State Institute of Statistics in the Global Trade Atlas database, accessed July 27, 2021.

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 2020 data.

Subject countries combined

Table VII-24 presents summary data on aluminum foil operations of the reporting subject producers in the subject countries. Combined subject countries project a net increase in both production and capacity for production of aluminum foil, with capacity levels increasing by *** percent to *** short tons in 2022 and production levels increasing by *** percent to *** short tons in 2022 compared to 2020 levels. This leaves the capacity utilization rate at a projected *** percent, compared to *** percent reported in 2020. Inventory as a ratio to production levels for the 2021-2022 period is projected to be *** percent, an increase from the 2020 level of *** percent.

This projected *** short ton increase in production of aluminum foil is driven by both growth in shipments to home markets as well as growth in exports to all other markets. Of home markets shipments, exports to all other markets, and U.S. exports, only combined subject

countries' exports to the U.S. market are projected to decline from 2020-2022. The magnitude of this projected decline is from a reported *** short tons exported to the U.S. in 2020 to a projected *** short tons in 2020, a *** percent decline. This shift is being driven by a drop in U.S. exports from Armenia, Brazil and Russia, with all other subject countries projecting net increases in U.S. exports from 2020-2022. Alongside this projected decline in U.S. exports, exports to all other markets are projected to increase by *** percent, from *** short tons in 2020 to *** short tons in 2022. The combined drop in U.S. exports from 2020-2022, results in a subsequent drop in U.S. exports as a share of total shipments, from *** percent to *** percent. Likewise, total exports as a share of total shipments are also projected to decline, from *** percent in 2020 to *** percent in 2022.

Table VII-24
Aluminum foil: Data on the industry in subject countries, by period

Quantity in short tons

Item	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021	Projection 2021	Projection 2022
Capacity	***	***	***	***	***	***	***
Production	***	***	***	***	***	***	***
End-of-period inventories	***	***	***	***	***	***	***
Internal consumption	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Home market shipments	***	***	***	***	***	***	***
Exports to the United States	***	***	***	***	***	***	***
Exports to all other markets	***	***	***	***	***	***	***
Export shipments	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
Resales exported to the United States	***	***	***	***	***	***	***
Adjusted total exports to the United States	***	***	***	***	***	***	***

Table continued.

Table VII-24 Continued
Aluminum foil: Data on the industry in subject countries, by period

Shares and ratios in percent

Item	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021	Projection 2021	Projection 2022
Capacity utilization ratio	***	***	***	***	***	***	***
Inventory ratio to production	***	***	***	***	***	***	***
Inventory ratio to total shipments	***	***	***	***	***	***	***
Internal consumption share	***	***	***	***	***	***	***
Commercial home market shipments share	***	***	***	***	***	***	***
Home market shipments share	***	***	***	***	***	***	***
Exports to the United States share	***	***	***	***	***	***	***
Exports to all other markets share	***	***	***	***	***	***	***
Export shipments share	***	***	***	***	***	***	***
Total shipments share	***	***	***	***	***	***	***
Producers share of adjusted exports to the United States	***	***	***	***	***	***	***
Resellers share of adjusted exports to the United States	***	***	***	***	***	***	***
Adjusted exports to the United States share of total shipments	***	***	***	***	***	***	***

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

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

U.S. inventories of imported merchandise

Table VII-25 presents data on U.S. importers' reported inventories of aluminum foil. U.S. importers' inventories of aluminum foil from subject countries increased from a ratio of *** percent to imports in 2018 to *** percent of imports in 2020, at *** short tons of aluminum foil from subject countries in 2020. The *** short tons of inventory from subject countries in 2020 is a *** percent increase from 2018 inventories and outpaces the *** percent growth in the same period for nonsubject inventories.

This increase in inventories of subject merchandise is driven by inventories from ***. The only subject country that importers did not report increasing amounts of inventory from 2018 through 2020 was ***. Of those subject countries for which importers reported growing levels of inventory through 2020, *** had the highest levels of reported inventory, at *** short tons in 2020, an increase of *** percent.

Table VII-25
Aluminum foil: U.S. importers' inventories, by period

Quantity in short tons, ratios in percent

Measure	Source	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Inventories quantity	Armenia	***	***	***	***	***
Ratio to imports	Armenia	***	***	***	***	***
Ratio to U.S. shipments of imports	Armenia	***	***	***	***	***
Ratio to total shipments of imports	Armenia	***	***	***	***	***
Inventories quantity	Brazil	***	***	***	***	***
Ratio to imports	Brazil	***	***	***	***	***
Ratio to U.S. shipments of imports	Brazil	***	***	***	***	***
Ratio to total shipments of imports	Brazil	***	***	***	***	***
Inventories quantity	Oman	***	***	***	***	***
Ratio to imports	Oman	***	***	***	***	***
Ratio to U.S. shipments of imports	Oman	***	***	***	***	***
Ratio to total shipments of imports	Oman	***	***	***	***	***
Inventories quantity	Russia	***	***	***	***	***
Ratio to imports	Russia	***	***	***	***	***
Ratio to U.S. shipments of imports	Russia	***	***	***	***	***
Ratio to total shipments of imports	Russia	***	***	***	***	***
Inventories quantity	Turkey	***	***	***	***	***
Ratio to imports	Turkey	***	***	***	***	***
Ratio to U.S. shipments of imports	Turkey	***	***	***	***	***
Ratio to total shipments of imports	Turkey	***	***	***	***	***
Inventories quantity	Subject	***	***	***	***	***
Ratio to imports	Subject	***	***	***	***	***
Ratio to U.S. shipments of imports	Subject	***	***	***	***	***
Ratio to total shipments of imports	Subject	***	***	***	***	***
Inventories quantity	China	***	***	***	***	***
Ratio to imports	China	***	***	***	***	***
Ratio to U.S. shipments of imports	China	***	***	***	***	***
Ratio to total shipments of imports	China	***	***	***	***	***

Table continued.

Table VII-25 Continued
Aluminum foil: U.S. importers' inventories, by period

Quantity in short tons, ratios in percent

Measure	Source	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Inventories quantity	Germany	***	***	***	***	***
Ratio to imports	Germany	***	***	***	***	***
Ratio to U.S. shipments of imports	Germany	***	***	***	***	***
Ratio to total shipments of imports	Germany	***	***	***	***	***
Inventories quantity	Korea	***	***	***	***	***
Ratio to imports	Korea	***	***	***	***	***
Ratio to U.S. shipments of imports	Korea	***	***	***	***	***
Ratio to total shipments of imports	Korea	***	***	***	***	***
Inventories quantity	All other sources	***	***	***	***	***
Ratio to imports	All other sources	***	***	***	***	***
Ratio to U.S. shipments of imports	All other sources	***	***	***	***	***
Ratio to total shipments of imports	All other sources	***	***	***	***	***
Inventories quantity	Nonsubject	***	***	***	***	***
Ratio to imports	Nonsubject	***	***	***	***	***
Ratio to U.S. shipments of imports	Nonsubject	***	***	***	***	***
Ratio to total shipments of imports	Nonsubject	***	***	***	***	***
Inventories quantity	All	***	***	***	***	***
Ratio to imports	All	***	***	***	***	***
Ratio to U.S. shipments of imports	All	***	***	***	***	***
Ratio to total shipments of imports	All	***	***	***	***	***

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 after March 31, 2021. Responding importers reported outstanding orders for aluminum foil through the first quarter of 2022. Subject imports account for *** percent of all reported outstanding orders, with subject imports from *** accounting for the largest share of outstanding orders from subject countries.

Table VII-26
Aluminum foil: Quantity of U.S. importers' arranged imports, by period

Quantity in short tons

Source of arranged imports	Apr-Jun 2021	Jul-Sept 2021	Oct-Dec 2021	Jan-Mar 2022	Total
Armenia	***	***	***	***	***
Brazil	***	***	***	***	***
Oman	***	***	***	***	***
Russia	***	***	***	***	***
Turkey	***	***	***	***	***
Subject	***	***	***	***	***
China	***	***	***	***	***
Germany	***	***	***	***	***
Korea	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***

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

Third-country trade actions

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 2015.¹⁹ 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).”²⁰

¹⁹ EC, Commission Implementing Regulation (EU) 2015/2385 OJ L 322 18.12.2015, December 18, 2015, p. 110.

²⁰ EC, Commission Implementing Regulation (EU) 2015/2385 OJ L 322 18.12.2015, December 18, 2015, p. 92.

Information on nonsubject countries

Global production

***.

Table VII-27
Aluminum foil: Global production capacity by country (excludes North America) by year

Quantity in short tons

Item	2017	2018	2019	2020	2021
Armenia	***	***	***	***	***
Brazil	***	***	***	***	***
Oman	***	***	***	***	***
Russia	***	***	***	***	***
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	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All reporting countries (excludes North America)	***	***	***	***	***

Source: ***.

Global exports

Aluminum foil is produced and traded in substantial volumes throughout the world. IHS Markit, Global Trade Atlas (GTA) publishes data on global exports of aluminum foil for HS subheading 7607.11.²¹ As shown in table VII-28, global exports of subject aluminum foil totaled almost 2 million short tons in 2020, valued at \$5.5 billion. Since 2018, global exports by volume have declined by 3.3 percent. In both volume and value, China is the world's largest exporter of subject aluminum foil accounting for 870,000 short tons shipped at a value of \$2.1 billion in 2020. Exports from China represented 44.3 percent of global exports, by volume, in 2020. Other leading nonsubject exporters of aluminum foil include Germany, Greece, and Italy with global export shares ranging from 3.8 percent to 10.1 percent in 2020. The largest sources of nonsubject U.S. imports in 2020 were Korea, Germany, China, Thailand and Taiwan.²²

²¹ 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.

²² USITC Dataweb, HTS subheading 7607.11 (accessed August 2, 2021).

Table VII-28
Aluminum foil: Global exports by exporter, 2018-20

Quantity in short tons; value in 1,000 dollars

Exporting country	Measure	2018	2019	2020
United States	Quantity	73,740	68,672	69,807
Armenia	Quantity	31,206	35,903	38,738
Brazil	Quantity	29,077	27,782	26,339
Oman	Quantity	8,919	18,406	14,304
Russia	Quantity	16,164	25,986	23,789
Turkey	Quantity	114,049	125,960	117,114
Subject	Quantity	199,415	234,037	220,284
China	Quantity	901,111	899,560	870,243
Germany	Quantity	212,524	205,226	197,049
South Korea	Quantity	55,410	55,298	69,412
Greece	Quantity	77,606	76,015	78,826
Italy	Quantity	64,618	65,034	75,412
Japan	Quantity	52,154	50,550	38,367
All other exporters	Quantity	193,995	148,161	122,875
All reporting exporters	Quantity	2,029,987	2,036,591	1,962,559
United States	Value	284,093	265,692	258,280
Armenia	Value	92,792	95,076	94,691
Brazil	Value	96,301	87,257	74,396
Oman	Value	24,583	48,606	35,124
Russia	Value	47,296	66,768	59,027
Turkey	Value	338,204	334,298	296,834
Subject	Value	599,176	632,005	560,071
China	Value	2,487,106	2,262,449	2,110,622
Germany	Value	735,657	652,174	607,963
South Korea	Value	229,752	220,396	259,841
Greece	Value	268,935	240,872	240,939
Italy	Value	210,140	206,935	228,249
Japan	Value	209,034	181,806	147,977
All other exporters	Value	779,098	613,779	550,651
All reporting exporters	Value	6,402,167	5,908,114	5,524,665

Table continued.

Table VII-28
Aluminum foil: Global exports by exporter, 2018-20

Unit values in dollars per short ton; shares in percent

Exporting country	Measure	2018	2019	2020
United States	Unit value	3,853	3,869	3,700
Armenia	Unit value	2,974	2,648	2,444
Brazil	Unit value	3,312	3,141	2,825
Oman	Unit value	2,756	2,641	2,455
Russia	Unit value	2,926	2,569	2,481
Turkey	Unit value	2,965	2,654	2,535
Subject	Unit value	3,005	2,700	2,543
China	Unit value	2,760	2,515	2,425
Germany	Unit value	3,462	3,178	3,085
South Korea	Unit value	4,146	3,986	3,743
Greece	Unit value	3,465	3,169	3,057
Italy	Unit value	3,252	3,182	3,027
Japan	Unit value	4,008	3,597	3,857
All other exporters	Unit value	4,016	4,143	4,481
All reporting exporters	Unit value	3,154	2,901	2,815
United States	Share of quantity	38.0	3.4	3.6
Armenia	Share of quantity	1.5	1.8	2.0
Brazil	Share of quantity	1.4	1.4	1.3
Oman	Share of quantity	0.4	0.9	0.7
Russia	Share of quantity	0.8	1.3	1.2
Turkey	Share of quantity	5.6	6.2	6.0
Subject	Share of quantity	9.8	11.5	11.2
China	Share of quantity	44.4	44.2	44.3
Germany	Share of quantity	10.5	10.1	10.0
South Korea	Share of quantity	2.7	2.7	3.5
Greece	Share of quantity	3.8	3.7	4.0
Italy	Share of quantity	3.2	3.2	3.8
Japan	Share of quantity	2.6	2.5	2.0
All other exporters	Share of quantity	9.6	7.3	6.3
All reporting exporters	Share of quantity	100.0	100.0	100.0

Source: Official exports statistics under HS subheading 7607.11 reported by various national statistical authorities in the IHS Markit, Global Trade Atlas database, accessed July 27, 2021 and official global imports statistics from Oman under HS subheading 7607.11 as reported by UN comtrade in the IHS Markit, Global Trade Atlas database, accessed July 27, 2021.

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 followed by the countries under investigation, all remaining top exporting countries in descending order of 2020 data.

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 14 percent of U.S. aluminum foil imports by volume in 2020.²³ Also in 2020, Korea accounted for 3.5 percent of global exports of aluminum foil by volume. ***.²⁴ 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.²⁵ Dong-Il Aluminum 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.²⁶

²³ USITC Dataweb, HTS 7607.11 (accessed August 2, 2021).

²⁴ *** (retrieved October 27, 2020).

²⁵ Lotte Aluminum, "About Us,"

<http://www.lotte.co.kr/global/en/business/compDetail.do?compCd=L305> (retrieved August 5, 2021).

²⁶ Dong Il Aluminium Co. Ltd., "Corporate Overview,"

http://dongilal.com/sub_eng/introduction01.php (retrieved August 5, 2021).

Germany

Germany is the second largest nonsubject source of U.S. aluminum foil imports, accounting for nearly 11 percent of U.S. aluminum foil imports in 2020.²⁷ Germany is also the second largest global exporter of aluminum foil by volume, accounting for 10.0 percent of global exports in 2020. ***.²⁸ Novelis, the world's largest producer of flat-rolled aluminum products has six production sites for aluminum products in Germany,²⁹ ***.³⁰ Its plant in Ohle, Germany produces foil trays.³¹ Norsk Hydro ASA (Hydro), a multinational firm headquartered in Norway, completed the sale of its entire rolling business to KPS Capital Partners in June of 2021. KPS Capital Partners created a new company, Speira, which now operates the world's largest aluminum rolling mill in Alunorf, Neuss, Germany and the world's largest rolled aluminum finishing mill in Grevenbroich, Rhein-Kreis Neuss, Germany. Speira employs around 5,000 employees shared between Norway and Germany.³²

²⁷ USITC Dataweb, HTS 7607.11 (accessed August 2, 2021).

²⁸ *** (retrieved October 27, 2020).

²⁹ Novelis, "Geographic Locations," <https://novelis.com/contact/> (retrieved August 5, 2021).

³⁰ *** (retrieved October 27, 2020).

³¹ Novelis, "Geographic Locations," <https://novelis.com/contact/> (retrieved August 5, 2021).

³² Speira, "Press release," June 1, 2021, https://www.speira.com/media/21nils2v/jun1_press-release_eng.pdf (retrieved August 5, 2021)

China

China was the third largest nonsubject source of U.S. aluminum foil imports in 2020.³³ China was also the world's largest global exporter in 2020, accounting for 44.3 percent of total exports by volume. ***.³⁴ 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.³⁵ There were over 100 firms believed to produce and/or export aluminum foil from China at the time of the USITC's investigation.³⁶ Zhejiang Junma Aluminum Industry Co. Ltd. is one of the largest manufacturers and exporters of aluminum foil in China.³⁷ Its aluminum foil plant has a capacity of 80,000 rolls per day.³⁸ 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.^{39 40}

³³ USITC Dataweb, HTS 7607.11 (accessed August 2, 2021).

³⁴ ***, (retrieved October 27, 2020).

³⁵ *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.

³⁶ *Aluminum Foil from China, Inv. Nos. 701-TA-570 and 731-TA-1346 (Final)*, USITC Publication 4771, April 2018, p. VII-3.

³⁷ Marketwatch, "Press Release: Aluminum Foil Market Share, Growth, Industry Size, Key Players, Segments, Latest Trends and Forecast 2021-2026," September 1, 2021, <https://www.marketwatch.com/press-release/aluminum-foil-market-share-growth-industry-size-key-players-segments-latest-trends-and-forecast-2021-2026-2021-09-01>.

³⁸ 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>.

³⁹ Zhonji, "Company Profile," <http://www.zjalufoil.com/about/> (retrieved October 25, 2020).

⁴⁰ 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.

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	<i>Aluminum Foil From Armenia, Brazil, Oman, Russia, and Turkey; Institution of Anti-Dumping and Countervailing Duty Investigations and Scheduling of Preliminary Phase Investigations</i>	https://www.govinfo.gov/content/pkg/FR-2020-10-05/pdf/2020-21953.pdf
85 FR 67711 October 26, 2020	<i>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</i>	https://www.govinfo.gov/content/pkg/FR-2020-10-26/pdf/2020-23673.pdf
85 FR 68287 October 28, 2020	<i>Certain Aluminum Foil From the Sultanate of Oman and the Republic of Turkey: Initiation of Countervailing Duty Investigations</i>	https://www.govinfo.gov/content/pkg/FR-2020-10-28/pdf/2020-23926.pdf
85 FR 73748 November 19, 2020	<i>Aluminum Foil From Armenia, Brazil, Oman, Russia, and Turkey</i>	https://www.govinfo.gov/content/pkg/FR-2020-11-19/pdf/2020-25489.pdf

Citation	Title	Link
86 FR 9909 February 17, 2021	<i>Certain Aluminum Foil From the Republic of Armenia, Brazil, the Sultanate of Oman, the Russian Federation, and the Republic of Turkey: Postponement of Preliminary Determinations in the Less-Than-Fair-Value Investigations</i>	https://www.govinfo.gov/content/pkg/FR-2021-02-17/pdf/2021-03152.pdf
86 FR 12911 March 5, 2021	<i>Certain Aluminum Foil From the Republic of Turkey: Preliminary Affirmative Countervailing Duty Determination, and Alignment of Final Determination With Final Antidumping Duty Determination</i>	https://www.govinfo.gov/content/pkg/FR-2021-03-05/pdf/2021-04565.pdf
86 FR 12913 March 5, 2021	<i>Certain Aluminum Foil From the Sultanate of Oman: Preliminary Affirmative Countervailing Duty Determination and Alignment of Final Determination With Final Antidumping Duty Determination</i>	https://www.govinfo.gov/content/pkg/FR-2021-03-05/pdf/2021-04566.pdf
86 FR 23672 May 4, 2021	<i>Certain Aluminum Foil From the Republic of Armenia: Preliminary Affirmative Determination of Sales at Less Than Fair Value, Postponement of Final Determination, and Extension of Provisional Measures</i>	https://www.govinfo.gov/content/pkg/FR-2021-05-04/pdf/2021-09321.pdf

Citation	Title	Link
86 FR 23678 May 4, 2021	<i>Certain Aluminum Foil From Brazil: Preliminary Affirmative Determination of Sales at Less Than Fair Value, Postponement of Final Determination, and Extension of Provisional Measures</i>	https://www.govinfo.gov/content/pkg/FR-2021-05-04/pdf/2021-09319.pdf
86 FR 23681 May 4, 2021	<i>Certain Aluminum Foil From the Sultanate of Oman: Preliminary Affirmative Determination of Sales at Less Than Fair Value, Postponement of Final Determination, and Extension of Provisional Measures</i>	https://www.govinfo.gov/content/pkg/FR-2021-05-04/pdf/2021-09320.pdf
86 FR 23683 May 4, 2021	<i>Certain Aluminum Foil From Russia: Preliminary Affirmative Determination of Sales at Less Than Fair Value, Postponement of Final Determination, and Extension of Provisional Measures</i>	https://www.govinfo.gov/content/pkg/FR-2021-05-04/pdf/2021-09322.pdf
86 FR 23686 May 4, 2021	<i>Certain Aluminum Foil From the Republic of Turkey: Preliminary Negative Determination of Sales at Less Than Fair Value, Postponement of Final Determination</i>	https://www.govinfo.gov/content/pkg/FR-2021-05-04/pdf/2021-09323.pdf
86 FR 28146 May 25, 2021	<i>Aluminum Foil From Armenia, Brazil, Oman, Russia, and Turkey Scheduling of the Final Phase of Countervailing and Antidumping Duty Investigations</i>	https://www.govinfo.gov/content/pkg/FR-2021-05-25/pdf/2021-10971.pdf

Citation	Title	Link
86 FR 52876 September 23, 2021	<i>Certain Aluminum Foil From the Sultanate of Oman: Final Affirmative Determination of Sales at Less Than Fair Value</i>	https://www.govinfo.gov/content/pkg/FR-2021-09-23/pdf/2021-20538.pdf
86 FR 52878 September 23, 2021	<i>Certain Aluminum Foil From the Russian Federation: Final Affirmative Determination of Sales at Less Than Fair Value</i>	https://www.govinfo.gov/content/pkg/FR-2021-09-23/pdf/2021-20540.pdf
86 FR 52880 September 23, 2021	<i>Certain Aluminum Foil From the Republic of Turkey: Final Affirmative Determination of Sales at Less Than Fair Value</i>	https://www.govinfo.gov/content/pkg/FR-2021-09-23/pdf/2021-20534.pdf
86 FR 52882 September 23, 2021	<i>Certain Aluminum Foil From the Republic of Armenia: Final Affirmative Determination of Sales at Less Than Fair Value</i>	https://www.govinfo.gov/content/pkg/FR-2021-09-23/pdf/2021-20539.pdf
86 FR 52884 September 23, 2021	<i>Certain Aluminum Foil From the Republic of Turkey: Final Affirmative Countervailing Duty Determination</i>	https://www.govinfo.gov/content/pkg/FR-2021-09-23/pdf/2021-20535.pdf
86 FR 52886 September 23, 2021	<i>Certain Aluminum Foil From Brazil: Final Affirmative Determination of Sales at Less Than Fair Value</i>	https://www.govinfo.gov/content/pkg/FR-2021-09-23/pdf/2021-20537.pdf
86 FR 52888 September 23, 2021	<i>Certain Aluminum Foil From the Sultanate of Oman: Final Affirmative Countervailing Duty Determination</i>	https://www.govinfo.gov/content/pkg/FR-2021-09-23/pdf/2021-20536.pdf

APPENDIX B

LIST OF HEARING WITNESSES

CALENDAR OF PUBLIC HEARING

Those listed below appeared in the United States International Trade Commission’s hearing via videoconference:

Subject: Aluminum Foil from Armenia, Brazil, Oman, Russia, and Turkey
Inv. Nos.: 701-TA-658-659 and 731-TA-1538-1542 (Final)
Date and Time: September 14, 2021 - 9:30 a.m.

OPENING REMARKS:

Petitioner (**John M. Herrmann**, Kelley Drye & Warren LLP)
Respondents (**Douglas J. Heffner**, Faegre Drinker Biddle & Reath 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

Brad Thomas, Vice President for Strategy, Sales and Marketing,
Gränges Americas Inc.

Ryan Olsen, Vice President, Market Growth and Development,
The Aluminum Association

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 Intermediate, Inc.
Ampac Holdings, LLC
Jen-Coat, Inc. DBA Prolamina
(collectively, “ProAmpac”)

Paul Schabow, Vice President, Procurement, ProAmpac

Erin Stapleton, Senior Commodity Manager, ProAmpac

Mark R. Ludwikowski)
) – OF COUNSEL
Courtney Gayle Taylor)

White and Case LLP
Washington, DC
on behalf of

Companhia Brasileira de Alumínio (“CBA Alumínio”)
CBA Itapissuma Ltda (“CBA Itapissuma”)
(collectively, “CBA”)

Fabiano Schneider Urso, General Manager, Downstream
Business Unit, CBA

Ron Kendler) -- COUNSEL

Akin Gump Strauss Haure & Feld LLP
Curtis, Mallet-Prevost, Colt and Mosle LLP
Washington, DC
on behalf of

Oman Aluminium Rolling Company LLC (“OARC”)

Peter Rijkoort, Chief Executive Officer, OARC

Bernd G. Janzen)
Julia K. Eppard) – OF COUNSEL
Matthew P. McCullough)

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

Arent Fox LLP
Washington, DC
on behalf of

Istanbul Ferrous and Non-Ferrous Metals Exporters' Association
Asaş Alüminyum Sanayi ve Ticaret Anonim Şirketi
Panda Alüminyum Anonim Şirketi
Assan Alüminyum Sanayi ve Ticaret A.S.
(collectively, "Turkish Producers and Exporters")

Matthew Nolan)
Leah N. Scarpelli) – OF COUNSEL
John A. Gurtunca)

Faegre Drinker Biddle & Reath LLP
Washington, DC
on behalf of

Amcor Flexibles North America and Bemis Company Inc.
(members of the Amcor group of companies)
Goodman Manufacturing Company L.P.
(a member of the Daikin group of companies)
Adams Thermal Systems Inc.

Erica Paschal, Vice President of Procurement,
Goodman Manufacturing, L.P.

Tim Brown, Category Procurement Manager, Aluminum,
Amcor Flexibles North America and Bemis Company Inc.

Kenn Weng, Group Procurement Director,
Amcor Flexibles North America and Bemis Company Inc.

Kevin Boehm, Director of Purchasing, General Manager AFS,
Adams Thermal Systems, Inc.

Douglas J. Heffner)
Richard P. Ferrin) – OF COUNSEL
Carrie Bethea Connolly)

**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

Jeff Bornmann, Chief Operating Officer, Trinidad

Donna Walters, Director of Aluminum Risk, Trinidad

Lynn Fischer Fox)
Daniel Wilson) – OF COUNSEL
Gina Colarusso)

Mayer Brown LLP
Washington, DC
on behalf of

Rusal Sayanal and JSC Ural Foil, Joint Stock Company
Rusal Armenal Closed Joint Stock Company

Mike Hutt, Vice President, New England Foil, Inc.

Matthew McConkey)
Jing Zhang) – OF COUNSEL
Jennifer Parry)

REBUTTAL/CLOSING REMARKS:

Petitioner (**Paul C. Rosenthal**, Kelley Drye & Warren LLP)
Respondents (**Matthew McConkey**, Mayer Brown LLP)

-END-

APPENDIX C
SUMMARY DATA

Table C-1: Product: Summary data concerning the total U.S. market	C-3
Table C-2: Product: Summary data concerning the merchant U.S. market	C-5

Total market

Table C-1

Aluminum foil: Summary data concerning the U.S. total market, 2018-20, January to March 2020, and January to March 2021

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		Jan-Mar			Comparison years			Jan-Mar
	2018	2019	2020	2020	2021	2018-20	2018-19	2019-20	2020-21
U.S. total market consumption quantity:									
Amount.....	596,905	582,844	559,460	142,185	148,915	▼(6.3)	▼(2.4)	▼(4.0)	▲4.7
Producers' share (fn1).....	76.0	72.1	72.1	75.4	68.7	▼(3.9)	▼(3.9)	▲0.0	▼(6.7)
Importers' share (fn1):									
Armenia.....	***	***	***	***	***	▼***	▼***	▲***	▲***
Brazil.....	***	***	***	***	***	▼***	▼***	▼***	▲***
Oman.....	***	***	***	***	***	▲***	▲***	▼***	▲***
Russia.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Turkey.....	***	***	***	***	***	▲***	▲***	▼***	▲***
Subject sources.....	12.6	16.3	15.4	12.1	16.2	▲2.7	▲3.7	▼(0.9)	▲4.1
China.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Germany.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Korea.....	***	***	***	***	***	▲***	▲***	▲***	▲***
All other sources.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Nonsubject sources.....	11.4	11.6	12.5	12.6	15.1	▲1.1	▲0.2	▲0.9	▲2.6
All import sources.....	24.0	27.9	27.9	24.6	31.3	▲3.9	▲3.9	▼(0.0)	▲6.7
U.S. total market consumption value:									
Amount.....	2,128,582	1,955,291	1,730,072	457,538	494,395	▼(18.7)	▼(8.1)	▼(11.5)	▲8.1
Producers' share (fn1).....	74.2	70.5	71.0	74.3	68.0	▼(3.2)	▼(3.7)	▲0.5	▼(6.3)
Importers' share (fn1):									
Armenia.....	***	***	***	***	***	▼***	▼***	▲***	▲***
Brazil.....	***	***	***	***	***	▼***	▼***	▼***	▲***
Oman.....	***	***	***	***	***	▲***	▲***	▼***	▲***
Russia.....	***	***	***	***	***	▲***	▲***	▼***	▼***
Turkey.....	***	***	***	***	***	▲***	▲***	▼***	▲***
Subject sources.....	11.8	15.2	13.8	10.8	14.2	▲2.0	▲3.4	▼(1.4)	▲3.3
China.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Germany.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Korea.....	***	***	***	***	***	▲***	▲***	▲***	▲***
All other sources.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Nonsubject sources.....	14.0	14.3	15.1	14.8	17.8	▲1.2	▲0.3	▲0.9	▲3.0
All import sources.....	25.8	29.5	29.0	25.7	32.0	▲3.2	▲3.7	▼(0.5)	▲6.3
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.....	75,377	95,003	85,891	17,149	24,113	▲13.9	▲26.0	▼(9.6)	▲40.6
Value.....	250,758	297,711	239,125	49,582	70,089	▼(4.6)	▲18.7	▼(19.7)	▲41.4
Unit value.....	\$3,327	\$3,134	\$2,784	\$2,891	\$2,907	▼(16.3)	▼(5.8)	▼(11.2)	▲0.5
Ending inventory quantity.....	8,200	13,672	19,427	13,713	16,970	▲136.9	▲66.7	▲42.1	▲23.8

Table continued on next page.

Table C-1--Continued

Aluminum foil: Summary data concerning the U.S. total market, 2018-20, January to March 2020, and January to March 2021

(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		Jan-Mar			Comparison years			Jan-Mar
	2018	2019	2020	2020	2021	2018-20	2018-19	2019-20	2020-21
U.S. importers' U.S. shipments of imports from-- Continued									
China:									
Quantity.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Value.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Unit value.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Ending inventory quantity.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Germany:									
Quantity.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Value.....	***	***	***	***	***	▲***	▲***	▼***	▼***
Unit value.....	***	***	***	***	***	▼***	▼***	▼***	▲***
Ending inventory quantity.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Korea:									
Quantity.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Value.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Unit value.....	***	***	***	***	***	▼***	▼***	▼***	▲***
Ending inventory quantity.....	***	***	***	***	***	▼***	▲***	▼***	▼***
All other sources:									
Quantity.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Value.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Unit value.....	***	***	***	***	***	▼***	▲***	▼***	▲***
Ending inventory quantity.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Nonsubject sources:									
Quantity.....	67,921	67,528	69,998	17,877	22,524	▲3.1	▼(0.6)	▲3.7	▲26.0
Value.....	297,561	278,995	261,939	67,917	88,047	▼(12.0)	▼(6.2)	▼(6.1)	▲29.6
Unit value.....	\$4,381	\$4,132	\$3,742	\$3,799	\$3,909	▼(14.6)	▼(5.7)	▼(9.4)	▲2.9
Ending inventory quantity.....	11,087	12,536	15,754	10,843	16,016	▲42.1	▲13.1	▲25.7	▲47.7
All imports:									
Quantity.....	143,298	162,531	155,889	35,026	46,637	▲8.8	▲13.4	▼(4.1)	▲33.1
Value.....	548,319	576,706	501,064	117,499	158,136	▼(8.6)	▲5.2	▼(13.1)	▲34.6
Unit value.....	\$3,826	\$3,548	\$3,214	\$3,355	\$3,391	▼(16.0)	▼(7.3)	▼(9.4)	▲1.1
Ending inventory quantity.....	19,287	26,208	35,181	24,556	32,986	▲82.4	▲35.9	▲34.2	▲34.3
U.S. producers':									
Average capacity quantity.....	544,180	572,057	553,961	142,698	130,702	▲1.8	▲5.1	▼(3.2)	▼(8.4)
Production quantity.....	482,003	448,127	426,082	108,381	105,318	▼(11.6)	▼(7.0)	▼(4.9)	▼(2.8)
Capacity utilization (fn1).....	88.6	78.3	76.9	76.0	80.6	▼(11.7)	▼(10.2)	▼(1.4)	▲4.6
U.S. shipments:									
Quantity.....	453,607	420,313	403,571	107,159	102,278	▼(11.0)	▼(7.3)	▼(4.0)	▼(4.6)
Value.....	1,580,263	1,378,585	1,229,008	340,039	336,259	▼(22.2)	▼(12.8)	▼(10.9)	▼(1.1)
Unit value.....	\$3,484	\$3,280	\$3,045	\$3,173	\$3,288	▼(12.6)	▼(5.9)	▼(7.2)	▲3.6
Export shipments:									
Quantity.....	26,469	24,859	26,740	5,185	7,537	▲1.0	▼(6.1)	▲7.6	▲45.4
Value.....	92,280	79,566	80,258	16,451	25,365	▼(13.0)	▼(13.8)	▲0.9	▲54.2
Unit value.....	\$3,486	\$3,201	\$3,001	\$3,173	\$3,365	▼(13.9)	▼(8.2)	▼(6.2)	▲6.1
Ending inventory quantity.....	31,070	34,025	29,796	30,062	25,299	▼(4.1)	▲9.5	▼(12.4)	▼(15.8)
Inventories/total shipments (fn1).....	6.5	7.6	6.9	6.7	5.8	▲0.5	▲1.2	▼(0.7)	▼(0.9)
Production workers.....	1,514	1,526	1,368	1,484	1,315	▼(9.6)	▲0.8	▼(10.4)	▼(11.4)
Hours worked (1,000s).....	3,208	3,244	2,826	781	669	▼(11.9)	▲1.1	▼(12.9)	▼(14.3)
Wages paid (\$1,000).....	114,643	116,322	105,594	30,261	27,044	▼(7.9)	▲1.5	▼(9.2)	▼(10.6)
Hourly wages (dollars per hour).....	\$35.74	\$35.86	\$37.37	\$38.75	\$40.42	▲4.6	▲0.3	▲4.2	▲4.3
Productivity (short tons per 1,000 hours).....	150.3	138.1	150.8	138.8	157.4	▲0.3	▼(8.1)	▲9.1	▲13.4
Unit labor costs.....	\$238	\$260	\$248	\$279	\$257	▲4.2	▲9.1	▼(4.5)	▼(8.0)

Table continued on next page.

Table C-1--Continued

Aluminum foil: Summary data concerning the U.S. total market, 2018-20, January to March 2020, and January to March 2021

(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		Jan-Mar			Comparison years			Jan-Mar
	2018	2019	2020	2020	2021	2018-20	2018-19	2019-20	2020-21
Net sales:									
Quantity.....	480,076	445,172	430,311	112,344	109,815	▼(10.4)	▼(7.3)	▼(3.3)	▼(2.3)
Value.....	1,672,543	1,458,151	1,309,266	356,491	361,625	▼(21.7)	▼(12.8)	▼(10.2)	▲1.4
Unit value.....	\$3,484	\$3,275	\$3,043	\$3,173	\$3,293	▼(12.7)	▼(6.0)	▼(7.1)	▲3.8
Cost of goods sold (COGS).....	1,584,033	1,373,598	1,221,253	335,568	339,865	▼(22.9)	▼(13.3)	▼(11.1)	▲1.3
Gross profit or (loss) (fn2).....	88,510	84,553	88,013	20,923	21,760	▼(0.6)	▼(4.5)	▲4.1	▲4.0
SG&A expenses.....	56,067	84,333	64,887	13,630	11,355	▲15.7	▲50.4	▼(23.1)	▼(16.7)
Operating income or (loss) (fn2).....	32,443	220	23,126	7,293	10,405	▼(28.7)	▼(99.3)	▲10,411.8	▲42.7
Net income or (loss) (fn2).....	1,454	(25,845)	191	1,051	9,563	▼(86.9)	▼***	▲***	▲809.9
Unit COGS.....	\$3,300	\$3,086	\$2,838	\$2,987	\$3,095	▼(14.0)	▼(6.5)	▼(8.0)	▲3.6
Unit SG&A expenses.....	\$117	\$189	\$151	\$121	\$103	▲29.1	▲62.2	▼(20.4)	▼(14.8)
Unit operating income or (loss) (fn2).....	\$68	\$0	\$54	\$65	\$95	▼(20.5)	▼(99.3)	▲10,774.8	▲46.0
Unit net income or (loss) (fn2).....	\$3	\$(58)	\$0	\$9	\$87	▼(85.3)	▼***	▲***	▲830.8
COGS/sales (fn1).....	94.7	94.2	93.3	94.1	94.0	▼(1.4)	▼(0.5)	▼(0.9)	▼(0.1)
Operating income or (loss)/sales (fn1).....	1.9	0.0	1.8	2.0	2.9	▼(0.2)	▼(1.9)	▲1.8	▲0.8
Net income or (loss)/sales (fn1).....	0.1	(1.8)	0.0	0.3	2.6	▼(0.1)	▼(1.9)	▲1.8	▲2.3
Capital expenditures.....	81,545	130,263	38,579	10,213	8,297	▼(52.7)	▲59.7	▼(70.4)	▼(18.8)
Research and development expenses.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Net assets.....	660,034	753,065	737,311	NA	NA	▲11.7	▲14.1	▼(2.1)	NA

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, 2018-20, January to March 2020, and January to March 2021

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		Jan-Mar			Comparison years			Jan-Mar
	2018	2019	2020	2020	2021	2018-20	2018-19	2019-20	2020-21
U.S. merchant market consumption quantity:									
Amount.....	***	***	***	***	***	▼***	▼***	▼***	▲***
Producers' share (fn1).....	***	***	***	***	***	▼***	▼***	▼***	▼***
Importers' share (fn1):									
Armenia.....	***	***	***	***	***	▼***	▼***	▲***	▲***
Brazil.....	***	***	***	***	***	▼***	▼***	▼***	▲***
Oman.....	***	***	***	***	***	▲***	▲***	▼***	▲***
Russia.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Turkey.....	***	***	***	***	***	▲***	▲***	▼***	▲***
Subject sources.....	***	***	***	***	***	▲***	▲***	▼***	▲***
China.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Germany.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Korea.....	***	***	***	***	***	▲***	▲***	▲***	▲***
All other 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.....	***	***	***	***	***	▲***	▲***	▼***	▲***
China.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Germany.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Korea.....	***	***	***	***	***	▲***	▲***	▲***	▲***
All other 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:									
Quantity.....	75,377	95,003	85,891	17,149	24,113	▲13.9	▲26.0	▼(9.6)	▲40.6
Value.....	250,758	297,711	239,125	49,582	70,089	▼(4.6)	▲18.7	▼(19.7)	▲41.4
Unit value.....	\$3,327	\$3,134	\$2,784	\$2,891	\$2,907	▼(16.3)	▼(5.8)	▼(11.2)	▲0.5
Ending inventory quantity.....	8,200	13,672	19,427	13,713	16,970	▲136.9	▲66.7	▲42.1	▲23.8

Table continued on next page.

Table C-2--Continued

Aluminum foil: Summary data concerning the U.S. merchant market, 2018-20, January to March 2020, and January to March 2021

(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		Jan-Mar			Comparison years			Jan-Mar
	2018	2019	2020	2020	2021	2018-20	2018-19	2019-20	2020-21
U.S. importers' U.S. shipments of imports from-- Continued									
China:									
Quantity.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Value.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Unit value.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Ending inventory quantity.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Germany:									
Quantity.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Value.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Unit value.....	***	***	***	***	***	▼***	▼***	▼***	▲***
Ending inventory quantity.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Korea:									
Quantity.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Value.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Unit value.....	***	***	***	***	***	▼***	▼***	▼***	▲***
Ending inventory quantity.....	***	***	***	***	***	▼***	▲***	▼***	▼***
All other sources:									
Quantity.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Value.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Unit value.....	***	***	***	***	***	▼***	▲***	▼***	▲***
Ending inventory quantity.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Nonsubject sources:									
Quantity.....	67,921	67,528	69,998	17,877	22,524	▲3.1	▼(0.6)	▲3.7	▲26.0
Value.....	297,561	278,995	261,939	67,917	88,047	▼(12.0)	▼(6.2)	▼(6.1)	▲29.6
Unit value.....	\$4,381	\$4,132	\$3,742	\$3,799	\$3,909	▼(14.6)	▼(5.7)	▼(9.4)	▲2.9
Ending inventory quantity.....	11,087	12,536	15,754	10,843	16,016	▲42.1	▲13.1	▲25.7	▲47.7
All imports:									
Quantity.....	143,298	162,531	155,889	35,026	46,637	▲8.8	▲13.4	▼(4.1)	▲33.1
Value.....	548,319	576,706	501,064	117,499	158,136	▼(8.6)	▲5.2	▼(13.1)	▲34.6
Unit value.....	\$3,826	\$3,548	\$3,214	\$3,355	\$3,391	▼(16.0)	▼(7.3)	▼(9.4)	▲1.1
Ending inventory quantity.....	19,287	26,208	35,181	24,556	32,986	▲82.4	▲35.9	▲34.2	▲34.3
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

SECTION 232 DEVELOPMENTS AND EXCLUSION REQUESTS

Table D-1**Aluminum foil: Section 232 national security measures relating to aluminum**

Effective date	Actions and affected U.S. trade partner(s)
April 26, 2017	Commerce announced the institution of an investigation, by its U.S. Bureau of Industry and Security (“BIS”), into the potential impact of imported aluminum products on national security. (82 FR 21509, May 9, 2017)
January 19, 2018	The Secretary of Commerce submitted the BIS Section 232 aluminum imports report to the President. (83 FR 11619, March 15, 2018)
March 23, 2018	The President announced the imposition of 10 percent ad valorem national-security duties on U.S. aluminum imports. Initially exempted— Canada and Mexico. (83 FR 11619, March 15, 2018)
March 23 through May 1, 2018	Adjustment: Exempted— Argentina, Australia, Brazil, Canada, Mexico, South Korea, and the European Union (“EU”) member states. (83 FR 13355, March 28, 2018)
May 1 through June 1, 2018	Adjustment: Exempted— Argentina, Australia, Brazil. Exemptions continued to June 1—Canada, Mexico, and EU member states. Exemption expired— South Korea. (83 FR 20677, May 7, 2018 and 83 FR 25849, June 5, 2018)
June 1, 2018	Adjustment: Exempted—Argentina (annual quota limit), Australia. Exemptions expired—Brazil, Canada, Mexico, and EU member states. (83 FR 25849, June 5, 2018)
September 11, 2018	Exclusion Process: Presidential Proclamation 9776 grants the Secretary of Commerce the authority to exclude aluminum articles for which there is a lack of domestic production capacity of comparable production, or to exclude aluminum articles from such restrictions for specific national security-based considerations. The BIS published an interim final rule establishing this exclusion process. (83 FR 46026, September 11, 2018)
May 20, 2019	Adjustment: Exemptions reinstated— Canada and Mexico. (84 FR 23983, May 23, 2019)
January 24, 2020	Adjustment: The President expanded the scope of the Section 232 measures to include imports of certain derivative (fabricated) aluminum articles. (85 FR 5281, January 29, 2020).
August 16, 2020	Adjustment: Exemptions discontinued— Canada. (85 FR 49921, August 14, 2020).
September 1, 2020	Adjustment: Exemptions reinstated— Canada. (85 FR 68709, October 27, 2020).
December 14, 2020	Exclusion Process: A ruling by BIS establishes the General Approved Exclusion for steel and aluminum articles for which exclusions have been requested and have not received any filed objections. These items would be allowed to be imported by any domestic firm, without volume limitations, for an indefinite period of time. The ruling cites 15 aluminum products for which the General Approved Exclusion rule will go into effect on December 29, 2020. This includes HTS 7606.11.6000, which is subject to these investigations. (85 FR 81060, December 14, 2020).
January 19, 2021	Adjustment: Exempted—United Arab Emirates (annual quota limit), effective February 3, 2021. (86 FR 6825, January 25, 2021).
February 1, 2021	Adjustment: Exemptions discontinued— United Arab Emirates. (86 FR 8265, February 4, 2021).

Source: Various Federal Register notices as cited in each row.

Section 232 exclusion requests

Individuals or organizations that use aluminum products specified in the Section 232 action and partake in U.S. business activities can submit requests to have certain products excluded from the Section 232 national security import tariffs. As of September 10, 2021, ***¹ exclusion requests have been submitted to the U.S. Department of Commerce's U.S. Bureau of Industry and Security ("BIS") for specific aluminum foil products imported under the in-scope primary HTSUS statistical reporting numbers 7607.11.3000, 7607.11.6090², 7607.11.9090, and 7607.19.6000³ as well as 7607.11.6000 which covered some in-scope products before it was annotated on January 1, 2019 and 7607.11.9000 which appears in the dataset with product labeled as "foil lid stock" and "foil" (table D-2).⁴ Of the total *** exclusion requests submitted under the HTSUS statistical reporting numbers identified in table D-2, *** percent cited "insufficient U.S. availability" as the primary reason for the submission, *** percent cited "no U.S. production," and *** percent cited various "other" reasons. Information presented in tables D-2, D-3, and D-4 may not reflect the most current status of exclusion requests that are marked as pending.

¹ ***

² 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.

³ 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.

⁴ No exclusion requests have been reported for in-scope primary HTSUS statistical reporting numbers 7607.11.9030 and 7607.11.9060.

Table D-2

Aluminum foil: Section 232 exclusion requests for aluminum foil as of September 10, 2021, by HTSUS statistical reporting number and exclusion status

Quantity in number of exclusions

HTS statistical reporting numbers	Measure	Granted exclusions	Denied exclusions	Pending exclusions	All exclusions
7607.11.3000	Quantity	***	***	***	***
7607.11.6000	Quantity	***	***	***	***
7607.11.6090	Quantity	***	***	***	***
7607.11.9000	Quantity	***	***	***	***
7607.11.9090	Quantity	***	***	***	***
7607.19.6000	Quantity	***	***	***	***
All HTS statistical reporting numbers	Quantity	***	***	***	***

Source: ***.

Note: Section 232 exclusion requests in this table are defined by the relevant HTSUS statistical reporting numbers. However, not all subject merchandise may be included. Conversely, certain other products excluded from the scope of these investigations may also be included. 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.

Table D-3 presents the top ten firms by total number of exclusion requests, as of September 10, 2021.

Table D-3

Aluminum foil: Section 232: Exclusion requests for certain aluminum products, by firm, as of September 10, 2021

Quantity in number of exclusions

Requestor	Measure	Granted exclusions	Denied exclusions	Pending exclusions	All exclusions
***	Quantity	***	***	***	***
***	Quantity	***	***	***	***
***	Quantity	***	***	***	***
***	Quantity	***	***	***	***
***	Quantity	***	***	***	***
***	Quantity	***	***	***	***
***	Quantity	***	***	***	***
***	Quantity	***	***	***	***
***	Quantity	***	***	***	***
***	Quantity	***	***	***	***
***	Quantity	***	***	***	***
All other requestors	Quantity	***	***	***	***
All requestors	Quantity	***	***	***	***

Source: ***.

Note: Section 232 exclusion requests in this table are defined by the relevant HTSUS statistical reporting numbers. However, not all subject merchandise may be included. Conversely, certain other products excluded from the scope of these investigations may also be included.

Table D-4 presents reasons provided by U.S. producers for exclusion requests, as of September 10, 2021. *** to file exclusion requests for aluminum foil products imported under the primary HTSUS statistical reporting numbers listed in table D-2. The *** exclusion requests were for a total of *** metric tons of excluded product. ***.⁵

⁵ ***.

Table D-4

Aluminum foil: ***

HTS statistical reporting numbers	Measure	Insufficient U.S. availability/production	No U.S. production	Total exclusion requests
7607.11.6000	Quantity	***	***	***
7607.11.6090	Quantity	***	***	***
7607.11.9090	Quantity	***	***	***
All HTS statistical reporting numbers	Quantity	***	***	***

Source: ***.

Note: Section 232 exclusion requests in this table are defined by the relevant HTSUS statistical reporting numbers. However, not all subject merchandise may be included. Conversely, certain other products excluded from the scope of these investigations may also be included. 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.

Respondents argue that U.S. producers have used Section 232 exclusion requests because of structural capacity issues.⁶ Respondents also argue that the number of exclusion requests by the domestic industry shows U.S. producers have insufficient capacity to supply the needs of the U.S. downstream market.⁷ Petitioners argue domestic producers have refrained from objecting to Section 232 exclusion requests submitted by large U.S. purchasers/importers in order to avoid upsetting important customers.⁸

⁶ Hearing transcript, p. 13.

⁷ Respondents' pre-hearing brief, p. 35.

⁸ Hearing transcript, pp. 70-71.

APPENDIX E

**U.S. PRODUCERS' AND U.S. IMPORTERS' SHIPMENTS BY THICKNESS AND BY
PRODUCT TYPE**

Table E-1
Aluminum foil: U.S. producers' U.S. shipments by thickness and period

Quantity in short tons; value in 1,000 dollars; unit values in dollars per short ton; share in percent

Thickness category	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Ultra-thin	Quantity	***	***	***	***	***
Thin	Quantity	***	***	***	***	***
Standard	Quantity	***	***	***	***	***
Heavy	Quantity	***	***	***	***	***
Extra heavy	Quantity	***	***	***	***	***
All thicknesses	Quantity	453,607	420,313	403,571	107,159	102,278
Ultra-thin	Value	***	***	***	***	***
Thin	Value	***	***	***	***	***
Standard	Value	***	***	***	***	***
Heavy	Value	***	***	***	***	***
Extra heavy	Value	***	***	***	***	***
All thicknesses	Value	1,580,263	1,378,585	1,229,008	340,039	336,259
Ultra-thin	Unit value	***	***	***	***	***
Thin	Unit value	***	***	***	***	***
Standard	Unit value	***	***	***	***	***
Heavy	Unit value	***	***	***	***	***
Extra heavy	Unit value	***	***	***	***	***
All thicknesses	Unit value	3,484	3,280	3,045	3,173	3,288
Ultra-thin	Share of quantity	***	***	***	***	***
Thin	Share of quantity	***	***	***	***	***
Standard	Share of quantity	***	***	***	***	***
Heavy	Share of quantity	***	***	***	***	***
Extra heavy	Share of quantity	***	***	***	***	***
All thicknesses	Share of quantity	100.0	100.0	100.0	100.0	100.0
Ultra-thin	Share of value	***	***	***	***	***
Thin	Share of value	***	***	***	***	***
Standard	Share of value	***	***	***	***	***
Heavy	Share of value	***	***	***	***	***
Extra heavy	Share of value	***	***	***	***	***
All thicknesses	Share of value	100.0	100.0	100.0	100.0	100.0

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table E-2
Aluminum foil: U.S. importers' U.S. shipments of imports from Armenia by thickness and period

Quantity in short tons; value in 1,000 dollars; unit values in dollars per short ton; share in percent

Thickness category	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Ultra-thin	Quantity	***	***	***	***	***
Thin	Quantity	***	***	***	***	***
Standard	Quantity	***	***	***	***	***
Heavy	Quantity	***	***	***	***	***
Extra heavy	Quantity	***	***	***	***	***
All thicknesses	Quantity	***	***	***	***	***
Ultra-thin	Value	***	***	***	***	***
Thin	Value	***	***	***	***	***
Standard	Value	***	***	***	***	***
Heavy	Value	***	***	***	***	***
Extra heavy	Value	***	***	***	***	***
All thicknesses	Value	***	***	***	***	***
Ultra-thin	Unit value	***	***	***	***	***
Thin	Unit value	***	***	***	***	***
Standard	Unit value	***	***	***	***	***
Heavy	Unit value	***	***	***	***	***
Extra heavy	Unit value	***	***	***	***	***
All thicknesses	Unit value	***	***	***	***	***
Ultra-thin	Share of quantity	***	***	***	***	***
Thin	Share of quantity	***	***	***	***	***
Standard	Share of quantity	***	***	***	***	***
Heavy	Share of quantity	***	***	***	***	***
Extra heavy	Share of quantity	***	***	***	***	***
All thicknesses	Share of quantity	100.0	100.0	100.0	100.0	100.0
Ultra-thin	Share of value	***	***	***	***	***
Thin	Share of value	***	***	***	***	***
Standard	Share of value	***	***	***	***	***
Heavy	Share of value	***	***	***	***	***
Extra heavy	Share of value	***	***	***	***	***
All thicknesses	Share of value	100.0	100.0	100.0	100.0	100.0

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table E-3**Aluminum foil: U.S. importers' U.S. shipments of imports from Brazil by thickness and period**

Quantity in short tons; value in 1,000 dollars; unit values in dollars per short ton; share in percent

Thickness category	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Ultra-thin	Quantity	***	***	***	***	***
Thin	Quantity	***	***	***	***	***
Standard	Quantity	***	***	***	***	***
Heavy	Quantity	***	***	***	***	***
Extra heavy	Quantity	***	***	***	***	***
All thicknesses	Quantity	***	***	***	***	***
Ultra-thin	Value	***	***	***	***	***
Thin	Value	***	***	***	***	***
Standard	Value	***	***	***	***	***
Heavy	Value	***	***	***	***	***
Extra heavy	Value	***	***	***	***	***
All thicknesses	Value	***	***	***	***	***
Ultra-thin	Unit value	***	***	***	***	***
Thin	Unit value	***	***	***	***	***
Standard	Unit value	***	***	***	***	***
Heavy	Unit value	***	***	***	***	***
Extra heavy	Unit value	***	***	***	***	***
All thicknesses	Unit value	***	***	***	***	***
Ultra-thin	Share of quantity	***	***	***	***	***
Thin	Share of quantity	***	***	***	***	***
Standard	Share of quantity	***	***	***	***	***
Heavy	Share of quantity	***	***	***	***	***
Extra heavy	Share of quantity	***	***	***	***	***
All thicknesses	Share of quantity	100.0	100.0	100.0	100.0	100.0
Ultra-thin	Share of value	***	***	***	***	***
Thin	Share of value	***	***	***	***	***
Standard	Share of value	***	***	***	***	***
Heavy	Share of value	***	***	***	***	***
Extra heavy	Share of value	***	***	***	***	***
All thicknesses	Share of value	100.0	100.0	100.0	100.0	100.0

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table E-4
Aluminum foil: U.S. importers' U.S. shipments of imports from Oman by thickness and period

Quantity in short tons; value in 1,000 dollars; unit values in dollars per short ton; share in percent

Thickness category	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Ultra-thin	Quantity	***	***	***	***	***
Thin	Quantity	***	***	***	***	***
Standard	Quantity	***	***	***	***	***
Heavy	Quantity	***	***	***	***	***
Extra heavy	Quantity	***	***	***	***	***
All thicknesses	Quantity	***	***	***	***	***
Ultra-thin	Value	***	***	***	***	***
Thin	Value	***	***	***	***	***
Standard	Value	***	***	***	***	***
Heavy	Value	***	***	***	***	***
Extra heavy	Value	***	***	***	***	***
All thicknesses	Value	***	***	***	***	***
Ultra-thin	Unit value	***	***	***	***	***
Thin	Unit value	***	***	***	***	***
Standard	Unit value	***	***	***	***	***
Heavy	Unit value	***	***	***	***	***
Extra heavy	Unit value	***	***	***	***	***
All thicknesses	Unit value	***	***	***	***	***
Ultra-thin	Share of quantity	***	***	***	***	***
Thin	Share of quantity	***	***	***	***	***
Standard	Share of quantity	***	***	***	***	***
Heavy	Share of quantity	***	***	***	***	***
Extra heavy	Share of quantity	***	***	***	***	***
All thicknesses	Share of quantity	100.0	100.0	100.0	100.0	100.0
Ultra-thin	Share of value	***	***	***	***	***
Thin	Share of value	***	***	***	***	***
Standard	Share of value	***	***	***	***	***
Heavy	Share of value	***	***	***	***	***
Extra heavy	Share of value	***	***	***	***	***
All thicknesses	Share of value	100.0	100.0	100.0	100.0	100.0

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table E-5
Aluminum foil: U.S. importers' U.S. shipments of imports from Russia by thickness and period

Quantity in short tons; value in 1,000 dollars; unit values in dollars per short ton; share in percent

Thickness category	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Ultra-thin	Quantity	***	***	***	***	***
Thin	Quantity	***	***	***	***	***
Standard	Quantity	***	***	***	***	***
Heavy	Quantity	***	***	***	***	***
Extra heavy	Quantity	***	***	***	***	***
All thicknesses	Quantity	***	***	***	***	***
Ultra-thin	Value	***	***	***	***	***
Thin	Value	***	***	***	***	***
Standard	Value	***	***	***	***	***
Heavy	Value	***	***	***	***	***
Extra heavy	Value	***	***	***	***	***
All thicknesses	Value	***	***	***	***	***
Ultra-thin	Unit value	***	***	***	***	***
Thin	Unit value	***	***	***	***	***
Standard	Unit value	***	***	***	***	***
Heavy	Unit value	***	***	***	***	***
Extra heavy	Unit value	***	***	***	***	***
All thicknesses	Unit value	***	***	***	***	***
Ultra-thin	Share of quantity	***	***	***	***	***
Thin	Share of quantity	***	***	***	***	***
Standard	Share of quantity	***	***	***	***	***
Heavy	Share of quantity	***	***	***	***	***
Extra heavy	Share of quantity	***	***	***	***	***
All thicknesses	Share of quantity	100.0	100.0	100.0	100.0	100.0
Ultra-thin	Share of value	***	***	***	***	***
Thin	Share of value	***	***	***	***	***
Standard	Share of value	***	***	***	***	***
Heavy	Share of value	***	***	***	***	***
Extra heavy	Share of value	***	***	***	***	***
All thicknesses	Share of value	100.0	100.0	100.0	100.0	100.0

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table E-6
Aluminum foil: U.S. importers' U.S. shipments of imports from Turkey by thickness and period

Quantity in short tons; value in 1,000 dollars; unit values in dollars per short ton; share in percent

Thickness category	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Ultra-thin	Quantity	***	***	***	***	***
Thin	Quantity	***	***	***	***	***
Standard	Quantity	***	***	***	***	***
Heavy	Quantity	***	***	***	***	***
Extra heavy	Quantity	***	***	***	***	***
All thicknesses	Quantity	***	***	***	***	***
Ultra-thin	Value	***	***	***	***	***
Thin	Value	***	***	***	***	***
Standard	Value	***	***	***	***	***
Heavy	Value	***	***	***	***	***
Extra heavy	Value	***	***	***	***	***
All thicknesses	Value	***	***	***	***	***
Ultra-thin	Unit value	***	***	***	***	***
Thin	Unit value	***	***	***	***	***
Standard	Unit value	***	***	***	***	***
Heavy	Unit value	***	***	***	***	***
Extra heavy	Unit value	***	***	***	***	***
All thicknesses	Unit value	***	***	***	***	***
Ultra-thin	Share of quantity	***	***	***	***	***
Thin	Share of quantity	***	***	***	***	***
Standard	Share of quantity	***	***	***	***	***
Heavy	Share of quantity	***	***	***	***	***
Extra heavy	Share of quantity	***	***	***	***	***
All thicknesses	Share of quantity	100.0	100.0	100.0	100.0	100.0
Ultra-thin	Share of value	***	***	***	***	***
Thin	Share of value	***	***	***	***	***
Standard	Share of value	***	***	***	***	***
Heavy	Share of value	***	***	***	***	***
Extra heavy	Share of value	***	***	***	***	***
All thicknesses	Share of value	100.0	100.0	100.0	100.0	100.0

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table E-7**Aluminum foil: U.S. importers' U.S. shipments of imports from subject sources by thickness and period**

Quantity in short tons; value in 1,000 dollars; unit values in dollars per short ton; share in percent

Thickness category	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Ultra-thin	Quantity	***	***	***	***	***
Thin	Quantity	***	***	***	***	***
Standard	Quantity	***	***	***	***	***
Heavy	Quantity	***	***	***	***	***
Extra heavy	Quantity	***	***	***	***	***
All thicknesses	Quantity	75,377	95,003	85,891	17,149	24,113
Ultra-thin	Value	***	***	***	***	***
Thin	Value	***	***	***	***	***
Standard	Value	***	***	***	***	***
Heavy	Value	***	***	***	***	***
Extra heavy	Value	***	***	***	***	***
All thicknesses	Value	250,756	297,711	239,125	49,582	70,089
Ultra-thin	Unit value	***	***	***	***	***
Thin	Unit value	***	***	***	***	***
Standard	Unit value	***	***	***	***	***
Heavy	Unit value	***	***	***	***	***
Extra heavy	Unit value	***	***	***	***	***
All thicknesses	Unit value	3,327	3,134	2,784	2,891	2,907
Ultra-thin	Share of quantity	***	***	***	***	***
Thin	Share of quantity	***	***	***	***	***
Standard	Share of quantity	***	***	***	***	***
Heavy	Share of quantity	***	***	***	***	***
Extra heavy	Share of quantity	***	***	***	***	***
All thicknesses	Share of quantity	100.0	100.0	100.0	100.0	100.0
Ultra-thin	Share of value	***	***	***	***	***
Thin	Share of value	***	***	***	***	***
Standard	Share of value	***	***	***	***	***
Heavy	Share of value	***	***	***	***	***
Extra heavy	Share of value	***	***	***	***	***
All thicknesses	Share of value	100.0	100.0	100.0	100.0	100.0

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table E-8**Aluminum foil: U.S. importers' U.S. shipments of imports from China by thickness and period**

Quantity in short tons; value in 1,000 dollars; unit values in dollars per short ton; share in percent

Thickness category	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Ultra-thin	Quantity	***	***	***	***	***
Thin	Quantity	***	***	***	***	***
Standard	Quantity	***	***	***	***	***
Heavy	Quantity	***	***	***	***	***
Extra heavy	Quantity	***	***	***	***	***
All thicknesses	Quantity	***	***	***	***	***
Ultra-thin	Value	***	***	***	***	***
Thin	Value	***	***	***	***	***
Standard	Value	***	***	***	***	***
Heavy	Value	***	***	***	***	***
Extra heavy	Value	***	***	***	***	***
All thicknesses	Value	***	***	***	***	***
Ultra-thin	Unit value	***	***	***	***	***
Thin	Unit value	***	***	***	***	***
Standard	Unit value	***	***	***	***	***
Heavy	Unit value	***	***	***	***	***
Extra heavy	Unit value	***	***	***	***	***
All thicknesses	Unit value	***	***	***	***	***
Ultra-thin	Share of quantity	***	***	***	***	***
Thin	Share of quantity	***	***	***	***	***
Standard	Share of quantity	***	***	***	***	***
Heavy	Share of quantity	***	***	***	***	***
Extra heavy	Share of quantity	***	***	***	***	***
All thicknesses	Share of quantity	100.0	100.0	100.0	100.0	100.0
Ultra-thin	Share of value	***	***	***	***	***
Thin	Share of value	***	***	***	***	***
Standard	Share of value	***	***	***	***	***
Heavy	Share of value	***	***	***	***	***
Extra heavy	Share of value	***	***	***	***	***
All thicknesses	Share of value	100.0	100.0	100.0	100.0	100.0

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table E-9
Aluminum foil: U.S. importers' U.S. shipments of imports from Germany by thickness and period

Quantity in short tons; value in 1,000 dollars; unit values in dollars per short ton; share in percent

Thickness category	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Ultra-thin	Quantity	***	***	***	***	***
Thin	Quantity	***	***	***	***	***
Standard	Quantity	***	***	***	***	***
Heavy	Quantity	***	***	***	***	***
Extra heavy	Quantity	***	***	***	***	***
All thicknesses	Quantity	***	***	***	***	***
Ultra-thin	Value	***	***	***	***	***
Thin	Value	***	***	***	***	***
Standard	Value	***	***	***	***	***
Heavy	Value	***	***	***	***	***
Extra heavy	Value	***	***	***	***	***
All thicknesses	Value	***	***	***	***	***
Ultra-thin	Unit value	***	***	***	***	***
Thin	Unit value	***	***	***	***	***
Standard	Unit value	***	***	***	***	***
Heavy	Unit value	***	***	***	***	***
Extra heavy	Unit value	***	***	***	***	***
All thicknesses	Unit value	***	***	***	***	***
Ultra-thin	Share of quantity	***	***	***	***	***
Thin	Share of quantity	***	***	***	***	***
Standard	Share of quantity	***	***	***	***	***
Heavy	Share of quantity	***	***	***	***	***
Extra heavy	Share of quantity	***	***	***	***	***
All thicknesses	Share of quantity	100.0	100.0	100.0	100.0	100.0
Ultra-thin	Share of value	***	***	***	***	***
Thin	Share of value	***	***	***	***	***
Standard	Share of value	***	***	***	***	***
Heavy	Share of value	***	***	***	***	***
Extra heavy	Share of value	***	***	***	***	***
All thicknesses	Share of value	100.0	100.0	100.0	100.0	100.0

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table E-10
Aluminum foil: U.S. importers' U.S. shipments of imports from Korea by thickness and period

Quantity in short tons; value in 1,000 dollars; unit values in dollars per short ton; share in percent

Thickness category	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Ultra-thin	Quantity	***	***	***	***	***
Thin	Quantity	***	***	***	***	***
Standard	Quantity	***	***	***	***	***
Heavy	Quantity	***	***	***	***	***
Extra heavy	Quantity	***	***	***	***	***
All thicknesses	Quantity	***	***	***	***	***
Ultra-thin	Value	***	***	***	***	***
Thin	Value	***	***	***	***	***
Standard	Value	***	***	***	***	***
Heavy	Value	***	***	***	***	***
Extra heavy	Value	***	***	***	***	***
All thicknesses	Value	***	***	***	***	***
Ultra-thin	Unit value	***	***	***	***	***
Thin	Unit value	***	***	***	***	***
Standard	Unit value	***	***	***	***	***
Heavy	Unit value	***	***	***	***	***
Extra heavy	Unit value	***	***	***	***	***
All thicknesses	Unit value	***	***	***	***	***
Ultra-thin	Share of quantity	***	***	***	***	***
Thin	Share of quantity	***	***	***	***	***
Standard	Share of quantity	***	***	***	***	***
Heavy	Share of quantity	***	***	***	***	***
Extra heavy	Share of quantity	***	***	***	***	***
All thicknesses	Share of quantity	100.0	100.0	100.0	100.0	100.0
Ultra-thin	Share of value	***	***	***	***	***
Thin	Share of value	***	***	***	***	***
Standard	Share of value	***	***	***	***	***
Heavy	Share of value	***	***	***	***	***
Extra heavy	Share of value	***	***	***	***	***
All thicknesses	Share of value	100.0	100.0	100.0	100.0	100.0

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table E-11
Aluminum foil: U.S. importers' U.S. shipments of imports from all other sources by thickness and period

Quantity in short tons; value in 1,000 dollars; unit values in dollars per short ton; share in percent

Thickness category	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Ultra-thin	Quantity	***	***	***	***	***
Thin	Quantity	***	***	***	***	***
Standard	Quantity	***	***	***	***	***
Heavy	Quantity	***	***	***	***	***
Extra heavy	Quantity	***	***	***	***	***
All thicknesses	Quantity	***	***	***	***	***
Ultra-thin	Value	***	***	***	***	***
Thin	Value	***	***	***	***	***
Standard	Value	***	***	***	***	***
Heavy	Value	***	***	***	***	***
Extra heavy	Value	***	***	***	***	***
All thicknesses	Value	***	***	***	***	***
Ultra-thin	Unit value	***	***	***	***	***
Thin	Unit value	***	***	***	***	***
Standard	Unit value	***	***	***	***	***
Heavy	Unit value	***	***	***	***	***
Extra heavy	Unit value	***	***	***	***	***
All thicknesses	Unit value	***	***	***	***	***
Ultra-thin	Share of quantity	***	***	***	***	***
Thin	Share of quantity	***	***	***	***	***
Standard	Share of quantity	***	***	***	***	***
Heavy	Share of quantity	***	***	***	***	***
Extra heavy	Share of quantity	***	***	***	***	***
All thicknesses	Share of quantity	100.0	100.0	100.0	100.0	100.0
Ultra-thin	Share of value	***	***	***	***	***
Thin	Share of value	***	***	***	***	***
Standard	Share of value	***	***	***	***	***
Heavy	Share of value	***	***	***	***	***
Extra heavy	Share of value	***	***	***	***	***
All thicknesses	Share of value	100.0	100.0	100.0	100.0	100.0

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table E-12
Aluminum foil: U.S. importers' U.S. shipments of imports from nonsubject sources by thickness and period

Quantity in short tons; value in 1,000 dollars; unit values in dollars per short ton; share in percent

Thickness category	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Ultra-thin	Quantity	***	***	***	***	***
Thin	Quantity	***	***	***	***	***
Standard	Quantity	***	***	***	***	***
Heavy	Quantity	***	***	***	***	***
Extra heavy	Quantity	***	***	***	***	***
All thicknesses	Quantity	67,921	67,530	69,999	17,878	22,524
Ultra-thin	Value	***	***	***	***	***
Thin	Value	***	***	***	***	***
Standard	Value	***	***	***	***	***
Heavy	Value	***	***	***	***	***
Extra heavy	Value	***	***	***	***	***
All thicknesses	Value	297,562	278,979	261,938	67,914	88,048
Ultra-thin	Unit value	***	***	***	***	***
Thin	Unit value	***	***	***	***	***
Standard	Unit value	***	***	***	***	***
Heavy	Unit value	***	***	***	***	***
Extra heavy	Unit value	***	***	***	***	***
All thicknesses	Unit value	4,381	4,131	3,742	3,799	3,909
Ultra-thin	Share of quantity	***	***	***	***	***
Thin	Share of quantity	***	***	***	***	***
Standard	Share of quantity	***	***	***	***	***
Heavy	Share of quantity	***	***	***	***	***
Extra heavy	Share of quantity	***	***	***	***	***
All thicknesses	Share of quantity	100.0	100.0	100.0	100.0	100.0
Ultra-thin	Share of value	***	***	***	***	***
Thin	Share of value	***	***	***	***	***
Standard	Share of value	***	***	***	***	***
Heavy	Share of value	***	***	***	***	***
Extra heavy	Share of value	***	***	***	***	***
All thicknesses	Share of value	100.0	100.0	100.0	100.0	100.0

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table E-13
Aluminum foil: U.S. importers' U.S. shipments of imports from all import sources by thickness and period

Quantity in short tons; value in 1,000 dollars; unit values in dollars per short ton; share in percent

Thickness category	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Ultra-thin	Quantity	***	***	***	***	***
Thin	Quantity	***	***	***	***	***
Standard	Quantity	***	***	***	***	***
Heavy	Quantity	***	***	***	***	***
Extra heavy	Quantity	***	***	***	***	***
All thicknesses	Quantity	143,298	162,533	155,890	35,027	46,637
Ultra-thin	Value	***	***	***	***	***
Thin	Value	***	***	***	***	***
Standard	Value	***	***	***	***	***
Heavy	Value	***	***	***	***	***
Extra heavy	Value	***	***	***	***	***
All thicknesses	Value	548,318	576,690	501,063	117,496	158,137
Ultra-thin	Unit value	***	***	***	***	***
Thin	Unit value	***	***	***	***	***
Standard	Unit value	***	***	***	***	***
Heavy	Unit value	***	***	***	***	***
Extra heavy	Unit value	***	***	***	***	***
All thicknesses	Unit value	3,826	3,548	3,214	3,354	3,391
Ultra-thin	Share of quantity	***	***	***	***	***
Thin	Share of quantity	***	***	***	***	***
Standard	Share of quantity	***	***	***	***	***
Heavy	Share of quantity	***	***	***	***	***
Extra heavy	Share of quantity	***	***	***	***	***
All thicknesses	Share of quantity	100.0	100.0	100.0	100.0	100.0
Ultra-thin	Share of value	***	***	***	***	***
Thin	Share of value	***	***	***	***	***
Standard	Share of value	***	***	***	***	***
Heavy	Share of value	***	***	***	***	***
Extra heavy	Share of value	***	***	***	***	***
All thicknesses	Share of value	100.0	100.0	100.0	100.0	100.0

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table E-14
Aluminum foil: U.S. producers' U.S. shipments by product type and period

Quantity in short tons; value in 1,000 dollars; unit values in dollars per short ton; share in percent

Product type	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Fin stock	Quantity	***	***	***	***	***
Other than fin stock	Quantity	***	***	***	***	***
All product types	Quantity	***	***	***	***	***
Fin stock	Value	***	***	***	***	***
Other than fin stock	Value	***	***	***	***	***
All product types	Value	***	***	***	***	***
Fin stock	Unit value	***	***	***	***	***
Other than fin stock	Unit value	***	***	***	***	***
All product types	Unit value	***	***	***	***	***
Fin stock	Share of quantity	***	***	***	***	***
Other than fin stock	Share of quantity	***	***	***	***	***
All product types	Share of quantity	***	***	***	***	***
Fin stock	Share of value	***	***	***	***	***
Other than fin stock	Share of value	***	***	***	***	***
All product types	Share of value	***	***	***	***	***

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table E-15**Aluminum foil: U.S. importers' U.S. shipments of imports from Armenia by product type and period**

Quantity in short tons; value in 1,000 dollars; unit values in dollars per short ton; share in percent

Product type	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Fin stock	Quantity	***	***	***	***	***
Other than fin stock	Quantity	***	***	***	***	***
All product types	Quantity	***	***	***	***	***
Fin stock	Value	***	***	***	***	***
Other than fin stock	Value	***	***	***	***	***
All product types	Value	***	***	***	***	***
Fin stock	Unit value	***	***	***	***	***
Other than fin stock	Unit value	***	***	***	***	***
All product types	Unit value	***	***	***	***	***
Fin stock	Share of quantity	***	***	***	***	***
Other than fin stock	Share of quantity	***	***	***	***	***
All product types	Share of quantity	***	***	***	***	***
Fin stock	Share of value	***	***	***	***	***
Other than fin stock	Share of value	***	***	***	***	***
All product types	Share of value	***	***	***	***	***

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table E-16**Aluminum foil: U.S. importers' U.S. shipments of imports from Brazil by product type and period**

Quantity in short tons; value in 1,000 dollars; unit values in dollars per short ton; share in percent

Product type	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Fin stock	Quantity	***	***	***	***	***
Other than fin stock	Quantity	***	***	***	***	***
All product types	Quantity	***	***	***	***	***
Fin stock	Value	***	***	***	***	***
Other than fin stock	Value	***	***	***	***	***
All product types	Value	***	***	***	***	***
Fin stock	Unit value	***	***	***	***	***
Other than fin stock	Unit value	***	***	***	***	***
All product types	Unit value	***	***	***	***	***
Fin stock	Share of quantity	***	***	***	***	***
Other than fin stock	Share of quantity	***	***	***	***	***
All product types	Share of quantity	***	***	***	***	***
Fin stock	Share of value	***	***	***	***	***
Other than fin stock	Share of value	***	***	***	***	***
All product types	Share of value	***	***	***	***	***

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table E-17**Aluminum foil: U.S. importers' U.S. shipments of imports from Oman by product type and period**

Quantity in short tons; value in 1,000 dollars; unit values in dollars per short ton; share in percent

Product type	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Fin stock	Quantity	***	***	***	***	***
Other than fin stock	Quantity	***	***	***	***	***
All product types	Quantity	***	***	***	***	***
Fin stock	Value	***	***	***	***	***
Other than fin stock	Value	***	***	***	***	***
All product types	Value	***	***	***	***	***
Fin stock	Unit value	***	***	***	***	***
Other than fin stock	Unit value	***	***	***	***	***
All product types	Unit value	***	***	***	***	***
Fin stock	Share of quantity	***	***	***	***	***
Other than fin stock	Share of quantity	***	***	***	***	***
All product types	Share of quantity	***	***	***	***	***
Fin stock	Share of value	***	***	***	***	***
Other than fin stock	Share of value	***	***	***	***	***
All product types	Share of value	***	***	***	***	***

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table E-18

Aluminum foil: U.S. importers' U.S. shipments of imports from Russia by product type and period

Quantity in short tons; value in 1,000 dollars; unit values in dollars per short ton; share in percent

Product type	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Fin stock	Quantity	***	***	***	***	***
Other than fin stock	Quantity	***	***	***	***	***
All product types	Quantity	***	***	***	***	***
Fin stock	Value	***	***	***	***	***
Other than fin stock	Value	***	***	***	***	***
All product types	Value	***	***	***	***	***
Fin stock	Unit value	***	***	***	***	***
Other than fin stock	Unit value	***	***	***	***	***
All product types	Unit value	***	***	***	***	***
Fin stock	Share of quantity	***	***	***	***	***
Other than fin stock	Share of quantity	***	***	***	***	***
All product types	Share of quantity	***	***	***	***	***
Fin stock	Share of value	***	***	***	***	***
Other than fin stock	Share of value	***	***	***	***	***
All product types	Share of value	***	***	***	***	***

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table E-19**Aluminum foil: U.S. importers' U.S. shipments of imports from Turkey by product type and period**

Quantity in short tons; value in 1,000 dollars; unit values in dollars per short ton; share in percent

Product type	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Fin stock	Quantity	***	***	***	***	***
Other than fin stock	Quantity	***	***	***	***	***
All product types	Quantity	***	***	***	***	***
Fin stock	Value	***	***	***	***	***
Other than fin stock	Value	***	***	***	***	***
All product types	Value	***	***	***	***	***
Fin stock	Unit value	***	***	***	***	***
Other than fin stock	Unit value	***	***	***	***	***
All product types	Unit value	***	***	***	***	***
Fin stock	Share of quantity	***	***	***	***	***
Other than fin stock	Share of quantity	***	***	***	***	***
All product types	Share of quantity	***	***	***	***	***
Fin stock	Share of value	***	***	***	***	***
Other than fin stock	Share of value	***	***	***	***	***
All product types	Share of value	***	***	***	***	***

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table E-20**Aluminum foil: U.S. importers' U.S. shipments of imports from subject countries by product type and period**

Quantity in short tons; value in 1,000 dollars; unit values in dollars per short ton; share in percent

Product type	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Fin stock	Quantity	***	***	***	***	***
Other than fin stock	Quantity	***	***	***	***	***
All product types	Quantity	***	***	***	***	***
Fin stock	Value	***	***	***	***	***
Other than fin stock	Value	***	***	***	***	***
All product types	Value	***	***	***	***	***
Fin stock	Unit value	***	***	***	***	***
Other than fin stock	Unit value	***	***	***	***	***
All product types	Unit value	***	***	***	***	***
Fin stock	Share of quantity	***	***	***	***	***
Other than fin stock	Share of quantity	***	***	***	***	***
All product types	Share of quantity	***	***	***	***	***
Fin stock	Share of value	***	***	***	***	***
Other than fin stock	Share of value	***	***	***	***	***
All product types	Share of value	***	***	***	***	***

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table E-21**Aluminum foil: U.S. importers' U.S. shipments of imports from China by product type and period**

Quantity in short tons; value in 1,000 dollars; unit values in dollars per short ton; share in percent

Product type	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Fin stock	Quantity	***	***	***	***	***
Other than fin stock	Quantity	***	***	***	***	***
All product types	Quantity	***	***	***	***	***
Fin stock	Value	***	***	***	***	***
Other than fin stock	Value	***	***	***	***	***
All product types	Value	***	***	***	***	***
Fin stock	Unit value	***	***	***	***	***
Other than fin stock	Unit value	***	***	***	***	***
All product types	Unit value	***	***	***	***	***
Fin stock	Share of quantity	***	***	***	***	***
Other than fin stock	Share of quantity	***	***	***	***	***
All product types	Share of quantity	***	***	***	***	***
Fin stock	Share of value	***	***	***	***	***
Other than fin stock	Share of value	***	***	***	***	***
All product types	Share of value	***	***	***	***	***

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table E-22**Aluminum foil: U.S. importers' U.S. shipments of imports from Germany by product type and period**

Quantity in short tons; value in 1,000 dollars; unit values in dollars per short ton; share in percent

Product type	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Fin stock	Quantity	***	***	***	***	***
Other than fin stock	Quantity	***	***	***	***	***
All product types	Quantity	***	***	***	***	***
Fin stock	Value	***	***	***	***	***
Other than fin stock	Value	***	***	***	***	***
All product types	Value	***	***	***	***	***
Fin stock	Unit value	***	***	***	***	***
Other than fin stock	Unit value	***	***	***	***	***
All product types	Unit value	***	***	***	***	***
Fin stock	Share of quantity	***	***	***	***	***
Other than fin stock	Share of quantity	***	***	***	***	***
All product types	Share of quantity	***	***	***	***	***
Fin stock	Share of value	***	***	***	***	***
Other than fin stock	Share of value	***	***	***	***	***
All product types	Share of value	***	***	***	***	***

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table E-23**Aluminum foil: U.S. importers' U.S. shipments of imports from Korea by product type and period**

Quantity in short tons; value in 1,000 dollars; unit values in dollars per short ton; share in percent

Product type	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Fin stock	Quantity	***	***	***	***	***
Other than fin stock	Quantity	***	***	***	***	***
All product types	Quantity	***	***	***	***	***
Fin stock	Value	***	***	***	***	***
Other than fin stock	Value	***	***	***	***	***
All product types	Value	***	***	***	***	***
Fin stock	Unit value	***	***	***	***	***
Other than fin stock	Unit value	***	***	***	***	***
All product types	Unit value	***	***	***	***	***
Fin stock	Share of quantity	***	***	***	***	***
Other than fin stock	Share of quantity	***	***	***	***	***
All product types	Share of quantity	***	***	***	***	***
Fin stock	Share of value	***	***	***	***	***
Other than fin stock	Share of value	***	***	***	***	***
All product types	Share of value	***	***	***	***	***

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table E-24**Aluminum foil: U.S. importer's U.S. shipments of imports from all other sources by product type and period**

Quantity in short tons; value in 1,000 dollars; unit values in dollars per short ton; share in percent

Product type	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Fin stock	Quantity	***	***	***	***	***
Other than fin stock	Quantity	***	***	***	***	***
All product types	Quantity	***	***	***	***	***
Fin stock	Value	***	***	***	***	***
Other than fin stock	Value	***	***	***	***	***
All product types	Value	***	***	***	***	***
Fin stock	Unit value	***	***	***	***	***
Other than fin stock	Unit value	***	***	***	***	***
All product types	Unit value	***	***	***	***	***
Fin stock	Share of quantity	***	***	***	***	***
Other than fin stock	Share of quantity	***	***	***	***	***
All product types	Share of quantity	***	***	***	***	***
Fin stock	Share of value	***	***	***	***	***
Other than fin stock	Share of value	***	***	***	***	***
All product types	Share of value	***	***	***	***	***

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table E-25**Aluminum foil: U.S. importers' U.S. shipments of imports from nonsubject countries by product type and period**

Quantity in short tons; value in 1,000 dollars; unit values in dollars per short ton; share in percent

Product type	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Fin stock	Quantity	***	***	***	***	***
Other than fin stock	Quantity	***	***	***	***	***
All product types	Quantity	***	***	***	***	***
Fin stock	Value	***	***	***	***	***
Other than fin stock	Value	***	***	***	***	***
All product types	Value	***	***	***	***	***
Fin stock	Unit value	***	***	***	***	***
Other than fin stock	Unit value	***	***	***	***	***
All product types	Unit value	***	***	***	***	***
Fin stock	Share of quantity	***	***	***	***	***
Other than fin stock	Share of quantity	***	***	***	***	***
All product types	Share of quantity	***	***	***	***	***
Fin stock	Share of value	***	***	***	***	***
Other than fin stock	Share of value	***	***	***	***	***
All product types	Share of value	***	***	***	***	***

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table E-26**Aluminum foil: U.S. importers' U.S. shipments of imports from all sources by product type and period**

Quantity in short tons; value in 1,000 dollars; unit values in dollars per short ton; share in percent

Product type	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Fin stock	Quantity	***	***	***	***	***
Other than fin stock	Quantity	***	***	***	***	***
All product types	Quantity	***	***	***	***	***
Fin stock	Value	***	***	***	***	***
Other than fin stock	Value	***	***	***	***	***
All product types	Value	***	***	***	***	***
Fin stock	Unit value	***	***	***	***	***
Other than fin stock	Unit value	***	***	***	***	***
All product types	Unit value	***	***	***	***	***
Fin stock	Share of quantity	***	***	***	***	***
Other than fin stock	Share of quantity	***	***	***	***	***
All product types	Share of quantity	***	***	***	***	***
Fin stock	Share of value	***	***	***	***	***
Other than fin stock	Share of value	***	***	***	***	***
All product types	Share of value	***	***	***	***	***

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table E-27

Ultra-thin aluminum foil: U.S. producers' and U.S. importers' U.S. Shipments, by source and period

Quantity in short tons; share in percent; ratio of quantity to overall apparent consumption

Source	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
U.S. producers	Quantity	***	***	***	***	***
Armenia	Quantity	***	***	***	***	***
Brazil	Quantity	***	***	***	***	***
Oman	Quantity	***	***	***	***	***
Russia	Quantity	***	***	***	***	***
Turkey	Quantity	***	***	***	***	***
Subject sources	Quantity	***	***	***	***	***
China	Quantity	***	***	***	***	***
Germany	Quantity	***	***	***	***	***
Korea	Quantity	***	***	***	***	***
All other sources	Quantity	***	***	***	***	***
Nonsubject sources	Quantity	***	***	***	***	***
All import sources	Quantity	***	***	***	***	***
All sources	Quantity	***	***	***	***	***
U.S. producers	Share	***	***	***	***	***
Armenia	Share	***	***	***	***	***
Brazil	Share	***	***	***	***	***
Oman	Share	***	***	***	***	***
Russia	Share	***	***	***	***	***
Turkey	Share	***	***	***	***	***
Subject sources	Share	***	***	***	***	***
China	Share	***	***	***	***	***
Germany	Share	***	***	***	***	***
Korea	Share	***	***	***	***	***
All other sources	Share	***	***	***	***	***
Nonsubject sources	Share	***	***	***	***	***
All import sources	Share	***	***	***	***	***
All sources	Share	***	***	***	***	***

Table continued.

Table E-27 Continued

Ultra-thin aluminum foil: U.S. producers' and U.S. importers' U.S. Shipments, by source and period

Quantity in short tons; share in percent; ratio of quantity to overall apparent consumption

Source	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
U.S. producers	Ratio	***	***	***	***	***
Armenia	Ratio	***	***	***	***	***
Brazil	Ratio	***	***	***	***	***
Oman	Ratio	***	***	***	***	***
Russia	Ratio	***	***	***	***	***
Turkey	Ratio	***	***	***	***	***
Subject sources	Ratio	***	***	***	***	***
China	Ratio	***	***	***	***	***
Germany	Ratio	***	***	***	***	***
Korea	Ratio	***	***	***	***	***
All other sources	Ratio	***	***	***	***	***
Nonsubject sources	Ratio	***	***	***	***	***
All import sources	Ratio	***	***	***	***	***
All sources	Ratio	***	***	***	***	***

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---". The data in this table reflect both the total market and the merchant market.

Table E-28

Thin aluminum foil: U.S. producers' and U.S. importers' U.S. Shipments, by source and period

Quantity in short tons; share in percent; ratio of quantity to overall apparent consumption

Source	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
U.S. producers	Quantity	***	***	***	***	***
Armenia	Quantity	***	***	***	***	***
Brazil	Quantity	***	***	***	***	***
Oman	Quantity	***	***	***	***	***
Russia	Quantity	***	***	***	***	***
Turkey	Quantity	***	***	***	***	***
Subject sources	Quantity	***	***	***	***	***
China	Quantity	***	***	***	***	***
Germany	Quantity	***	***	***	***	***
Korea	Quantity	***	***	***	***	***
All other sources	Quantity	***	***	***	***	***
Nonsubject sources	Quantity	***	***	***	***	***
All import sources	Quantity	***	***	***	***	***
All sources	Quantity	***	***	***	***	***
U.S. producers	Share	***	***	***	***	***
Armenia	Share	***	***	***	***	***
Brazil	Share	***	***	***	***	***
Oman	Share	***	***	***	***	***
Russia	Share	***	***	***	***	***
Turkey	Share	***	***	***	***	***
Subject sources	Share	***	***	***	***	***
China	Share	***	***	***	***	***
Germany	Share	***	***	***	***	***
Korea	Share	***	***	***	***	***
All other sources	Share	***	***	***	***	***
Nonsubject sources	Share	***	***	***	***	***
All import sources	Share	***	***	***	***	***
All sources	Share	***	***	***	***	***

Table continued.

Table E-28 Continued

Thin aluminum foil: U.S. producers' and U.S. importers' U.S. Shipments, by source and period

Quantity in short tons; share in percent; ratio of quantity to overall apparent consumption

Source	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
U.S. producers	Ratio	***	***	***	***	***
Armenia	Ratio	***	***	***	***	***
Brazil	Ratio	***	***	***	***	***
Oman	Ratio	***	***	***	***	***
Russia	Ratio	***	***	***	***	***
Turkey	Ratio	***	***	***	***	***
Subject sources	Ratio	***	***	***	***	***
China	Ratio	***	***	***	***	***
Germany	Ratio	***	***	***	***	***
Korea	Ratio	***	***	***	***	***
All other sources	Ratio	***	***	***	***	***
Nonsubject sources	Ratio	***	***	***	***	***
All import sources	Ratio	***	***	***	***	***
All sources	Ratio	***	***	***	***	***

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---". The data in this table reflect both the total market and the merchant market.

Table E-29

Standard aluminum foil: U.S. producers' and U.S. importers' U.S. shipments (total market), by source and period

Quantity in short tons; share in percent; ratio of quantity to overall apparent consumption

Source	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
U.S. producers	Quantity	***	***	***	***	***
Armenia	Quantity	***	***	***	***	***
Brazil	Quantity	***	***	***	***	***
Oman	Quantity	***	***	***	***	***
Russia	Quantity	***	***	***	***	***
Turkey	Quantity	***	***	***	***	***
Subject sources	Quantity	***	***	***	***	***
China	Quantity	***	***	***	***	***
Germany	Quantity	***	***	***	***	***
Korea	Quantity	***	***	***	***	***
All other sources	Quantity	***	***	***	***	***
Nonsubject sources	Quantity	***	***	***	***	***
All import sources	Quantity	***	***	***	***	***
All sources, total market	Quantity	***	***	***	***	***
U.S. producers	Share	***	***	***	***	***
Armenia	Share	***	***	***	***	***
Brazil	Share	***	***	***	***	***
Oman	Share	***	***	***	***	***
Russia	Share	***	***	***	***	***
Turkey	Share	***	***	***	***	***
Subject sources	Share	***	***	***	***	***
China	Share	***	***	***	***	***
Germany	Share	***	***	***	***	***
Korea	Share	***	***	***	***	***
All other sources	Share	***	***	***	***	***
Nonsubject sources	Share	***	***	***	***	***
All import sources	Share	***	***	***	***	***
All sources, total market	Share	***	***	***	***	***

Table continued.

Table E-29 Continued

Standard aluminum foil: U.S. producers' and U.S. importers' U.S. shipments (total market), by source and period

Quantity in short tons; share in percent; ratio of quantity to overall apparent consumption

Source	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
U.S. producers	Ratio	***	***	***	***	***
Armenia	Ratio	***	***	***	***	***
Brazil	Ratio	***	***	***	***	***
Oman	Ratio	***	***	***	***	***
Russia	Ratio	***	***	***	***	***
Turkey	Ratio	***	***	***	***	***
Subject sources	Ratio	***	***	***	***	***
China	Ratio	***	***	***	***	***
Germany	Ratio	***	***	***	***	***
Korea	Ratio	***	***	***	***	***
All other sources	Ratio	***	***	***	***	***
Nonsubject sources	Ratio	***	***	***	***	***
All import sources	Ratio	***	***	***	***	***
All sources, total market	Ratio	***	***	***	***	***

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---". The data in this table reflect both the total market and the merchant market.

Table E-30

Standard aluminum foil: U.S. producers' commercial U.S. shipments and U.S. importers' U.S. shipments (merchant market), by source and period

Quantity in short tons; share in percent; ratio of quantity to overall percent

Source	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
U.S. producers	Quantity	***	***	***	***	***
Armenia	Quantity	***	***	***	***	***
Brazil	Quantity	***	***	***	***	***
Oman	Quantity	***	***	***	***	***
Russia	Quantity	***	***	***	***	***
Turkey	Quantity	***	***	***	***	***
Subject sources	Quantity	***	***	***	***	***
China	Quantity	***	***	***	***	***
Germany	Quantity	***	***	***	***	***
Korea	Quantity	***	***	***	***	***
All other sources	Quantity	***	***	***	***	***
Nonsubject sources	Quantity	***	***	***	***	***
All import sources	Quantity	***	***	***	***	***
All sources, merchant market	Quantity	***	***	***	***	***
U.S. producers	Share	***	***	***	***	***
Armenia	Share	***	***	***	***	***
Brazil	Share	***	***	***	***	***
Oman	Share	***	***	***	***	***
Russia	Share	***	***	***	***	***
Turkey	Share	***	***	***	***	***
Subject sources	Share	***	***	***	***	***
China	Share	***	***	***	***	***
Germany	Share	***	***	***	***	***
Korea	Share	***	***	***	***	***
All other sources	Share	***	***	***	***	***
Nonsubject sources	Share	***	***	***	***	***
All import sources	Share	***	***	***	***	***
All sources, merchant market	Share	***	***	***	***	***

Table continued.

Table E-30 Continued

Standard aluminum foil: U.S. producers' commercial U.S. shipments and U.S. importers' U.S. shipments (merchant market), by source and period

Quantity in short tons; share in percent; ratio of quantity to overall percent

Source	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
U.S. producers	Ratio	***	***	***	***	***
Armenia	Ratio	***	***	***	***	***
Brazil	Ratio	***	***	***	***	***
Oman	Ratio	***	***	***	***	***
Russia	Ratio	***	***	***	***	***
Turkey	Ratio	***	***	***	***	***
Subject sources	Ratio	***	***	***	***	***
China	Ratio	***	***	***	***	***
Germany	Ratio	***	***	***	***	***
Korea	Ratio	***	***	***	***	***
All other sources	Ratio	***	***	***	***	***
Nonsubject sources	Ratio	***	***	***	***	***
All import sources	Ratio	***	***	***	***	***
All sources, merchant market	Ratio	***	***	***	***	***

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---". The data in this table reflect both the total market and the merchant market.

Table E-31
Heavy aluminum foil: U.S. producers' and U.S. importers' U.S. shipments, by source and period

Quantity in short tons; share in percent; ratio of quantity to overall apparent market consumption

Source	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
U.S. producers	Quantity	***	***	***	***	***
Armenia	Quantity	***	***	***	***	***
Brazil	Quantity	***	***	***	***	***
Oman	Quantity	***	***	***	***	***
Russia	Quantity	***	***	***	***	***
Turkey	Quantity	***	***	***	***	***
Subject sources	Quantity	***	***	***	***	***
China	Quantity	***	***	***	***	***
Germany	Quantity	***	***	***	***	***
Korea	Quantity	***	***	***	***	***
All other sources	Quantity	***	***	***	***	***
Nonsubject sources	Quantity	***	***	***	***	***
All import sources	Quantity	***	***	***	***	***
All sources	Quantity	***	***	***	***	***
U.S. producers	Share	***	***	***	***	***
Armenia	Share	***	***	***	***	***
Brazil	Share	***	***	***	***	***
Oman	Share	***	***	***	***	***
Russia	Share	***	***	***	***	***
Turkey	Share	***	***	***	***	***
Subject sources	Share	***	***	***	***	***
China	Share	***	***	***	***	***
Germany	Share	***	***	***	***	***
Korea	Share	***	***	***	***	***
All other sources	Share	***	***	***	***	***
Nonsubject sources	Share	***	***	***	***	***
All import sources	Share	***	***	***	***	***
All sources	Share	***	***	***	***	***

Table continued.

Table E-31 Continued

Heavy aluminum foil: U.S. producers' and U.S. importers' U.S. shipments, by source and period

Quantity in short tons; share in percent; ratio of quantity to overall apparent market consumption

Source	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
U.S. producers	Ratio	***	***	***	***	***
Armenia	Ratio	***	***	***	***	***
Brazil	Ratio	***	***	***	***	***
Oman	Ratio	***	***	***	***	***
Russia	Ratio	***	***	***	***	***
Turkey	Ratio	***	***	***	***	***
Subject sources	Ratio	***	***	***	***	***
China	Ratio	***	***	***	***	***
Germany	Ratio	***	***	***	***	***
Korea	Ratio	***	***	***	***	***
All other sources	Ratio	***	***	***	***	***
Nonsubject sources	Ratio	***	***	***	***	***
All import sources	Ratio	***	***	***	***	***
All sources	Ratio	***	***	***	***	***

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---". The data in this table reflect both the total market and the merchant market.

Table E-32

Extra heavy aluminum foil: U.S. producers' and U.S. importers' U.S. shipments, by source and period

Quantity in short tons; share in percent; ratio of quantity to overall apparent consumption

Source	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
U.S. producers	Quantity	***	***	***	***	***
Armenia	Quantity	***	***	***	***	***
Brazil	Quantity	***	***	***	***	***
Oman	Quantity	***	***	***	***	***
Russia	Quantity	***	***	***	***	***
Turkey	Quantity	***	***	***	***	***
Subject sources	Quantity	***	***	***	***	***
China	Quantity	***	***	***	***	***
Germany	Quantity	***	***	***	***	***
Korea	Quantity	***	***	***	***	***
All other sources	Quantity	***	***	***	***	***
Nonsubject sources	Quantity	***	***	***	***	***
All import sources	Quantity	***	***	***	***	***
All sources	Quantity	***	***	***	***	***
U.S. producers	Share	***	***	***	***	***
Armenia	Share	***	***	***	***	***
Brazil	Share	***	***	***	***	***
Oman	Share	***	***	***	***	***
Russia	Share	***	***	***	***	***
Turkey	Share	***	***	***	***	***
Subject sources	Share	***	***	***	***	***
China	Share	***	***	***	***	***
Germany	Share	***	***	***	***	***
Korea	Share	***	***	***	***	***
All other sources	Share	***	***	***	***	***
Nonsubject sources	Share	***	***	***	***	***
All import sources	Share	***	***	***	***	***
All sources	Share	***	***	***	***	***

Table continued.

Table E-32 Continued

Extra heavy aluminum foil: U.S. producers' and U.S. importers' U.S. shipments, by source and period

Quantity in short tons; share in percent; ratio of quantity to overall apparent consumption

Source	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
U.S. producers	Ratio	***	***	***	***	***
Armenia	Ratio	***	***	***	***	***
Brazil	Ratio	***	***	***	***	***
Oman	Ratio	***	***	***	***	***
Russia	Ratio	***	***	***	***	***
Turkey	Ratio	***	***	***	***	***
Subject sources	Ratio	***	***	***	***	***
China	Ratio	***	***	***	***	***
Germany	Ratio	***	***	***	***	***
Korea	Ratio	***	***	***	***	***
All other sources	Ratio	***	***	***	***	***
Nonsubject sources	Ratio	***	***	***	***	***
All import sources	Ratio	***	***	***	***	***
All sources	Ratio	***	***	***	***	***

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---". The data in this table reflect both the total market and the merchant market.

Table E-33

Fin stock aluminum foil: U.S. producers' and U.S. importers' U.S. shipments, by source and period

Quantity in short tons; share in percent; ratio of quantity to overall apparent consumption

Source	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
U.S. producers	Quantity	***	***	***	***	***
Armenia	Quantity	***	***	***	***	***
Brazil	Quantity	***	***	***	***	***
Oman	Quantity	***	***	***	***	***
Russia	Quantity	***	***	***	***	***
Turkey	Quantity	***	***	***	***	***
Subject sources	Quantity	***	***	***	***	***
China	Quantity	***	***	***	***	***
Germany	Quantity	***	***	***	***	***
Korea	Quantity	***	***	***	***	***
All other sources	Quantity	***	***	***	***	***
Nonsubject sources	Quantity	***	***	***	***	***
All import sources	Quantity	***	***	***	***	***
All sources	Quantity	***	***	***	***	***
U.S. producers	Share	***	***	***	***	***
Armenia	Share	***	***	***	***	***
Brazil	Share	***	***	***	***	***
Oman	Share	***	***	***	***	***
Russia	Share	***	***	***	***	***
Turkey	Share	***	***	***	***	***
Subject sources	Share	***	***	***	***	***
China	Share	***	***	***	***	***
Germany	Share	***	***	***	***	***
Korea	Share	***	***	***	***	***
All other sources	Share	***	***	***	***	***
Nonsubject sources	Share	***	***	***	***	***
All import sources	Share	***	***	***	***	***
All sources	Share	***	***	***	***	***

Table continued.

Table E-33 Continued

Fin stock aluminum foil: U.S. producers' and U.S. importers' U.S. shipments, by source and period

Quantity in short tons; share in percent; ratio of quantity to overall apparent consumption

Source	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
U.S. producers	Ratio	***	***	***	***	***
Armenia	Ratio	***	***	***	***	***
Brazil	Ratio	***	***	***	***	***
Oman	Ratio	***	***	***	***	***
Russia	Ratio	***	***	***	***	***
Turkey	Ratio	***	***	***	***	***
Subject sources	Ratio	***	***	***	***	***
China	Ratio	***	***	***	***	***
Germany	Ratio	***	***	***	***	***
Korea	Ratio	***	***	***	***	***
All other sources	Ratio	***	***	***	***	***
Nonsubject sources	Ratio	***	***	***	***	***
All import sources	Ratio	***	***	***	***	***
All sources	Ratio	***	***	***	***	***

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---". The data in this table reflect both the total market and the merchant market.

APPENDIX F

PRODUCTION SHIFTING AND PRODUCTION FOR MARKET SEGMENTS

Table F-1
Aluminum foil: Count of firms' ability to switch production between categories of aluminum foil thickness by producer type

Count in number of firms reporting

Aluminum foil thickness	Firm type	No	Yes
Ultra-thin	U.S. producers	4	1
Ultra-thin	Foreign producers	1	7
Thin	U.S. producers	4	1
Thin	Foreign producers	1	7
Standard	U.S. producers	2	3
Standard	Foreign producers	1	7
Heavy	U.S. producers	1	4
Heavy	Foreign producers	1	7
Extra heavy	U.S. producers	0	5
Extra heavy	Foreign producers	1	7

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

Table F-2
Aluminum foil: Count of firms' capability to produce and those who have produced specific product types of aluminum foil since January 1, 2018, by producer type

Count in number of firms reporting

Item	Firm type	No	Yes
Capable of producing ultra-thin extra wide	U.S. producers	4	1
Capable of producing ultra-thin extra wide	Foreign producers	4	4
Have produced ultra-thin extra wide	U.S. producers	4	1
Have produced ultra-thin extra wide	Foreign producers	4	4
Capable of producing specific gauge ultra-thin	U.S. producers	3	2
Capable of producing specific gauge ultra-thin	Foreign producers	1	7
Have produced specific gauge ultra-thin	U.S. producers	3	2
Have produced specific gauge ultra-thin	Foreign producers	2	6
Capable of producing 8000 series standard	U.S. producers	1	4
Capable of producing 8000 series standard	Foreign producers	1	7
Have produced 8000 series standard	U.S. producers	2	3
Have produced 8000 series standard	Foreign producers	1	7

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

Table F-3
Aluminum foil: U.S. producers' responses to production shifting between categories of aluminum foil, by firm and foil thickness

Firm	Aluminum foil thickness	Explanation for production ceasing
***	Ultra-thin	***
***	Ultra-thin	***
***	Thin	***
***	Thin	***
***	Standard	***

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

Table F-4
Aluminum foil: U.S. producers' responses to production for market segments, by firm and product type

Firm	Product type	Capable of producing	Actually produced since January 1, 2018	Explanation
***	Ultra-thin extra wide	***	***	***
***	Ultra-thin extra wide	***	***	***
***	Ultra-thin extra wide	***	***	***
***	Ultra-thin extra wide	***	***	***

Table continued.

Table F-4 Continued

Aluminum foil: U.S. producers' responses to production for market segments, by firm and product type

Firm	Product type	Capable of producing	Actually produced since January 1, 2018	Explanation
***	Ultra-thin extra wide	***	***	***
***	Ultra-thin or thin special gauge	***	***	***
***	Ultra-thin or thin special gauge	***	***	***
***	Ultra-thin or thin special gauge	***	***	***
***	Ultra-thin or thin special gauge	***	***	***

Table continued.

Table F-4 Continued

Aluminum foil: U.S. producers' responses to production for market segments, by firm and product type

Firm	Product type	Capable of producing	Actually produced since January 1, 2018	Explanation
***	Ultra-thin or thin special gauge	***	***	***
***	8000 series standard gauge	***	***	***
***	8000 series standard gauge	***	***	***
***	8000 series standard gauge	***	***	***
***	8000 series standard gauge	***	***	***
***	8000 series standard gauge	***	***	***

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

Table F-6
Aluminum foil: Foreign producers' responses to production for market segments, by firm and product type

Firm	Product type	Capable of producing	Actually produced since January 1, 2018	Explanation
***	Ultra-thin extra wide	***	***	***
***	Ultra-thin extra wide	***	***	***
***	Ultra-thin extra wide	***	***	***

Table continued.

Table F-6 Continued

Aluminum foil: Foreign producers' responses to production for market segments, by firm and product type

Firm	Product type	Capable of producing	Actually produced since January 1, 2018	Explanation
***	Ultra-thin extra wide	***	***	***
***	Ultra-thin extra wide	***	***	***
***	Ultra-thin extra wide	***	***	***
***	Ultra-thin extra wide	***	***	***
***	Ultra-thin extra wide	***	***	***
***	Ultra-thin or thin special gauge	***	***	***

Table continued.

Table F-6 Continued

Aluminum foil: Foreign producers' responses to production for market segments, by firm and product type

Firm	Product type	Capable of producing	Actually produced since January 1, 2018	Explanation
***	Ultra-thin or thin special gauge	***	***	***
***	Ultra-thin or thin special gauge	***	***	***
***	Ultra-thin or thin special gauge	***	***	***
***	Ultra-thin or thin special gauge	***	***	***
***	Ultra-thin or thin special gauge	***	***	***
***	Ultra-thin or thin special gauge	***	***	***

Table continued.

Table F-6 Continued

Aluminum foil: Foreign producers' responses to production for market segments, by firm and product type

Firm	Product type	Capable of producing	Actually produced since January 1, 2018	Explanation
***	Ultra-thin or thin special gauge	***	***	***
***	8000 series standard gauge	***	***	***
***	8000 series standard gauge	***	***	***
***	8000 series standard gauge	***	***	***
***	8000 series standard gauge	***	***	***
***	8000 series standard gauge	***	***	***
***	8000 series standard gauge	***	***	***
***	8000 series standard gauge	***	***	***
***	8000 series standard gauge	***	***	***

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

Table F-7

Aluminum foil: U.S. producers' responses to fin stock production questions

Firm	Has your firm shifted capacity or production previously used for fin stock to out-of-scope heavier-gauge aluminum products, such as automotive body sheet? Yes/No; If yes, please list the products that the capacity or production shifted into.	Has your firm shifted capacity or production previously used for fin stock to other in-scope extra-heavy-gauge aluminum products, such as automotive body sheet? Yes/No; If yes, please list the products that the capacity or production shifted into.	What percentage of your extra-heavy segment production is made up of fin-stock?
***	***	***	***
***	***	***	***

Table continued.

Table F-7 Continued

Aluminum foil: U.S. producers' responses to fin stock production questions

Firm	Has your firm shifted capacity or production previously used for fin stock to out-of-scope heavier-gauge aluminum products, such as automotive body sheet? Yes/No; If yes, please list the products that the capacity or production shifted into.	Has your firm shifted capacity or production previously used for fin stock to other in-scope extra-heavy-gauge aluminum products, such as automotive body sheet? Yes/No; If yes, please list the products that the capacity or production shifted into.	What percentage of your extra-heavy segment production is made up of fin-stock?
***	***	***	***
***	***	***	***

Source: Domestic producers' posthearing briefs, September 21, 2021 and correspondence with *** on September 22, 2021.

Table F-8

Aluminum foil: Foreign producers' responses to fin stock production questions

Firm	Has your firm shifted capacity or production previously used for fin stock to out-of-scope heavier-gauge aluminum products, such as automotive body sheet? Yes/No; If yes, please list the products that the capacity or production shifted into.	Has your firm shifted capacity or production previously used for fin stock to other in-scope extra-heavy-gauge aluminum products, such as automotive body sheet? Yes/No; If yes, please list the products that the capacity or production shifted into.	What percentage of your extra-heavy segment production is made up of fin-stock?
***	***	***	***
***	***	***	***

Table continued.

Table F-8 Continued

Aluminum foil: Foreign producers' responses to fin stock production questions

Firm	<p>Has your firm shifted capacity or production previously used for fin stock to out-of-scope heavier-gauge aluminum products, such as automotive body sheet? Yes/No; If yes, please list the products that the capacity or production shifted into.</p>	<p>Has your firm shifted capacity or production previously used for fin stock to other in-scope extra-heavy-gauge aluminum products, such as automotive body sheet? Yes/No; If yes, please list the products that the capacity or production shifted into.</p>	<p>What percentage of your extra-heavy segment production is made up of fin-stock?</p>
***	***	***	***

Table continued.

Table F-8 Continued

Aluminum foil: Foreign producers' responses to fin stock production questions

Firm	Has your firm shifted capacity or production previously used for fin stock to out-of-scope heavier-gauge aluminum products, such as automotive body sheet? Yes/No; If yes, please list the products that the capacity or production shifted into.	Has your firm shifted capacity or production previously used for fin stock to other in-scope extra-heavy-gauge aluminum products, such as automotive body sheet? Yes/No; If yes, please list the products that the capacity or production shifted into.	What percentage of your extra-heavy segment production is made up of fin-stock?
***	***	***	***
***	***	***	***
***	***	***	***

Source: Respondent producers' posthearing briefs, September 21, 2021.

APPENDIX G

RAW MATERIAL AND INDEXED PRICE

Table G-1**Raw materials: Price in USD per short ton of aluminum, by month**

Price in dollars per short ton

Year	Month	Price
2018	January	2,005
2018	February	1,979
2018	March	1,877
2018	April	2,045
2018	May	2,086
2018	June	2,030
2018	July	1,889
2018	August	1,861
2018	September	1,838
2018	October	1,841
2018	November	1,759
2018	December	1,742
2019	January	1,682
2019	February	1,690
2019	March	1,698
2019	April	1,674
2019	May	1,616
2019	June	1,593
2019	July	1,630
2019	August	1,579
2019	September	1,591
2019	October	1,566
2019	November	1,610
2019	December	1,607
2020	January	1,609
2020	February	1,531
2020	March	1,461
2020	April	1,324
2020	May	1,330
2020	June	1,423
2020	July	1,491
2020	August	1,577
2020	September	1,582
2020	October	1,638
2020	November	1,756
2020	December	1,828
2021	January	1,818
2021	February	1,886
2021	March	1,987

Source: Federal Reserve Economic Data (FRED), St. Louis Federal Reserve Bank, retrieved August 13, 2021.

Table G-2**Aluminum: High price per pound for Platt's Midwest premium by month January 2018- December 2020**

Price in dollars per pound

Period	Month	High price for Platt's Midwest Premium
2018	January	***
2018	February	***
2018	March	***
2018	April	***
2018	May	***
2018	June	***
2018	July	***
2018	August	***
2018	September	***
2018	October	***
2018	November	***
2018	December	***
2019	January	***
2019	February	***
2019	March	***
2019	April	***
2019	May	***
2019	June	***
2019	July	***
2019	August	***
2019	September	***
2019	October	***
2019	November	***
2019	December	***
2020	January	***
2020	February	***
2020	March	***
2020	April	***
2020	May	***
2020	June	***
2020	July	***
2020	August	***
2020	September	***
2020	October	***
2020	November	***
2020	December	***

Source: ***.

Table G-3
Aluminum foil: Indexed U.S. producer prices, January 2018 through March 2021

Index in ratio as a percent of Jan.-Mar 2018 observation

Period	Product 1	Product 2	Product 3	Product 4
2018 Q1	---	100.0	100.0	100.0
2018 Q2	---	110.6	106.8	104.9
2018 Q3	---	101.6	106.3	102.4
2018 Q4	---	92.4	102.2	102.6
2019 Q1	---	90.2	101.3	103.8
2019 Q2	---	88.2	100.6	102.1
2019 Q3	---	86.7	97.8	99.9
2019 Q4	---	85.4	95.7	98.8
2020 Q1	---	83.1	95.3	96.7
2020 Q2	---	72.4	85.9	84.1
2020 Q3	---	72.8	85.7	91.0
2020 Q4	---	84.7	92.0	97.7
2021 Q1	---	94.8	104.8	103.2

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

Table G-4
Aluminum foil: Indexed subject U.S. importer purchase costs by quarter, January 2018 through March 2021

Index in ratio as a percent of Jan.-Mar 2018 observation

Period	Product 1	Product 2	Product 3	Product 4
2018 Q1	100.0	---	100.0	100.0
2018 Q2	104.3	---	109.2	101.0
2018 Q3	---	---	116.5	112.6
2018 Q4	---	---	116.4	111.9
2019 Q1	132.2	---	113.1	106.3
2019 Q2	116.6	---	109.4	104.6
2019 Q3	102.2	---	105.1	106.4
2019 Q4	115.6	---	104.7	106.1
2020 Q1	114.6	---	100.8	102.7
2020 Q2	106.9	---	95.7	106.4
2020 Q3	101.4	---	86.9	94.4
2020 Q4	107.2	---	89.7	88.3
2021 Q1	97.3	---	95.4	92.5

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

APPENDIX H

SUPPLEMENTAL OMAN AND PRODUCER PRICING DATA

Table H-1

Aluminum foil: Weighted-average f.o.b. prices and quantities of domestic and imported product S1, and margins of underselling/(overselling), by quarter

Quantity in pounds; Prices in dollars per pound; Margins in percent

Period	US price	US quantity	Oman price	Oman quantity	Oman margin
2018 Q1	***	***	***	***	***
2018 Q2	***	***	***	***	***
2018 Q3	***	***	***	***	***
2018 Q4	***	***	***	***	***
2019 Q1	***	***	***	***	***
2019 Q2	***	***	***	***	***
2019 Q3	***	***	***	***	***
2019 Q4	***	***	***	***	***
2020 Q1	***	***	***	***	***
2020 Q2	***	***	***	***	***
2020 Q3	***	***	***	***	***
2020 Q4	***	***	***	***	***
2021 Q1	***	***	***	***	***

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

Note: Product S1: Aluminum in the 8XXX series, standard tempers, 0.002-0.0039 inch thickness, width 6-40", mill finish. (This product is equivalent to the product 1 from the preliminary phase questionnaire submissions)

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

Figure H-1
Aluminum foil: Weighted-average f.o.b. prices and quantities of domestic and imported product S1, by quarter

*	*	*	*	*	*	*
*	*	*	*	*	*	*

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

Table H-2**Aluminum foil: Number of quarters containing observations low price, high price, and change in price over period, by product S1 and source**

Quantity in pounds; Prices and unit LDP values in dollars per pound; Change in percent

Product	Source	Number of quarters	Quantity	Low price	High price	First quarter price	Last quarter price	Change over period
Product S1	United States	***	***	***	***	***	***	***
Product S1	Oman	***	***	***	***	***	***	***

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

Table H-3**Aluminum foil: Instances of underselling/overselling and the range and average of margins, by product**

Quantity in pounds; Margins and differentials in percent.

Item	Type	Number of quarters	Quantity	Average margin	Minimum margin	Maximum margin
Product 1	Underselling	***	***	***	***	***
Product 2	Underselling	***	***	***	***	***
Product 3	Underselling	***	***	***	***	***
Product 4	Underselling	***	***	***	***	***
Product S1	Underselling	***	***	***	***	***
Total, underselling	Underselling	***	***	***	***	***
Product 1	Overselling	***	***	***	***	***
Product 2	Overselling	***	***	***	***	***
Product 3	Overselling	***	***	***	***	***
Product 4	Overselling	***	***	***	***	***
Product S1	Overselling	***	***	***	***	***
Total, overselling	Overselling	***	***	***	***	***

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

Table H-4
Aluminum foil: Instances of underselling/overselling and the range and average of margins, by country

Quantity in pounds; Margins and differentials in percent.

Item	Type	Number of quarters	Quantity	Average margin	Minimum margin	Maximum margin
Armenia	Underselling	***	***	***	***	***
Brazil	Underselling	***	***	***	***	***
Oman	Underselling	***	***	***	***	***
Russia	Underselling	***	***	***	***	***
Turkey	Underselling	***	***	***	***	***
Total, underselling	Underselling	***	***	***	***	***
Armenia	Overselling	***	***	***	***	***
Brazil	Overselling	***	***	***	***	***
Oman	Overselling	***	***	***	***	***
Russia	Overselling	***	***	***	***	***
Turkey	Overselling	***	***	***	***	***
Total, overselling	Overselling	***	***	***	***	***

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

Table H-5
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

Quantity in pounds; Margins and differentials in percent.

Item	Type	Number of quarters	Quantity	Average differential	Minimum differential	Maximum differential
Product 1	Lower	***	***	***	***	***
Product 2	Lower	***	***	***	***	***
Product 3	Lower	***	***	***	***	***
Product 4	Lower	***	***	***	***	***
Total, lower	Lower	72	274,867,010	11.8	0.2	35.9
Product 1	Higher	***	***	***	***	***
Product 2	Higher	***	***	***	***	***
Product 3	Higher	***	***	***	***	***
Product 4	Higher	***	***	***	***	***
Total, higher	Higher	19	70,234,375	(5.0)	(0.1)	(15.9)

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

Table H-6

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

Quantity in pounds; Margins and differentials in percent

Item	Type	Number of quarters	Quantity	Average differential	Minimum differential	Maximum differential
Armenia	Lower	***	***	***	***	***
Brazil	Lower	***	***	***	***	***
Oman	Lower	***	***	***	***	***
Russia	Lower	***	***	***	***	***
Turkey	Lower	***	***	***	***	***
Total, lower	Lower	72	274,867,010	11.8	0.2	35.9
Armenia	Higher	***	***	***	***	***
Brazil	Higher	***	***	***	***	***
Oman	Higher	***	***	***	***	***
Russia	Higher	***	***	***	***	***
Turkey	Higher	***	***	***	***	***
Total, higher	Higher	19	70,234,375	(5.0)	(0.1)	(15.9)

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

APPENDIX J

NONSUBJECT PRICING DATA AND QUARTERLY CONVERSION PRICE DATA

Nonsubject price data

Five importers reported price data for China, Germany, and South Korea for products 1-4. Price data reported by these firms accounted for 33.5 percent of U.S. commercial shipments of imports from China, Germany, and South Korea in 2020. These price items and accompanying data are comparable to those presented in tables V-4 to V-7. Price and quantity data for China, Germany, and South Korea are shown in tables J-1 to J-4 and in figures J-1 to J-4 (with domestic and subject sources).

In comparing nonsubject country pricing data with U.S. producer pricing data, prices for product imported from China, Germany, and South Korea were lower than prices for U.S.-produced product in one instance and higher in 10 instances. In comparing nonsubject country pricing data with subject country pricing data, prices for product imported from Armenia, Brazil, Oman, Russia, and Turkey were lower than prices for product imported from subject countries in one instance and higher in four instances. A summary of price differentials is presented in table J-6.

Table J-1

Aluminum foil: Weighted-average f.o.b. prices and quantities of domestic and imported product 1, and margins of underselling/(overselling), by quarter

Price in dollars per pound, quantity in pounds

Period	US price	US quantity	China price	China quantity	China margin
2018 Q1	***	***	***	***	***
2018 Q2	***	***	***	***	***
2018 Q3	***	***	***	***	***
2018 Q4	***	***	***	***	***
2019 Q1	***	***	***	***	***
2019 Q2	***	***	***	***	***
2019 Q3	***	***	***	***	***
2019 Q4	***	***	***	***	***
2020 Q1	***	***	***	***	***
2020 Q2	***	***	***	***	***
2020 Q3	***	***	***	***	***
2021 Q1	***	***	***	***	***

Period	Germany price	Germany quantity	Germany margin	Korea price	Korea quantity	Korea margin
2018 Q1	***	***	***	***	***	***
2018 Q2	***	***	***	***	***	***
2018 Q3	***	***	***	***	***	***
2018 Q4	***	***	***	***	***	***
2019 Q1	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***

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

Note: Product 1: Aluminum in the 8XXX or 1XXX series, standard tempers, 0.000235ga – 0.00025ga, all widths, mill finish.

Table J-2

Aluminum foil: Weighted-average f.o.b. prices and quantities of domestic and imported product 2, and margins of underselling/(overselling), by quarter

Price in dollars per pound, quantity in pounds

Period	US price	US quantity	China price	China quantity	China margin
2018 Q1	***	***	***	***	***
2018 Q2	***	***	***	***	***
2018 Q3	***	***	***	***	***
2018 Q4	***	***	***	***	***
2019 Q1	***	***	***	***	***
2019 Q2	***	***	***	***	***
2019 Q3	***	***	***	***	***
2019 Q4	***	***	***	***	***
2020 Q1	***	***	***	***	***
2020 Q2	***	***	***	***	***
2020 Q3	***	***	***	***	***
2021 Q1	***	***	***	***	***

Period	Germany price	Germany quantity	Germany margin	Korea price	Korea quantity	Korea margin
2018 Q1	***	***	***	***	***	***
2018 Q2	***	***	***	***	***	***
2018 Q3	***	***	***	***	***	***
2018 Q4	***	***	***	***	***	***
2019 Q1	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***

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

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

Table J-3

Aluminum foil: Weighted-average f.o.b. prices and quantities of domestic and imported product 3, and margins of underselling/(overselling), by quarter

Price in dollars per pound, quantity in pounds

Period	US price	US quantity	China price	China quantity	China margin
2018 Q1	***	***	***	***	***
2018 Q2	***	***	***	***	***
2018 Q3	***	***	***	***	***
2018 Q4	***	***	***	***	***
2019 Q1	***	***	***	***	***
2019 Q2	***	***	***	***	***
2019 Q3	***	***	***	***	***
2019 Q4	***	***	***	***	***
2020 Q1	***	***	***	***	***
2020 Q2	***	***	***	***	***
2020 Q3	***	***	***	***	***
2021 Q1	***	***	***	***	***

Period	Germany price	Germany quantity	Germany margin	Korea price	Korea quantity	Korea margin
2018 Q1	***	***	***	***	***	***
2018 Q2	***	***	***	***	***	***
2018 Q3	***	***	***	***	***	***
2018 Q4	***	***	***	***	***	***
2019 Q1	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***

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

Note: Product 3: Aluminum in the 8XXX series, standard tempers, 0.00039-0.001 inch thickness, width 12-18", mill finish.

Table J-4

Aluminum foil: Weighted-average f.o.b. prices and quantities of domestic and imported product 4, and margins of underselling/(overselling), by quarter

Price in dollars per pound, quantity in pounds

Period	US price	US quantity	China price	China quantity	China margin
2018 Q1	***	***	***	***	***
2018 Q2	***	***	***	***	***
2018 Q3	***	***	***	***	***
2018 Q4	***	***	***	***	***
2019 Q1	***	***	***	***	***
2019 Q2	***	***	***	***	***
2019 Q3	***	***	***	***	***
2019 Q4	***	***	***	***	***
2020 Q1	***	***	***	***	***
2020 Q2	***	***	***	***	***
2020 Q3	***	***	***	***	***
2021 Q1	***	***	***	***	***

Period	Germany price	Germany quantity	Germany margin	Korea price	Korea quantity	Korea margin
2018 Q1	***	***	***	***	***	***
2018 Q2	***	***	***	***	***	***
2018 Q3	***	***	***	***	***	***
2018 Q4	***	***	***	***	***	***
2019 Q1	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***

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

Note: Product 4: Aluminum in the 3XXX series, standard tempers, 0.0016-0.0032 inch thickness, width 0.5-15", mill finish.

Figure J-1

Aluminum foil: Weighted-average f.o.b. prices and quantities of domestic and imported product 1, by quarter

Price of product 1

* * * * *

Volume of product 1

* * * * *

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

Note: Product 1: Aluminum in the 8XXX or 1XXX series, standard tempers, 0.000235ga – 0.00025ga, all widths, mill finish.

Figure J-2

Aluminum foil: Weighted-average f.o.b. prices and quantities of domestic and imported product 2, by quarter

Price of product 2

* * * * *

Volume of product 2

* * * * *

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

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

Figure J-3

Aluminum foil: Weighted-average f.o.b. prices and quantities of domestic and imported product 3, by quarter

Price of product 3

* * * * *

Volume of product 3

* * * * *

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

Note: Product 3: Aluminum in the 8XXX series, standard tempers, 0.00039-0.001 inch thickness, width 12-18", mill finish.

Figure J-4

Aluminum foil: Weighted-average f.o.b. prices and quantities of domestic and imported product 4, by quarter

Price of product 4

* * * * *

Volume of product 4

* * * * *

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

Note: Product 4: Aluminum in the 3XXX series, standard tempers, 0.0016-0.0032 inch thickness, width 0.5-15", mill finish.

Table J-5

Aluminum foil: Number of quarters containing observations low price, high price, and change in price over period, by product and source, January 2018 through March 2021

Prices in dollars per pound; Quantity in pounds; Change in percent

Product	Source	Number of quarters	Quantity	Low price	High price	First quarter price	Last quarter price	Change over period
Product 1	United States	***	***	***	***	***	***	***
Product 1	China	***	***	***	***	***	***	***
Product 1	Germany	***	***	***	***	***	***	***
Product 1	Korea	***	***	***	***	***	***	***
Product 2	United States	***	***	***	***	***	***	***
Product 2	China	***	***	***	***	***	***	***
Product 2	Germany	***	***	***	***	***	***	***
Product 2	Korea	***	***	***	***	***	***	***
Product 3	United States	***	***	***	***	***	***	***
Product 3	China	***	***	***	***	***	***	***
Product 3	Germany	***	***	***	***	***	***	***
Product 3	Korea	***	***	***	***	***	***	***
Product 4	United States	***	***	***	***	***	***	***
Product 4	China	***	***	***	***	***	***	***
Product 4	Germany	***	***	***	***	***	***	***
Product 4	Korea	***	***	***	***	***	***	***

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

Table J-6

Aluminum foil: Summary of higher/(lower) unit values for nonsubject price data, by source, January 2018 through March 2021

Prices in dollars per pound

Comparison (nonsubject) source	Benchmark (US or subject) source	Number of quarters lower	Quantity lower	Number of quarters higher	Quantity higher
China	United States	***	***	***	***
Germany	United States	***	***	***	***
Korea	United States	***	***	***	***
China	Armenia	***	***	***	***
Germany	Armenia	***	***	***	***
Korea	Armenia	***	***	***	***
China	Brazil	***	***	***	***
Germany	Brazil	***	***	***	***
Korea	Brazil	***	***	***	***
China	Oman	***	***	***	***
Germany	Oman	***	***	***	***
Korea	Oman	***	***	***	***
China	Russia	***	***	***	***
Germany	Russia	***	***	***	***
Korea	Russia	***	***	***	***
China	Turkey	***	***	***	***
Germany	Turkey	***	***	***	***
Korea	Turkey	***	***	***	***
China	Subject	***	***	***	***
Germany	Subject	***	***	***	***
Korea	Subject	***	***	***	***

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

Conversion prices

U.S. producers were asked to report their conversion prices by thickness for supplemental pricing product 1. These are presented in tables J-7 through J-10, along with their explanations (table J-11). Trends in the conversion prices are presented in figures J-5 through J-9.

Table J-7
Aluminum foil: Quarterly conversion prices for Aleris, for product S1 by thickness

Price in dollars per pound

Period	Ultra-thin	Thin	Standard	Heavy	Extra heavy	All foil
2018 Q1	***	***	***	***	***	***
2018 Q2	***	***	***	***	***	***
2018 Q3	***	***	***	***	***	***
2018 Q4	***	***	***	***	***	***
2019 Q1	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***

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

Table J-8
Aluminum foil: Quarterly conversion prices for Gränges, for product S1 by thickness

Price in dollars per pound

Period	Ultra-thin	Thin	Standard	Heavy	Extra heavy	All foil
2018 Q1	***	***	***	***	***	***
2018 Q2	***	***	***	***	***	***
2018 Q3	***	***	***	***	***	***
2018 Q4	***	***	***	***	***	***
2019 Q1	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires

Table J-9
Aluminum foil: Quarterly conversion prices for JW Aluminum, for product S1 by thickness

Price in dollars per pound

Period	Ultra-thin	Thin	Standard	Heavy	Extra heavy	All foil
2018 Q1	***	***	***	***	***	***
2018 Q2	***	***	***	***	***	***
2018 Q3	***	***	***	***	***	***
2018 Q4	***	***	***	***	***	***
2019 Q1	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires

Table J-10
Aluminum foil: Quarterly conversion prices for Novelis, for product S1 by thickness

Price in dollars per pound

Period	Ultra-thin	Thin	Standard	Heavy	Extra heavy	All foil
2018 Q1	***	***	***	***	***	***
2018 Q2	***	***	***	***	***	***
2018 Q3	***	***	***	***	***	***
2018 Q4	***	***	***	***	***	***
2019 Q1	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires

Table J-11

Aluminum foil: Narrative explanations of U.S. producers' quarterly conversion price trends, by firm, since 2018

Firm	Narrative explanation
***	***
***	***
***	***
***	***

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

Figure J-5

Ultra-thin aluminum foil: Conversion prices, by firm and by quarter, January 2018 through March 2021

* * * * *

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

Figure J-6

Thin aluminum foil: Conversion prices, by firm and by quarter, January 2018 through March 2021

* * * * *

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

Figure J-7

Standard aluminum foil: Conversion prices, by firm and by quarter, January 2018 through March 2021

* * * * *

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

Figure J-8

Heavy aluminum foil: Conversion prices, by firm and by quarter, January 2018 through March 2021

* * * * *

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

Figure J-9

Extra heavy aluminum foil: Conversion prices, by firm and by quarter, January 2018 through March 2021

* * * * *

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

APPENDIX K

FIRM-BY-FIRM TOTAL MARKET FINANCIAL DATA

Table K-1 presents selected company-specific financial data for the total market.

Table K-1

Aluminum foil: Total market firm-by-firm total net sales quantity, by period

Net sales quantity

Quantity in short tons

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Granges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	480,076	445,172	430,311	112,344	109,815

Table continued.

Table K-1 Continued

Aluminum foil: Total market firm-by-firm total net sales value, by period

Net sales value

Value in 1,000 dollars

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Granges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	1,672,543	1,458,151	1,309,266	356,491	361,625

Table continued.

Table K-1 Continued

Aluminum foil: Total market firm-by-firm cost of goods sold (“COGS”), by period

COGS

Value in 1,000 dollars

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Granges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	1,584,033	1,373,598	1,221,253	335,568	339,865

Table continued.

Table K-1 Continued**Aluminum foil: Total market firm-by-firm gross profit or (loss), by period****Gross profit or (loss)**

Value in 1,000 dollars

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Granges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	88,510	84,553	88,013	20,923	21,760

Table continued.

Table K-1 Continued**Aluminum foil: Total market firm-by-firm selling, general, and administrative (“SG&A”) expenses, by period****SG&A expenses**

Value in 1,000 dollars

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Granges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	56,067	84,333	64,887	13,630	11,355

Table continued.

Table K-1 Continued**Aluminum foil: Total market firm-by-firm operating income or (loss), by period****Operating income or (loss)**

Value in 1,000 dollars

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Granges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	32,443	220	23,126	7,293	10,405

Table continued.

Table K-1 Continued**Aluminum foil: Total market firm-by-firm net income or (loss), by period****Net income or (loss)**

Value in 1,000 dollars

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Granges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	1,454	(25,845)	191	1,051	9,563

Table continued.

Table K-1 Continued**Aluminum foil: Total market firm-by-firm ratio of COGS to net sales value, by period****COGS to net sales ratio**

Ratios in percent

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Granges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	94.7	94.2	93.3	94.1	94.0

Table continued.

Table K-1 Continued**Aluminum foil: Total market firm-by-firm ratio of gross profit or (loss) to net sales value, by period****Gross profit or (loss) to net sales ratio**

Ratios in percent

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Granges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	5.3	5.8	6.7	5.9	6.0

Table continued.

Table K-1 Continued**Aluminum foil: Total market firm-by-firm ratio of SG&A expenses to net sales value, by period****SG&A expenses to net sales ratio**

Ratios in percent

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Granges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	3.4	5.8	5.0	3.8	3.1

Table continued.

Table K-1 Continued**Aluminum foil: Total market firm-by-firm ratio of operating income or (loss) to net sales value, by period****Operating income or (loss) to net sales ratio**

Ratios in percent

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Granges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	1.9	0.0	1.8	2.0	2.9

Table continued.

Table K-1 Continued**Aluminum foil: Total market firm-by-firm ratio of net income or (loss) to net sales value, by period****Net income or (loss) to net sales ratio**

Ratios in percent

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Granges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	0.1	(1.8)	0.0	0.3	2.6

Table continued.

Table K-1 Continued**Aluminum foil: Total market firm-by-firm unit net sales value, by period****Unit net sales value**

Unit values in dollars per short ton

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Granges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	3,484	3,275	3,043	3,173	3,293

Table continued.

Table K-1 Continued**Aluminum foil: Total market firm-by-firm unit raw material costs, by period****Unit raw material costs**

Unit values in dollars per short ton

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Granges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	2,425	2,185	1,891	2,005	2,207

Table continued.

Table K-1 Continued**Aluminum foil: Total market firm-by-firm unit direct labor cost, by period****Unit direct labor costs**

Unit values in dollars per short ton

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Granges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	252	266	243	265	237

Table continued.

Table K-1 Continued**Aluminum foil: Total market firm-by-firm unit other factory costs, by period****Unit other factory costs**

Unit values in dollars per short ton

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Granges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	623	634	704	716	651

Table continued.

Table K-1 Continued**Aluminum foil: Total market firm-by-firm unit COGS, by period****Unit COGS**

Unit values in dollars per short ton

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Granges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	3,300	3,086	2,838	2,987	3,095

Table continued.

Table K-1 Continued**Aluminum foil: Total market firm-by-firm unit gross profit or (loss), by period****Unit gross profit or (loss)**

Unit values in dollars per short ton

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Granges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	184	190	205	186	198

Table continued.

Table K-1 Continued**Aluminum foil: Total market firm-by-firm unit SG&A expenses, by period****Unit SG&A expenses**

Unit values in dollars per short ton

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Granges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	117	189	151	121	103

Table continued.

Table K-1 Continued**Aluminum foil: Total market firm-by-firm unit operating income or (loss), by period****Unit operating income or (loss)**

Unit values in dollars per short ton

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Granges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	68	0	54	65	95

Table continued.

Table K-1 Continued**Aluminum foil: Total market firm-by-firm unit net income or (loss), by period****Unit net income or (loss)**

Unit values in dollars per short ton

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Aleris	***	***	***	***	***
Granges	***	***	***	***	***
JW Aluminum	***	***	***	***	***
Novelis	***	***	***	***	***
Reynolds	***	***	***	***	***
All firms	3	(58)	0	9	87

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

Note: Ratios shown as "0.0" represent values greater than zero but less than 0.05 percent. Unit values shown as "0" represent non-zero values greater than zero but less than \$0.50.

