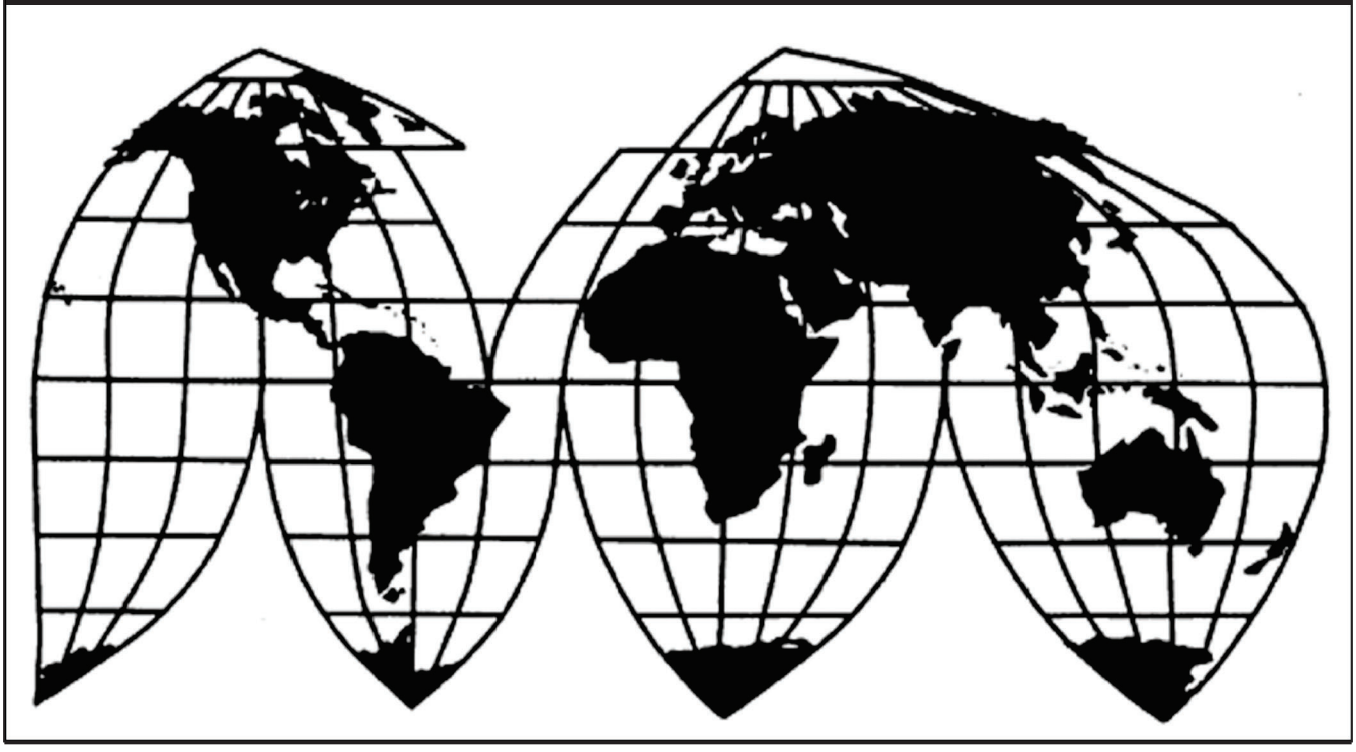
Tin Mill Products from Canada, China, Germany, Netherlands, South Korea, Taiwan, Turkey, and United Kingdom

Investigation Nos. 701-TA-685 and 731-TA-1599-1606 (Preliminary)

Publication 5413 **March 2023**

U.S. International Trade Commission



Washington, DC 20436

U.S. International Trade Commission

COMMISSIONERS

David S. Johanson, Chairman
Rhonda K. Schmidtlein
Jason E. Kearns
Randolph J. Stayin
Amy A. Karpel

Catherine DeFilippo
Director of Operations

Staff assigned

Calvin Chang, Investigator
Alejandro Orozco, Investigator
David Guberman, Industry Analyst
Karl Tsuji, Industry Analyst
Craig Thomsen, Economist
David Boyland, Accountant
Jennifer Catalano, Statistician
Jason Miller, Attorney
Elizabeth Haines, Supervisory Investigator

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

U.S. International Trade Commission

Washington, DC 20436
www.usitc.gov

Tin Mill Products from Canada, China, Germany, Netherlands, South Korea, Taiwan, Turkey, and United Kingdom

Investigation Nos. 701-TA-685 and 731-TA-1599-1606 (Preliminary)

Publication 5413

March 2023

CONTENTS

Page

CONTENTS

Page

CONTENTS

Page

CONTENTS

Page

CONTENTS

Page

Note.—Information that would reveal confidential operations of individual concerns may not be published.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-685 and 731-TA-1599-1606 (Preliminary)

Tin Mill Products from Canada, China, Germany, Netherlands,
South Korea, Taiwan, Turkey, and United Kingdom

DETERMINATIONS

On the basis of the record[1] developed in the subject investigations, the United States International Trade Commission ("Commission") determines, pursuant to the Tariff Act of 1930 ("the Act"), that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of tin mill products from Canada, China, Germany, Netherlands, South Korea, Taiwan, Turkey, and United Kingdom, provided for in subheadings 7210.11.00, 7210.12.00, 7210.50.00, 7212.10.00, 7212.50.00, 7225.99.00, and 7226.99.01 of the Harmonized Tariff Schedule of the United States, that are alleged to be sold in the United States at less than fair value ("LTFV") and to be subsidized by the government of China.[2]

COMMENCEMENT OF FINAL PHASE INVESTIGATIONS

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

---

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

[2] 88 FR 9476 and 88 FR 9481, February 14, 2023.

BACKGROUND

On January 18, 2023, Cleveland-Cliffs, Cleveland, Ohio, and United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union ("United Steelworkers" or "USW"), Pittsburgh, Pennsylvania, filed petitions with the Commission and Commerce, alleging that an industry in the United States is materially injured or threatened with material injury by reason of subsidized imports of tin mill products from China and LTFV imports of tin mill products from Canada, China, Germany, Netherlands, South Korea, Taiwan, Turkey, and United Kingdom. Accordingly, effective January 18, 2023, the Commission instituted countervailing duty investigation No. 701-TA-685 and antidumping duty investigation Nos. 731-TA-1599-1606 (Preliminary).

Notice of the institution of the Commission's investigations and of a public conference to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* of January 24, 2023 (88 FR 4206). The Commission conducted its conference on February 8, 2023. All persons who requested the opportunity were permitted to participate.

Views of the Commission

Based on the record in the preliminary phase of these investigations, we determine that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of tin mill products ("TMPs") from Canada, China, Germany, the Netherlands, South Korea, Taiwan, Turkey and the United Kingdom ("UK") that are allegedly sold in the United States at less than fair value and imports of TMPs from China that are allegedly subsidized by the government of China.

I. The Legal Standard for Preliminary Determinations

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

II. Background

The petitions in these investigations were filed on January 18, 2023, by Cleveland-Cliffs Inc. ("Cleveland-Cliffs"), a domestic producer of TMPs, and the United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union ("USW"), a labor union representing TMP workers.[3] Cleveland-Cliffs and USW (collectively, "Petitioners") appeared at the staff conference and submitted a joint

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

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

[3] Confidential Report, Memorandum INV-VV-020 ("CR") at I-1; Public Report, *Tin Mill Products from Canada, China, Germany, Netherlands, South Korea, Taiwan, Turkey, and United Kingdom*, Inv. Nos. 701-TA-685 and 731-TA-1599-1606 (Preliminary), USITC Pub. 5413 (Mar. 2023) ("PR") at I-1. These investigations comprise antidumping duty investigations on imports from each of the eight subject countries, and a countervailing duty investigation on imports from China.

postconference brief. Domestic producer United States Steel Corporation ("U.S. Steel"), which takes no position in these investigations,[4] also submitted a postconference brief.

The following respondents appeared at the staff conference and submitted postconference briefs:

- The Can Manufacturers Institute ("CMI"), a trade association of U.S. purchasers of subject merchandise;[5]

- Silgan, a U.S. purchaser of subject merchandise;

- Duferco Steel LLC ("Duferco"), a U.S. importer of subject merchandise;

- ArcelorMittal Dofasco G.P. ("Dofasco"), a producer and exporter of subject merchandise in Canada;

- Baoshan Iron & Steel Co., Ltd., Shanghai Meishan Iron & Steel Co., Ltd., WISCO – Nippon Steel Tinplate Co., Ltd., Baosteel America Inc., Shougang Jingtang United Iron & Steel Co., Ltd., China Shougang International Trade & Engineering Corporation, Shougang Holding Trade (Hong Kong) Limited, Handan Jintai Packing Material Co., Ltd., and the China Iron and Steel Association Tin Mill Flat-rolled Products Subcommittee (collectively, "Chinese Respondents"), producers and exporters of subject merchandise in China (and an association thereof);

- thyssenkrupp Rasselstein GmbH and thyssenkrupp Steel North America, Inc. (collectively, "thyssenkrupp"), a producer of subject merchandise in Germany and an importer of subject merchandise from Germany, respectively;

- KG Dongbu Steel Co., Ltd. and KG Steel USA Inc. (collectively, "KG Dongbu"), a producer of subject merchandise in South Korea and an importer of subject merchandise from South Korea, respectively;

- Tosyalı Toyo Çelik A.Ş. ("Tosyalı Toyo"), a producer and exporter of subject merchandise in Turkey; and

[4] *See* U.S. Steel's Postconf. Br. at 1; CR/PR at Table III-1.

[5] Industry witnesses from the following CMI members appeared at the staff conference: Can Corporation of America, Inc. ("Can Corp"); Crown Cork & Seal USA, Inc. ("Crown"); Independent Can Company ("ICC"); Silgan Containers Manufacturing Corporation ("Silgan"); Sonoco Metal Packaging ("Sonoco"); and Trivium Packaging USA Inc. ("Trivium"). *See* Staff Conference Transcript ("Tr.") at 3.

- Tata Steel Ijmuiden BV ("TSIJ") and Tata Steel UK Ltd. ("TSUK") (collectively, "Tata Steel"), producers and exporters of subject merchandise in the Netherlands and the UK, respectively.[6]

The period of investigation ("POI") is January 2019 through September 2022. U.S. industry data are based on the questionnaire responses of three firms accounting for virtually all U.S. production of TMPs in 2021.[7]

U.S. import data are based on questionnaire responses of 21 U.S. importers, representing *** imports from Canada, *** percent of imports from China, *** percent of imports from Germany, *** imports from the Netherlands, *** percent of imports from South Korea, *** percent of imports from Taiwan, *** imports from the UK, and *** percent of imports from nonsubject sources in 2021, based on official Department of Commerce ("Commerce") import statistics.[8]

The Commission received responses to its questionnaires from 14 producers/exporters of subject merchandise: one producer/exporter of TMPs in Canada accounting for an estimated *** percent of U.S. imports of subject merchandise from Canada in 2021;[9] six producers/exporters of TMPs in China accounting for an estimated *** percent of U.S. imports of subject merchandise from China in 2021;[10] one producer/exporter of TMPs in Germany accounting for an estimated *** percent of U.S. imports of subject merchandise from Germany in 2021;[11] one producer/exporter of TMPs in the Netherlands accounting for an estimated *** percent of U.S. imports of subject merchandise from the Netherlands in 2021;[12] two producers/exporters of TMPs in South Korea accounting for an estimated *** percent of U.S. imports of subject merchandise from South Korea in 2021;[13] one producer/exporter of TMPs in Taiwan accounting for an estimated *** percent of U.S. imports of subject merchandise from Taiwan in 2021;[14] one producer/exporter of TMPs in Turkey accounting for an estimated ***

[6] Additionally, a representative of the Consumer Brands Association, a trade association of tin can purchasers, appeared at the conference and submitted a postconference non-party statement in opposition to the imposition of antidumping and countervailing duties.

[7] CR/PR at I-4.

[8] CR/PR at IV-1. Official import statistics cover HTS subheadings 7210.11.00, 7210.12.00, 7210.50.00, 7212.10.00, and 7212.50.00, 7225.99.00, and 7226.99.01. *Id.* These subheadings are "basket" categories and therefore include out-of-scope merchandise. *Id*.

[9] CR/PR at VII-3.

[10] CR/PR at VII-11.

[11] CR/PR at VII-20.

[12] CR/PR at VII-28.

[13] CR/PR at VII-35.

[14] CR/PR at VII-43.

percent of U.S. imports of subject merchandise from Turkey in 2021;[15] and one producer/exporter of TMPs in the UK accounting for an estimated *** percent of U.S. imports of subject merchandise from the UK in 2021.[16]

III. Domestic Like Product

In determining whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of imports of the subject merchandise, the Commission first defines the "domestic like product" and the "industry."[17] 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."[18] 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."[19]

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.[20] 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."[21] The Commission then defines the domestic like product in light of the imported articles Commerce has identified.[22] The decision regarding the

---

[15] CR/PR at VII-50.

[16] CR/PR at VII-58. ***. *See* Note to CR/PR Table VII-8b. Together, this producer and reseller accounted for *** percent of estimated exports from the UK to the United States in 2021. *Id*. at IV-10, n.8.

[17] 19 U.S.C. § 1677(4)(A).

[18] 19 U.S.C. § 1677(4)(A).

[19] 19 U.S.C. § 1677(10).

[20] 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).

[21] *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).

[22] *Cleo*, 501 F.3d at 1298 n.1 ("Commerce's {scope} finding does not control the Commission's (Continued…)

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.[23] No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.[24] The Commission looks for clear dividing lines among possible like products and disregards minor variations.[25] The Commission may, where appropriate, include domestic articles in the domestic like product in addition to those described in the scope.[26]

A. Scope Definition

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

> {T}in mill flat-rolled products that are coated or plated with tin, chromium, or chromium oxides. Flat-rolled steel products coated with tin are known as tinplate. Flat-rolled steel products coated with chromium or chromium oxides are known as tin-free steel or electrolytic chromium-coated steel. The scope includes all the noted tin mill products regardless of thickness, width, form (in

---

{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).

[23] *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).

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

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

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

coils or cut sheets), coating type (electrolytic or otherwise), edge (trimmed, untrimmed or further processed, such as scroll cut), coating thickness, surface finish, temper, coating metal (tin, chromium, chromium oxide), reduction (single- or double-reduced), and whether or not coated with a plastic material.
All products that meet the written physical description are within the scope of these investigations unless specifically excluded. The following products are outside and/or specifically excluded from the scope of these investigations:

• Single reduced electrolytically chromium coated steel with a thickness 0.238 mm (85 pound base box) (±10%) or 0.251 mm (90 pound base box) (±10%) or 0.255 mm (±10%) with 770 mm (minimum width) (±1.588 mm) by 900 mm (maximum length if sheared) sheet size or 30.6875 inches (minimum width) (± 1/16 inch) and 35.4 inches (maximum length if sheared) sheet size; with type MR or higher (per ASTM) A623 steel chemistry; batch annealed at T2 1/2 anneal temper, with a yield strength of 31 to 42 kpsi (214 to 290 Mpa); with a tensile strength of 43 to 58 kpsi (296 to 400 Mpa); with a chrome coating restricted to 32 to 150 mg/m2 ; with a chrome oxide coating restricted to 6 to 25 mg/m2 with a modified 7B ground roll finish or blasted roll finish; with roughness average (Ra) 0.10 to 0.35 micrometers, measured with a stylus instrument with a stylus radius of 2 to 5 microns, a trace length of 5.6 mm, and a cut-off of 0.8 mm, and the measurement traces shall be made perpendicular to the rolling direction; with an oil level of 0.17 to 0.37 grams/base box as type BSO, or 2.5 to 5.5 mg/m2 as type DOS, or 3.5 to 6.5 mg/m2 as type ATBC; with electrical conductivity of static probe voltage drop of 0.46 volts drop maximum, and with electrical conductivity degradation to 0.70 volts drop maximum after stoving (heating to 400 degrees F for 100 minutes followed by a cool to room temperature).

• Single reduced electrolytically chromium- or tin-coated steel in the gauges of 0.0040 inch nominal, 0.0045 inch nominal, 0.0050 inch nominal, 0.0061 inch nominal (55 pound base box weight), 0.0066 inch nominal (60 pound base box weight), and 0.0072 inch nominal (65 pound base box weight), regardless of width, temper, finish, coating or other properties.

• Single reduced electrolytically chromium coated steel in the gauge of 0.024 inch, with widths of 27.0 inches or 31.5 inches, and with T-1 temper properties.

• Single reduced electrolytically chromium coated steel, with a chemical composition of 0.005% max carbon, 0.030% max silicon, 0.25% max manganese, 0.025% max phosphorous, 0.025% max sulfur 0.070% max aluminum, and the balance iron, with a metallic chromium layer of 70-130 mg/m2, with a chromium oxide layer of 5-30 mg/m2, with a tensile strength of 260-440 N/mm2, with an elongation of 28-48%, with a hardness (HR-30T) of 40-58, with a surface roughness of 0.5-1.5 microns Ra, with magnetic properties of Bm (KG) 10.0 minimum, Br (KG) 8.0 minimum, Hc (Oe) 2.5-3.8, and MU 1400 minimum, as

measured with a Riken Denshi DC magnetic characteristic measuring machine, Model BHU-60.

• Bright finish tin-coated sheet with a thickness equal to or exceeding 0.0299 inch, coated to thickness of ¾ pound (0.000045 inch) and 1 pound (0.00006 inch).

• Electrolytically chromium coated steel having ultra flat shape defined as oil can maximum depth of 5/64 inch (2.0 mm) and edge wave maximum of 5/64 inch (2.0 mm) and no wave to penetrate more than 2.0 inches (51.0 mm) from the strip edge and coilset or curling requirements of average maximum of 5/64 inch (2.0 mm) (based on six readings, three across each cut edge of a 24 inches (61 cm) long sample with no single reading exceeding 4/32 inch (3.2 mm) and no more than two readings at 4/32 inch (3.2 mm)) and (for 85 pound base box item only: crossbuckle maximums of 0.001 inch (0.0025 mm) average having no reading above 0.005 inch (0.127 mm)), with a camber maximum of 1/4 inch (6.3 mm) per 20 feet (6.1 meters), capable of being bent 120 degrees on a 0.002 inch radius without cracking, with a chromium coating weight of metallic chromium at 100 mg/m2 and chromium oxide of 10 mg/m2 , with a chemistry of 0.13% maximum carbon, 0.60% maximum manganese, 0.15% maximum silicon, 0.20% maximum copper, 0.04% maximum phosphorous, 0.05% maximum sulfur, and 0.20% maximum aluminum, with a surface finish of Stone Finish 7C, with a DOS-A oil at an aim level of 2 mg/square meter, with not more than 15 inclusions/foreign matter in 15 feet (4.6 meters) (with inclusions not to exceed 1/32 inch (0.8 mm) in width and 3/64 inch (1.2 mm) in length), with thickness/temper combinations of either 60 pound base box (0.0066 inch) double reduced CADR8 temper in widths of 25.00 inches, 27.00 inches, 27.50 inches, 28.00 inches, 28.25 inches, 28.50 inches, 29.50 inches, 29.75 inches, 30.25 inches, 31.00 inches, 32.75 inches, 33.75 inches, 35.75 inches, 36.25 inches, 39.00 inches, or 43.00 inches, or 85 pound base box (0.0094 inch) single reduced CAT4 temper in widths of 25.00 inches, 27.00 inches, 28.00 inches, 30.00 inches, 33.00 inches, 33.75 inches, 35.75 inches, 36.25 inches, or 43.00 inches, with width tolerance of 1/8 inch, with a thickness tolerance of 0.0005 inch, with a maximum coil weight of 20,000 pounds (9071.0 kg), with a minimum coil weight of 18,000 pounds (8164.8 kg), with a coil inside diameter of 16 inches (40.64 cm) with a steel core, with a coil maximum outside diameter of 59.5 inches (151.13 cm), with a maximum of one weld (identified with a paper flag) per coil, with a surface free of scratches, holes, and rust.

• Electrolytically tin coated steel having differential coating with 1.00 pound/base box equivalent on the heavy side, with varied coating equivalents in the lighter side (detailed below), with a continuous cast steel chemistry of type MR, with a surface finish of type 7B or 7C, with a surface passivation of 0.7 mg/square foot of chromium applied as a cathodic dichromate treatment, with

coil form having restricted oil film weights of 0.3-0.4 grams/base box of type DOS-A oil, coil inside diameter ranging from 15.5 to 17 inches, coil outside diameter of a maximum 64 inches, with a maximum coil weight of 25,000 pounds, and with temper/coating/dimension combinations of: (1) CAT4 temper, 1.00/.050 pound/base box coating, 70 pound/base box (0.0077 inch) thickness, and 33.1875 inch ordered width; or (2) CAT5 temper, 1.00/0.50 pound/base box coating, 75 pound/base box (0.0082 inch) thickness, and 34.9375 inch or 34.1875 inch ordered width; or (3) CAT5 temper, 1.00/0.50 pound/base box coating, 107 pound/base box (0.0118 inch) thickness, and 30.5625 inch or 35.5625 inch ordered width; or (4) CADR8 temper, 1.00/0.50 pound/base box coating, 85 pound/base box (0.0093 inch) thickness, and 35.5625 inch ordered width; or (5) CADR8 temper, 1.00/0.25 pound/base box coating, 60 pound/base box (0.0066 inch) thickness, and 35.9375 inch ordered width; or (6) CADR8 temper, 1.00/0.25 pound/base box coating, 70 pound/base box (0.0077 inch) thickness, and 32.9375 inch, 33.125 inch, or 35.1875 inch ordered width.

• Electrolytically tin coated steel having differential coating with 1.00 pound/base box equivalent on the heavy side, with varied coating equivalents on the lighter side (detailed below), with a continuous cast steel chemistry of type MR, with a surface finish of type 7B or 7C, with a surface passivation of 0.5 mg/square foot of chromium applied as a cathodic dichromate treatment, with ultra flat scroll cut sheet form, with CAT5 temper with 1.00/0.10 pound/base box coating, with a lithograph logo printed in a uniform pattern on the 0.10 pound coating side with a clear protective coat, with both sides waxed to a level of 15-20 mg/216 sq. inch, with ordered dimension combinations of (1) 75 pound/base box (0.0082 inch) thickness and 34.9375 inch x 31.748 inch scroll cut dimensions; or (2) 75 pound/base box (0.0082 inch) thickness and 34.1875 inch x 29.076 inch scroll cut dimensions; or (3) 107 pound/base box (0.0118 inch) thickness and 30.5625 inch x 34.125 inch scroll cut dimension.

• Tin-free steel coated with a metallic chromium layer between 100-200 mg/m2 and a chromium oxide layer between 5-30 mg/m2 ; chemical composition of 0.05% maximum carbon, 0.03% maximum silicon, 0.60% maximum manganese, 0.02% maximum phosphorous, and 0.02% maximum sulfur; magnetic flux density (Br) of 10 kg minimum and a coercive force (Hc) of 3.8 Oe minimum.

• Tin-free steel laminated on one or both sides of the surface with a polyester film, consisting of two layers (an amorphous layer and an outer crystal layer), that contains no more than the indicated amounts of the following environmental hormones: 1 mg/kg BADGE (BisPhenol—A Di-glycidyl Ether), 1

mg/kg BFDGE (BisPhenol—F Di-glycidyl Ether), and 3 mg/kg BPA (BisPhenol—A).[27]

The scope[28] comprises both tin-coated steel sheet, known as tinplate, and chromium-coated steel sheet, known as tin-free steel ("TFS"). Both tinplate and TFS are produced from black plate, an uncoated flat-rolled steel product. To produce tinplate, black plate is coated on both sides with commercially pure tin. To produce TFS, black plate is coated on both sides with chromium metal and chromium oxide.[29]

Tinplate is commonly manufactured to ASTM International ("ASTM") Standard Specifications A623, A624, and A626.[30] It is primarily used to make two- or three-piece metal cans – *e.g.*, food, aerosol, and paint cans.[31] A specific type of tinplate – drawn and walled ironed ("D&I") tinplate – is used to make two-piece cans.[32] D&I tinplate is sometimes sold in wider coils than tinplate used in other applications.[33] The five basic tinplate surface finishes available for general can-making operations are bright, light stone, stone, matte, and silver.[34]

TFS is manufactured to ASTM Standard Specification A657.[35] It is primarily used to make certain two-piece metal cans and ends for food cans.[36] It is also used to make caps and closures for glass containers.[37]

---

[27] *Tin Mill Products from Canada, the People's Republic of China, Germany, the Netherlands, the Republic of Korea, Taiwan, the Republic of Turkey, and the United Kingdom: Initiation of Less-Than-Fair-Value Investigations*, 88 Fed. Reg. 9481, 9487-9488 (Feb. 7, 2023); *Tin Mill Products from the People's Republic of China: Initiation of Countervailing Duty Investigation*, 88 Fed. Reg. 9476, 60214 (Feb. 7, 2023).

[28] The scope of these investigations is identical to the scope of the previous antidumping duty investigation of tin- and chromium-coated steel sheet from Japan, and to the scope of the resulting antidumping duty order that remains in place. *See Tin- and Chromium-Coated Steel Sheet from Japan*, Inv. No. 731-TA-860 (Preliminary), USITC Pub. 3264 (Dec. 1999) ("*Japan Preliminary Determination*"); *Tin- and Chromium-Coated Steel Sheet from Japan*, Inv. No. 731-TA-860 (Final), USITC Pub. 3337 (Aug. 2000) ("*Japan Final Determination*"); *Certain Tin Mill Products from Japan: Continuation of Antidumping Duty Order*, 83 Fed. Reg. 32074 (Jul. 11, 2018).

[29] CR/PR at I-17-18.

[30] CR/PR at I-17.

[31] CR/PR at I-18.

[32] CR/PR at I-18-19. A two-piece can is manufactured by taking a flat piece of tinplate and pushing it through progressively smaller rings (drawing and ironing) to form the base and body of the can out of one piece of steel. *Id*. at I-19. D&I tinplate is also referred to as "DWI" tinplate. *Id*.

[33] CR/PR at I-19.

[34] CR/PR at I-17-18.

[35] CR/PR at I-18.

[36] CR/PR at I-20.

[37] CR/PR at I-20.

B. Arguments of the Parties

Petitioners' *Arguments*. Petitioners argue that the Commission should define a single domestic like product coextensive with Commerce's scope.[38] They emphasize that in its previous antidumping duty investigation of tin- and chromium-coated steel sheet from Japan, involving the same scope as in the current investigations, the Commission defined a single domestic like product based on its analysis of the traditional like product factors.[39] Petitioners also note that in each of its three five-year reviews of the Japan order, the Commission has likewise defined a single domestic like product coextensive with the scope.[40]

Respondents' *Arguments*. No respondent contests the Petitioners' proposed definition of the domestic like product for purposes of the preliminary phase of these investigations.[41]

C. Analysis

Physical Characteristics and Uses. Tinplate and TFS share the same basic physical characteristics, as both are produced from black plate,[42] and both are primarily used in metal can production.[43] Tinplate and TFS are also physically similar in that both single-reduced tinplate and single-reduced TFS are commonly available in thicknesses of 0.38 mm and lighter, and both double-reduced tinplate and double-reduced TFS are commonly available in thicknesses of 0.28 mm and lighter.[44] The principal difference between tinplate and TFS is that the former is coated in tin and the latter is coated in chromium.[45] Due to the greater corrosion resistance of tinplate, tinplate tends to be used to produce can bodies and TFS tends to be used to produce the ends of cans, although TFS is also used to produce certain two-piece drawn cans.[46]

---

[38] Petitioners' Postconf. Br. at 11.

[39] Petitioners' Postconf. Br. at 11 (citing *Japan Preliminary Determination* at 5).

[40] Petitioners' Postconf. Br. at 12.

[41] Tr. at 184-185 (Kendler; Smith; Trendl; Quaia; Scroth; Lenhardt; and Jacobson); Chinese Respondents' Postconf. Br. at 1; Dofasco's Postconf. Br. at 5; Duferco's Postconf. Br. at 3; Tata Steel's Postconf. Br. at 3; and thyssenkrupp's Postconf. Br. at 5. Duferco "reserves the right to raise domestic like product issues" in any final phase of these investigations. *See* Duferco's Postconf. Br. at 3.

[42] CR/PR at I-17-18.

[43] CR/PR at I-18-20.

[44] CR/PR at I-17-18. Single-reduced TMPs are commonly produced by cold rolling, while double-reduced TMPs are commonly produced by cold rolling and annealing, followed by further cold reduction. *Id*. at I-20-22.

[45] CR/PR at I-17-18.

[46] CR/PR at I-20.

Manufacturing Facilities, Production Processes and Employees. Although tinplate and TFS are ultimately coated in different materials, the processes used in their production are otherwise the same.[47] Moreover, in its prior investigation of tin- and chromium-coated steel sheet from Japan, the Commission found that most companies produced tinplate and TFS using the same manufacturing facilities and employees.[48] There is no new information on the record indicating that this factor has changed, and Petitioners maintain that the Commission's prior analysis of this factor remains valid.[49]

Channels of Distribution. During the POI, domestically produced TMPs of all types were primarily sold to ***, with nearly all the rest sold to ***, and the remainder going to ***.[50]

Interchangeability. In its prior investigation of tin- and chromium-coated steel sheet from Japan, the Commission found that, although tinplate and TFS are rarely used interchangeably in particular applications, they are theoretically interchangeable.[51] There is no new information on the record indicating that this factor has changed, and Petitioners maintain that the Commission's prior analysis of this factor remains valid.[52]

Producer and Customer Perceptions. In its prior investigation of tin- and chromium-coated steel sheet from Japan, the Commission found that producers and customers grouped tinplate and TFS into a single class of products.[53] There is no new information in the record indicating that this factor has changed, and Petitioners maintain that the Commission's prior analysis of this factor remains valid.[54] Indeed, conference testimony suggests that producers and customers continue to view the products within the scope as a single category.[55]

Price. Tinplate and TFS prices overlapped during the POI. Prices for domestically produced pricing products 1 and 2, corresponding to tinplate, ranged from $*** per short ton

[47] CR/PR at I-20-22 ("Both tinplate and chromium-coated steel sheet are manufactured in five major steps… i. hot rolling and cold reduction …. ii. annealing … iii. temper rolling … iv. additional cold reduction … v. coating").

[48] *See Japan Preliminary Determination* at 5; *Japan Final Determination* at 5.

[49] *See* Petitioners' Postconf. Br. at 11-12.

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

[51] *See Japan Preliminary Determination* at 5; *Japan Final Determination* at 5.

[52] *See* Petitioners' Postconf. Br. at 11-12.

[53] *See Japan Preliminary Determination* at 5; *Japan Final Determination* at 5.

[54] *See* Petitioners' Postconf. Br. at 11-12.

[55] Tr. at 54 (Vaughn) ("{E}verybody in the industry treats tin mill products as a category. That's how it's written about in the press. That's how it's talked about every day by customers."); Tr. at 55 (Reynolds) ("{T}he Commission … routinely will include all {grades and specifications} within {a single} like product … in situations where the industry considers all those grades to be part of the same … product category. And, clearly, that's what's happening here.").

to $*** per short ton over the POI,[56] and prices for domestically produced pricing products 3 and 4, corresponding to TFS, ranged from $*** per short ton to $*** per short ton over this period.[57]

Conclusion. Tinplate and TFS share the same basic physical characteristics, as both are produced from black plate, and both are used to make cans. While they are ultimately coated in different materials, the processes used in their production are otherwise the same, and they are produced in the same manufacturing facilities by the same employees. They share identical channels of distribution, and are theoretically interchangeable in the same applications. Conference testimony indicates that producers and customers view them as a single product category, and quarterly pricing data indicate that they overlap in price. Based on the preponderance of similarities between tinplate and TFS, and in the absence of any contrary argument, we define a single domestic like product consisting of TMPs, coextensive with the scope of these investigations.

IV. Domestic Industry

The domestic industry is defined as the domestic "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."[58] 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.

These investigations raise the issue of whether appropriate circumstances exist to exclude a domestic producer from the domestic industry pursuant to the related parties provision. Section II.B. of GC-JJ-028 provides a discussion of the legal standards applicable to the related parties provision in section 771(4)(B) of the Tariff Act. This provision of the statute allows the Commission, if appropriate circumstances exist, to exclude from the domestic industry producers that are related to an exporter or importer of subject merchandise, or which are themselves importers.[59]

---

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

[57] CR/PR at Tables V-7-8.

[58] 19 U.S.C. § 1677(4)(A).

[59] 19 U.S.C. § 1677(4)(B). 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;
(Continued…)

One U.S. producer, ***, may be subject to possible exclusion from the domestic industry under the related parties provision because it is potentially controlled by ***, an exporter of subject merchandise in ***.[60] *** may additionally be subject to possible exclusion under the related parties provision because it is related to ***, an importer of subject merchandise from ***, through common control.[61]

1. Arguments of the Parties

Petitioners' Arguments. While Petitioners identify *** as a related party, they do not argue for its exclusion from the domestic industry.[62]

Respondents' Arguments. The respondents do not address the issue.

2. Analysis

*** accounted for *** percent of U.S. production in 2021, making it *** of the three domestic producers.[63] It *** and ***.[64] The ratio of *** subject imports to *** domestic production was *** percent in 2019, *** percent in 2020, and *** percent in 2021; it was *** percent in interim 2022, compared to *** percent in interim 2021.[65]

---

(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.

[60] Specifically, *** owns *** percent of ***. *See* CR/PR at Table III-2 and *** U.S. Producer Questionnaire Response at I-5. It is not clear whether this ownership stake indicates a requisite level of control over the domestic producer for purposes of the related parties provision; however, even assuming that *** is subject to the related parties provision, appropriate circumstances do not exist to exclude it from the domestic industry, as discussed below.

[61] Specifically, *** owns *** percent of *** as well as *** percent of ***. *See* CR/PR at Table III-2 and ***'s U.S. Importer Questionnaire Response at I-3. It is not clear whether *** ownership stakes in these companies indicate that they are under the requisite level of common control for purposes of the related parties provision; however, even assuming that *** is subject to the related parties provision, appropriate circumstances do not exist to exclude it from the domestic industry, as discussed below.

[62] Petitioners' Postconf. Br. at 12, n.52. Instead, Petitioners state that, "{b}ased on the information now on record, we are not taking the position that *** should be excluded from the domestic industry as a related party." *Id*.

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

[64] *** U.S. Producer Questionnaire Response at I-4.

[65] CR at Table III-10.

*** and the ratio of *** to *** domestic production was low throughout the POI. Nor is there evidence on the record indicating that any relationship *** has with either *** or *** has caused it to behave or perform differently than other domestic producers, or that including *** otherwise would mask any injury to the domestic industry that may be occurring. Indeed, *** exhibited the same general financial performance trends over the POI as the other domestic producers.[66] Thus, we find that appropriate circumstances do not exist to exclude *** from the domestic industry.

Accordingly, based on our definition of the domestic like product, we define the domestic industry as all U.S. producers of TMPs.

V. Negligible Imports

Pursuant to Section 771(24) of the Tariff Act, imports with respect to a subject investigation 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.[67]

During the 12-month period preceding the filing of the petitions (January 2022 through December 2022), subject imports from Canada accounted for *** percent of total imports, subject imports from China for *** percent (for both the antidumping and countervailing duty investigations), subject imports from Germany for *** percent, subject imports from the Netherlands for *** percent, subject imports from South Korea for *** percent, subject imports from Taiwan from *** percent, subject imports from Turkey for *** percent, and subject imports from the UK for *** percent.[68] As imports for each subject investigation exceed the statutory negligibility threshold, we find that subject imports for each of the subject investigations are not negligible.

VI. Cumulation

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

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

[67] 19 U.S.C. §§ 1671b(a), 1673b(a), 1677(24)(A)(i), 1677(24)(B).

[68] CR/PR at Table IV-4. The Commission has relied on questionnaire data rather than official import statistics for total imports because the HTS subheadings covering TMPs are "basket" categories – *see* CR/PR at IV-1 – and therefore include out-of-scope merchandise. *See* note to CR/PR Table IV-4.

investigations self-initiated by Commerce on the same day, if such imports compete with each other and with the domestic like product in the U.S. market. In assessing whether subject imports compete with each other and with the domestic like product, the Commission generally has considered four factors:

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

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

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

(4) whether the subject imports are simultaneously present in the market.[69]

While no single factor is necessarily determinative, and the list of factors is not exclusive, these factors are intended to provide the Commission with a framework for determining whether the subject imports compete with each other and with the domestic like product.[70] Only a "reasonable overlap" of competition is required.[71]

A. Arguments of the Parties

Petitioners' Arguments. Petitioners argue that the Commission should cumulate subject imports because the petitions were filed on the same day and there is a reasonable overlap of competition between and among the domestic like product and imports from each subject country. Specifically, they contend that subject imports from each source and the domestic like product are fungible, share common channels of distribution, are sold in overlapping

[69] *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).

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

[71] The Statement of Administrative Action (SAA) to the Uruguay Round Agreements Act (URAA), expressly states that "the new section will not affect current Commission practice under which the statutory requirement is satisfied if there is a reasonable overlap of competition." H.R. Rep. No. 103-316, Vol. I at 848 (1994) (*citing Fundicao Tupy, 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.").

geographic regions, and were simultaneously present in the U.S. market throughout the POI.[72] Petitioners submit that the recent earthquake in Turkey is not a basis for declining to cumulate subject imports from Turkey, claiming that Tosyalı Toyo's operations have either been unaffected by the earthquake, or will recover quickly from it.[73]

Respondents' Arguments. Tosyalı Toyo argues that subject imports from Turkey should not be cumulated because the recent earthquake, in February 2023, has "left Turkey with no current capacity to compete with U.S. domestic producers or other subject foreign producers."[74]

B. Analysis and Conclusion

We consider subject imports from Canada, China, Germany, the Netherlands, South Korea, Taiwan, Turkey, and the UK on a cumulated basis because the statutory criteria for cumulation appear to be satisfied.[75] As an initial matter, Petitioners filed each of the antidumping and countervailing duty petitions on the same day, January 18, 2023. The record also supports finding a reasonable overlap of competition between and among subject imports from each source and the domestic like product, as discussed below.

Fungibility. All U.S. producers reported that domestically produced TMPs are always interchangeable with imports from each subject country, and that imports from each subject country are always interchangeable with each other.[76] A majority of U.S. importers reported that domestically produced TMPs are sometimes interchangeable with imports from each subject country, and that imports from each subject country are sometimes interchangeable with each other.[77]

Many U.S. importers indicated that domestic and subject imported TMPs are only sometimes interchangeable because TMPs in wider widths are only available from subject

[72] Petitioners' Postconf. Br. at 13-17.

[73] Exhibit 1 to Petitioners' Postconf. Br. at 31-32.

[74] Tosyalı Toyo's Postconf. Br. at 1-2. To the extent that Tosyalı Toyo argues that the Commission, in making its cumulation decision, should disregard whether a reasonable overlap of competition existed for imports from Turkey during the POI, and instead base its decision solely on whether these imports are currently capable of competing in the U.S. market going forward – *see id*. at 4-6 – we disagree. However, in addition to considering evidence during the POI, we have also considered whether the known current effects of the post-POI earthquake render the cumulation of subject imports from Turkey inappropriate. *See infra*.

[75] None of the statutory exceptions to cumulation applies.

[76] CR/PR at II-17.

[77] CR/PR at II-17 and Table II-6.

sources and not from the domestic industry.[78] However, the record indicates that there were substantial volumes of TMPs imported from subject sources in widths up to 38-inches,[79] which Cleveland-Cliffs produces domestically.[80] Moreover, the record indicates that U.S. producer U.S. Steel manufactures TMPs in wider widths.[81]

Further, domestic and subject imported TMPs from each source overlap with respect to product type. Most U.S. shipments of domestically produced TMPs were tinplate in 2021, and there were also U.S. shipments of tinplate from each subject country that year, with this product accounting for a majority of U.S. shipments from most subject sources.[82] Consistent with the foregoing, the quarterly pricing data also indicate that domestic and subject imported TMPs from each source overlapped with respect to tinplate during the POI.[83]

The record also indicates that domestic and subject imported TMPs from each source overlap with respect to both base weight and finish. In 2021, both domestic and subject imported TMPs from each source were available in base weights of 73 and below, and between 75 and 107.[84] Moreover, domestic and subject imported TMPs from each source overlapped with respect to finish type, with substantial shares of TMPs from all sources possessing a non-bright finish in 2021.[85]

---

[78] CR/PR at II-17-18 and Table II-6.

[79] *See*, *e.g.*, Answers to Staff Questions Appended to Dofasco's Postconf. Br. at 4 (***); Answers to Staff Questions Appended to KG Dongbu's Postconf. Br. at 2 (***; Exhibit 3 to Chinese Respondents' Postconf. Br. (***); Answers to Staff Questions Appended to Tata Steel's Postconf. Br. at 3 (***); Exhibit 1 to thyssekrupp's Postconf. Br. at 6 (***); and Exhibit 12 to Tosyalı Toyo's Postconf. Br. (***).

[80] *See* Tr. at 60 (Jarvis).

[81] *See* U.S. Steel's Postconf. Br. at 1 ("United States Steel Corporation … offers the widest range of tin mill products produced in the United States, including wide drawn and ironed ('D&I') tin mill products."); CR at I-20 ("{t}he wide DWI products that are used to make two-piece tin cans are made by domestic producer U.S. Steel…"). We recognize that certain purchasers reported issues sourcing wide D&I tinplate from U.S. Steel during the POI, and that certain purchasers reported that U.S. Steel stopped producing wide D&I tinplate at certain points during this period. *See, e.g.*, Attachment A to CMI's Postconf. Br. (reflecting that U.S. Steel told Trivium in 2022 that it had no ability to supply Trivium with requested D&I tinplate, and that ***).

[82] Specifically, in 2021, all U.S. shipments of TMPs imported from *** were tinplate, most U.S. shipments of TMPs imported from *** were tinplate, and an appreciable share of U.S. shipments of TMPs imported from *** – *** percent –were tinplate. CR/PR at Table IV-5.

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

[84] CR/PR at Table IV-6. "Base weight" indicates the thickness of the product. A base weight of less than or equal to 73 is less than or equal to 0.2 mm/0.0080 inches in thickness. A base weight of 75-107 is greater than 0.2 mm/0.0080 inches but less than or equal to 0.3 mm/0.0118 inches in thickness. *Id*. at note to Table IV-6.

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

Channels of Distribution. Most domestically produced TMPs were sold to *** during the POI, as were at least a substantial percentage of subject imported TMPs from each source.[86]

Geographic Overlap. Domestically produced TMPs and imports from each subject source were sold in the *** regions during the POI.[87]

Simultaneous Presence in Market. Domestically produced TMPs and subject imports from Canada, China, Germany, the Netherlands, South Korea, Taiwan, and the UK were simultaneously present in the U.S. market throughout the POI.[88] Subject imports from Turkey were present in the U.S. market in 20 months out of the 45-month POI.[89]

The current record does not establish that the recent earthquake has rendered the cumulation of imports from Turkey inappropriate. As an initial matter, the February 2023 earthquake had no effect on subject imports from Turkey during the POI. Moreover, there is some evidence on the record that the earthquake may only temporarily disrupt Tosyalı Toyo's ability to produce and export TMPs to the United States.[90] In light of these considerations, we find for purposes of the preliminary phase of the investigations that the earthquake has not rendered the cumulation of subject imports from Turkey inappropriate.

Conclusion. The record shows that subject imports from Canada, China, Germany, the Netherlands, South Korea, Taiwan, Turkey, and the UK are fungible with each other and the domestic like product. The record also shows that imports from each subject country and the domestic like product overlapped with respect to channels of distribution and geographic markets, and were simultaneously present in the U.S. market during the POI. Because the record indicates that there is a reasonable overlap of competition between and among domestically produced TMPs and imports from each subject country, we cumulate subject imports from Canada, China, Germany, the Netherlands, South Korea, Taiwan, Turkey, and the UK for purposes of analyzing present material injury in the preliminary phase of these investigations.

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

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

[88] CR/PR at Tables IV-9 and V-4-7.

[89] CR/PR at Tables IV-9 and V-4-7.

[90] Specifically, while Tosyalı Toyo reported that its facility was currently offline because of the earthquake, it also reported that this facility "appears to have escaped material structural damage" and that it expected to begin trial production in March 2023. *See* Tosyalı Toyo's Postconf. Br. at 4; Exhibit 1 to Tosyalı Toyo's Postconf. Br. (Ersoy Dec'l.) at para. 8. In any final phase of these investigations, we will investigate this issue further.

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

A. Legal Standard

In the preliminary phase of antidumping and countervailing duty investigations, the Commission determines whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of the import s under investigation.[91] In making this determination, the Commission must consider the volume of subject imports, their effect on prices for the domestic like product, and their impact on domestic producers of the domestic like product, but only in the context of U.S. production operations.[92] The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant."[93] In assessing whether there is a reasonable indication that the domestic industry is materially injured by reason of subject imports, we consider all relevant economic factors that bear on the state of the industry in the United States.[94] 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."[95]

Although the statute requires the Commission to determine whether there is a reasonable indication that the domestic industry is "materially injured or threatened with material injury by reason of" unfairly traded imports,[96] 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.[97] 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

[91] 19 U.S.C. §§ 1671b(a), 1673b(a).

[92] 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).

[93] 19 U.S.C. § 1677(7)(A).

[94] 19 U.S.C. § 1677(7)(C)(iii).

[95] 19 U.S.C. § 1677(7)(C)(iii).

[96] 19 U.S.C. §§ 1671b(a), 1673b(a).

[97] *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).

cause of injury and that there is a sufficient causal, not merely a temporal, nexus between subject imports and material injury.[98]

In many investigations, there are other economic factors at work, some or all of which may also be having adverse effects on the domestic industry. Such economic factors might include nonsubject imports; changes in technology, demand, or consumer tastes; competition among domestic producers; or management decisions by domestic producers. The legislative history explains that the Commission must examine factors other than subject imports to ensure that it is not attributing injury from other factors to the subject imports, thereby inflating an otherwise tangential cause of injury into one that satisfies the statutory material injury threshold.[99] In performing its examination, however, the Commission need not isolate the injury caused by other factors from injury caused by unfairly traded imports.[100] Nor does

---

[98] 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).

[99] 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.

[100] 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 (Continued…)

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.[101] It is clear that the existence of injury caused by other factors does not compel a negative determination.[102]

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."[103] 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." [104] The Federal Circuit has examined and affirmed various Commission methodologies and has disavowed "rigid adherence to a specific formula."[105]

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

---

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.").

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

[102] *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.").

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

[104] *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.

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

evidence standard.[106] Congress has delegated this factual finding to the Commission because of the agency's institutional expertise in resolving injury issues.[107]

B. Conditions of Competition and the Business Cycle

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

1. Demand Conditions

Demand for TMPs derives from the demand for the products in which they are used, including food, aerosol spray, and paint cans.[108] Demand for TMPs reportedly increased during the POI because consumers bought more canned food and aerosol spray cleaning products due to the COVID-19 pandemic.[109] Most responding U.S. producers reported that U.S. demand for TMPs has fluctuated since the beginning of the POI,[110] while most responding U.S. importers reported that it has steadily increased or fluctuated upwards.[111]

According to CMI and its members, demand for the wider D&I tinplate used in two-piece can production – typically D&I tinplate in widths greater than 44.5 inches – increased over the POI.[112] However, only seven of 20 responding importers reported changes to the product mix or marketing of TMPs since the beginning of the POI.[113] Petitioners have estimated that

---

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

[107] *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.").

[108] CR/PR at II-1 and II-11.

[109] CR/PR at II-12; Tr. at 60 (Reynolds).

[110] CR/PR at Table II-4. U.S. producers were split as to which direction demand has fluctuated, with one reporting that it has fluctuated up and one reporting that it has fluctuated down. *Id*.

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

[112] CR/PR at I-19; CMI's Postconf. Br. at 20. CMI states that its members typically require D&I tinplate in widths greater than 44.5 inches to produce two-piece cans "with maximum efficiency." *See*, *e.g.*, CMI's Postconf. Br. at 21; Tr. at 142 (Dietrich). While acknowledging that narrower D&I tinplate can technically be used to produce two-piece cans, CMI and its members maintain that doing so would be highly inefficient. *See*, *e.g.*, CMI's Postconf. Br. at 22-24 and Attachments A (Trivium Dec'l.), D (Crown Dec'l.), and E (Sonoco Dec'l.).

[113] CR/PR at II-2.

demand for TMPs in widths greater than 39 inches, including wide D&I tinplate, comprise between *** to *** percent of total TMP demand in the United States.[114]

Apparent U.S. consumption of TMPs increased from *** short tons in 2019 to *** short tons in 2020 and *** short tons in 2021, a level *** percent greater than in 2019.[115] It was *** percent higher in interim 2022, at *** short tons, than in interim 2021, at *** short tons.[116]

2. Supply Conditions

The domestic industry, comprising Cleveland-Cliffs, Ohio Coatings, and U.S. Steel, was the largest supplier of TMPs to the U.S. market over most of the POI. Its share of apparent U.S. consumption increased from *** percent in 2019 to *** percent in 2020 before declining to *** percent in 2021; its market share was lower in interim 2022, at *** percent, than in interim 2021, at *** percent.[117] Cleveland-Cliffs reported the ability to supply TMPs in widths of up to 38 inches,[118] while U.S. Steel reported the ability to supply wider TMPs, including the wide D&I tinplate used in two-piece can production.[119]

U.S. Steel closed and idled certain TMP operations during the POI. Specifically, it closed its TMP operations in East Chicago, Indiana in 2019 and idled certain TMP lines at its operations in Gary, Indiana ("Gary Works") in 2022.[120] The domestic industry's practical TMP production capacity ranged between *** short tons from 2019 to 2021, and it was *** short tons in interim 2021 and interim 2022, respectively.[121]

---

[114] Petitioners' Postconf. Br. at 4-5 and Exhibit 15 (O'Neill Dec'l.) at para. 10. In any final phase of these investigations, we intend to further explore how U.S. demand has changed for pertinent TMP product specifications over the POI.

[115] CR/PR at Tables IV-10 and C-1.

[116] CR/PR at Tables IV-10 and C-1.

[117] CR/PR at Tables IV-10 and C-1.

[118] Tr. at 60 (Jarvis).

[119] CR at I-20; U.S. Steel's Postconf. Br. at 1. Petitioners maintain that U.S. Steel produces tinplate in widths of up to 45 inches. *See* Petitioners' Postconf. Br. at 39 and Exhibit 14 (O'Neill Dec'l.) at para. 3. As previously discussed, certain purchasers reported an inability to source wide D&I tinplate from U.S. Steel during the POI.

[120] CR/PR at Table III-3. U.S. Steel is also reportedly slated to close its UPI steel mill in Pittsburg, California, including capacity for the production of TMPs, in late 2023, and sell the property to a developer for warehousing. *Id*. However, this information has not been confirmed by U.S. Steel. *Id*. In any final phase of the investigation, we intend to further investigate the impact of U.S. Steel's closures and idlings, and its reported future closure of UPI, on the U.S. TMP market.

[121] CR/PR at Table III-5.

*** reported supply constraints during the POI.[122] ***.[123] Cleveland-Cliffs reported supply constraints during the POI stemming from occasional downtime needed to improve the equipment at its Weirton, West Virginia facility,[124] but indicated that such downtime was limited in duration and that these improvements are now largely complete.[125]

U.S. importers and purchasers likewise reported supply constraints from the domestic industry during the POI.[126] Additionally, U.S. importers and purchasers reported that the domestic industry has been unable or unwilling to supply certain TMP specifications that are available from subject sources (including wide D&I tinplate),[127] that domestic producers (and in particular ***) often failed to qualify as TMP suppliers during the POI,[128] and that the TMPs domestic producers did supply were rejected at higher rates than subject imports.[129] Petitioners counter that the U.S. industry supplies the full range of TMP specifications,[130] that

[122] CR/PR at II-10. ***. *Id*.

[123] CR/PR at II-10.

[124] CR/PR at II-10; Petitioners' Postconf. Br. at 39-40.

[125] Tr. at 63, 64, and 76 (Jarvis) (stating, *e.g.*, that Cleveland-Cliffs' capital improvements at Weirton are "pretty much behind us now," and that "for the most part, {the capital improvement program at Weirton} is complete"); Tr. at 63-64 (Vaughn) (characterizing the supply constraints resulting from the Weirton upgrades as "limited in time.").

[126] CR/PR at II-10-11; CMI's Postconf. Br. at 11-18; Exhibit 1 to Silgan's Postconf. Br. (Arena Dec'l). As an alleged example of constrained domestic supply, respondents emphasize that in 2022, ***. *See* CMI's Postconf. Br. at 11-12; Silgan's Postconf. Br. at 5-6. Petitioners counter that ***. *See* Exhibit 6 to Petitioners' Postconf. Br. (Jarvis Dec'l.) at para. 25. As another alleged example of constrained domestic supply, respondents contend that Cleveland-Cliffs told ***. *See* CMI's Postconf. Br. at 12 and Attachment D. Petitioners counter that ***. *See* Exhibit 6 to Petitioners' Postconf. Br. at para. 19. In any final phase of these investigations, we intend to further investigate the extent of any domestic industry supply constraints and offers refused.

[127] See, *e.g.*, CR/PR at II-17; CMI's Postconf. Br. at 19-31 and Attachments A, D, and E; Silgan's Postconf. Br. at 7-10 and Exhibit 1. In addition to wide D&I tinplate, purchasers and importers also reported that the domestic industry has been unable or unwilling to supply the TFS specifications used in easy peel and easy open can ends. *Id*.

[128] *See*, *e.g.*, CR/PR at II-15 and Table V-19; CMI's Postconf. Br. at 31-33 and Attachments C and D; Silgan's Postconf. Br. at 6, Exhibit 1, and Attachments G and H.

[129] *See*, *e.g.*, CR/PR at II-15 and Table V-19; CMI's Postconf. Br. at 34-36 and Attachments A, D, and E.

[130] Specifically, Petitioners assert that U.S. Steel produces D&I tinplate in widths of up to 45 inches, and that Cleveland-Cliffs produces the TFS used in easy open and easy peel can ends. *See* Petitioners' Postconf. Br. at 39. In any final phase of these investigations, we intend to further investigate the extent to which the domestic industry can supply the TMP specifications respondents have identified.

*** was not given a "***" to qualify as a supplier,[131] and that *** received quality claims for only *** percent of its 2021 shipments, and for only *** percent of its 2022 shipments.[132]

Cumulated subject imports were the second largest source of supply to the U.S. market during most of the POI, and were the largest source in interim 2022. Their share of apparent U.S. consumption decreased from *** percent in 2019 to *** percent in 2020 before increasing to *** percent in 2021; their market share was higher in interim 2022, at *** percent, than in interim 2021, at *** percent.[133] Importers reported supply constraints for subject imports resulting from supply chain disruptions, with one importer reporting that a particular shipment of subject imports had been held at a port for four months.[134]

Nonsubject imports were the smallest source of supply to the U.S. market during the POI. Their share of apparent U.S. consumption increased from *** percent in both 2019 and 2020 to *** percent in 2021; their market share was higher in interim 2022, at *** percent, than in interim 2021, at *** percent.[135]

3. Substitutability and Other Conditions

We find that there is a moderate-to-high degree of substitutability between the domestic like product and cumulated subject imports, with higher substitutability between domestic and subject imported TMPs of the same type.[136] TMPs, regardless of source, are commonly produced to the same ASTM standards.[137] Moreover, as previously discussed, the record indicates that the domestic like product and cumulated subject imports overlap in terms

[131] Petitioners' Postconf. Br. at 15, n.43 and Exhibit 6 (Jarvis Dec'l.) at paras. 5 and 26.

[132] Exhibit 15 to Petitioners' Postconf. Br. (O'Neill Dec'l.) at 8. U.S. Steel similarly states that in 2022 it attained a rejection rate of ***. *See* U.S. Steel's Postconf. Br. at 5.

[133] CR/PR at Tables IV-10 and C-1.

[134] CR/PR at II-10.

[135] CR/PR at Tables IV-10 and C-1. Japan was the largest country source of nonsubject imports during the POI. *Id*. at IV-8.

[136] CR/PR at II-15. We note that each of the factors that respondents have cited as limiting the substitutability between domestic and subject imported TMPs has been contested, including the alleged unavailability of domestic equivalents to certain subject imported TMP specifications, and the alleged inferior quality of domestic TMPs relative to subject imports (as reflected in allegedly higher domestic rejection and disqualification rates). We intend to further investigate whether and to what extent these factors impact substitutability in any final phase of the investigations.

[137] CR/PR at I-17-18.

of width,[138] product type,[139] base weight,[140] and finish.[141] All responding domestic producers reported that domestic and subject TMPs are always interchangeable, while a majority of responding importers reported that domestic and subject TMPs are at least sometimes interchangeable.[142]

We also find that price is an important factor in TMP purchasing decisions, along with other factors. Price and quality were cited by purchasers most frequently as being among the top three factors influencing their TMP purchasing decisions.[143] All U.S. producers reported that non-price factors are only sometimes or never significant in purchasing decisions between the domestic like product and imports from each subject country, while most U.S. importers reported that they are always or frequently significant.[144]

U.S. producers generally sold TMPs pursuant to annual contracts, typically negotiated in the fall of the preceding year.[145] All three U.S. producers reported that their contracts fix prices and *** reported that their contracts fix quantities, but both Cleveland-Cliffs and U.S. Steel reported that although their annual contracts set volume targets or minimums, these are ***.[146]

Steel is the main raw material input for TMPs.[147] Prices for cold-rolled steel coil ("CRC"), and in particular black plate, as well as for hot-rolled steel coil ("HRC"), which is used by integrated TMP producers to make black plate, decreased from 2019 to 2020. However, both CRC and HRC prices significantly increased from August 2020 to September 2021, by *** and

---

[138] Tr. at 60 (Jarvis); Answers to Staff Questions Appended to Dofasco's Postconf. Br. at 4; Answers to Staff Questions Appended to KG Dongbu's Postconf. Br. at 2; Exhibit 3 to Chinese Respondents' Postconf. Br.; Answers to Staff Questions Appended to Tata Steel's Postconf. Br. at 3-4; Exhibit 1 to thyssekrupp's Postconf. Br. at 6; and Exhibit 12 to Tosyalı Toyo's Postconf. Br.

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

[140] CR/PR at Table IV-6.

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

[142] CR/PR at II-17 and Table II-6.

[143] CR/PR at Table II-5. Nine firms each cited price and quality as among the top three factors influencing their purchasing decisions. The next most frequently cited factors were on-time delivery/reliability (eight firms) and ability to qualify/produce specifications/wide product (seven firms). *Id*.

[144] CR/PR at II-18 and Tables II-7-8.

[145] CR/PR at V-37 and Table V-3.

[146] *See* CR/PR at V-7; Exhibit 6 to Petitioners' Postconf. Br. (Jarvis Dec'l.) at para. 16; U.S. Steel's Postconf. Br. at 4 and 6-7. U.S. producers reported that they sold *** percent of their commercial U.S. shipments pursuant to annual contracts, with the ***. CR/PR at Table V-4. Subject U.S. importers reported that 77.7 percent of their commercial U.S. shipments were pursuant to annual contracts, which fixed both price and quantity; 3.3. percent were pursuant to short-term contracts; and 19.0 percent were through the spot market. *Id*. at V-8 & Table V-4.

[147] CR/PR at V-1.

*** percent, respectively.[148] CRC and HRC prices then decreased irregularly by *** and *** percent, respectively, through the end of the POI, with a temporary uptick in March/April 2022.[149] Two of three U.S. producers and 14 of 18 responding importers reported that raw material prices for TMPs have fluctuated since the beginning of the POI.[150]

TMPs imported from China, Taiwan, and Turkey are subject to an additional 25 percent *ad valorem* duty under Section 232.[151] TMPs imported from Germany, the Netherlands, and the UK are exempt from the additional 25 percent Section 232 duty within annual tariff-rate quotas ("TRQs"), but are subject to the additional 25 percent Section 232 duty above these TRQs.[152] TMPs imported from South Korea are exempt from Section 232 duties but are subject to an absolute annual quota.[153] TMPs imported from Canada are exempt from Section 232 duties or quotas.[154] CMI states that its members have filed hundreds of Section 232 exclusion requests and that Commerce has granted many of them, including for wide D&I tinplate.[155]

TMPs imported from China are subject to an additional 7.5 percent *ad valorem* duty under Section 301 of the Trade Act of 1974, as amended ("Section 301 duties").[156]

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."[157]

---

[148] CR/PR at V-1, Figure V-1, and Table V-1.

[149] CR/PR at V-1, Figure V-1, and Table V-1.

[150] CR/PR at V-1.

[151] CR/PR at I-14.

[152] For 2022, these TRQs were 151,183 short tons for Germany, 215,830 short tons for the Netherlands, and 38,547 short tons for the UK. CR/PR at I-13.

[153] For 2022, this quota was 80,605 short tons for South Korea. CR/PR at I-13.

[154] CR/PR at I-13.

[155] CR/PR at V-4; CMI's Postconf. Br. at 25-31. CMI contends that Section 232 exclusion requests have been granted on the basis that the excluded products are unavailable in the United States in adequate quantity or quality. Thus, it argues that Commerce's granting of various exclusion requests from its members confirms that the TMP specifications in question are not available from the domestic industry. CMI's Postconf. Br. at 25-31. Petitioners counter that several aspects of the Section 232 exclusions that Commerce has granted for certain TMPs "raise{ } serious questions about whether, and to what extent, those exclusions involved products not otherwise available." Answers to Staff's Questions Appended to Petitioners' Postconf. Br. at 19.

[156] CR/PR at I-16. As of January 2023, the Office of the United States Trade Representative had not excluded any TMPs originating in China from Section 301 duties. *Id*.

[157] 19 U.S.C. § 1677(7)(C)(i).

Cumulated subject import volume increased from *** short tons in 2019 to *** short tons in 2020 and to *** short tons in 2021, a level *** percent greater than in 2019. Cumulated subject import volume was *** percent greater in interim 2022, at *** short tons, than in interim 2021, at *** short tons.[158]

Cumulated subject imports, as a share of apparent U.S. consumption, decreased from *** percent in 2019 to *** percent in 2020 before increasing to *** percent in 2021, a level *** percentage points greater than in 2019. Cumulated subject imports, as a share of apparent U.S. consumption, were *** percentage points greater in interim 2022, at *** percent, than in interim 2021, at *** percent.[159]

In light of the foregoing, we find that the volume of cumulated subject imports and the increase in that volume were significant both in absolute terms and relative to consumption in the United States during the POI.

D. Price Effects of the Subject Imports

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

> (I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and
>
> (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.[160]

As addressed in section VII.B.3. above, we find a moderate-to-high degree of substitutability between the domestic like product and cumulated subject imports, with higher substitutability between domestic and subject imported TMPs of the same type, and that price is an important factor in purchasing decisions.

The Commission solicited quarterly data for the total quantity and f.o.b. value of four pricing products that were sold to unrelated U.S. customers from the first quarter of 2019

[158] CR/PR at Table IV-2.
[159] CR/PR at Tables IV-10 and C-1.
[160] 19 U.S.C. § 1677(7)(C)(ii).

through the third quarter of 2022.[161] Three domestic producers and 12 importers provided usable pricing data, although not all firms reported pricing for all products for all quarters.[162]

The price comparison data in the preliminary phase of these investigations show that subject imports undersold the domestic like product in 68 of 264 quarterly comparisons, or in 25.8 percent of the available comparisons, at margins ranging between 0.2 and 49.2 percent and averaging 10.7 percent.[163] Subject imports oversold the domestic like product in 196 of 264 quarterly comparisons, or in 74.2 percent of available comparisons, at margins ranging between 0.2 and 86.7 percent, and averaging 15.2 percent.[164] Quarters in which there was underselling accounted for 34.1 percent of the reported volume of cumulated subject import sales (601,468 short tons), and quarters in which there was overselling accounted for 65.9 percent of the reported volume of cumulated subject import sales (1.2 million short tons).[165]

Underselling intensified from 2020 to 2021 on both a quarterly and volume basis: in 2020, underselling occurred in *** percent of quarterly comparisons, accounting for *** percent of the reported volume of subject import sales; in 2021, underselling occurred in *** percent of quarterly comparisons, accounting for *** percent of the reported volume of subject import sales.[166] As underselling intensified from 2020 to 2021, the domestic industry lost *** percentage points of market share to cumulated subject imports.[167] Underselling further intensified in interim 2022 compared to interim 2021 on both a quarterly and volume basis: in interim 2022, underselling occurred in a majority, *** percent, of quarterly

---

[161] The four pricing products are as follows:

Product 1.-- Single reduced, electrolytic tinplate with base box weights of 75–95 lbs. inclusive, in coils;

Product 2.-- Single reduced, electrolytic chromium-coated steel with base box weights of 65–80 lbs. inclusive, in coils;

Product 3.-- Casing, Grade P-110, 5 1/2" O.D., 20.0 lbs./ft., threaded and coupled, range 3, welded sold to unrelated U.S. distributors; and

Product 4.-- Double reduced, electrolytic chromium-coated steel with base box weights of 55–65 lbs. inclusive, in coils. CR/PR at V-9.

[162] CR/PR at V-9. Pricing data reported by these firms accounted for *** percent of U.S. producers' U.S. shipments of TMPs in 2021, as well as *** percent of U.S. shipments of subject imports from Canada, *** percent of U.S. shipments of subject imports from China, *** percent of U.S. shipments of subject imports from Germany, *** percent of U.S. shipments of subject imports from the Netherlands, *** percent of U.S. shipments of subject imports from South Korea, *** percent of U.S. shipments of subject imports from Taiwan, *** percent of U.S. shipments of subject imports from Turkey, and *** percent of U.S. shipments of subject imports from the UK in 2021. *Id*.

[163] CR/PR at Table V-12.

[164] CR/PR at Table V-12.

[165] CR/PR at Table V-12.

[166] CR/PR at Table V-11.

[167] CR/PR at Table IV-10.

comparisons, accounting for the large majority, *** percent, of the reported volume of subject import sales; by comparison, in interim 2021, it occurred in *** percent of quarterly comparisons, accounting for *** percent of the reported volume of subject import sales.[168] As underselling further intensified in interim 2022, the domestic industry lost *** percentage points of market share to cumulated subject imports relative to interim 2021.[169]

We have also considered purchaser responses concerning lost sales. Eight of 12 responding purchasers reported that they had purchased subject imports instead of the domestic like product during the POI. Five of those eight responding purchasers reported that subject imports were priced lower than the domestic like product, and three of the five reported that price was a primary reason for their decision to purchase subject imports over the domestic like product. These three responding purchasers reported purchasing *** short tons of subject imports in lieu of the domestic like product primarily based on price.[170] We also observe that ***.[171]

Given the degree of substitutability between subject imports and the domestic like product, the importance of price in purchasing decisions, and the underselling in the majority of quarterly comparisons and with respect to the large majority of the reported subject import sales volume in interim 2022, we find that subject import underselling was significant in interim 2022. Moreover, given that the domestic industry lost market share to cumulated subject imports in 2021, when underselling intensified, and that it lost a greater amount of market share to these imports in interim 2022 relative to interim 2021, when underselling became significant, we cannot conclude that cumulated subject imports did not gain market share at the expense of the domestic industry as a result of the underselling.[172] [173]

---

[168] *Derived from* CR/PR Tables V-5-9.

[169] CR/PR at Table IV-10.

[170] CR/PR at Tables V-16-17.

[171] Petitioners' Postconf. Br. at 30-31 and Exhibit 6; U.S. Steel's Postconf. Br. at 6-7. We intend to investigate further in any final phase of these investigations whether and to what extent the domestic industry lost sales to subject imports on the basis of price and the extent to which the importer and purchaser allegations of domestic supply constraints and quality concerns may have affected purchasing decisions.

[172] As previously discussed, the domestic industry lost *** percentage points of market share to cumulated subject imports in 2021, and lost *** percentage points of market share to cumulated subject imports in interim 2022 relative to interim 2021. CR/PR at Tables IV-10 and C-1.

[173] Commissioner Karpel finds, given the moderate-to-high degree of substitutability between subject imports and the domestic like product, the importance of price in purchasing decisions, and the underselling during the POI, including in the majority of quarterly comparisons and with respect to the large majority of the reported subject import sales volume in interim 2022, that subject import underselling was significant during the POI. She cannot conclude that the underselling, particularly in (Continued…)

We have also considered price trends over the POI. The domestic industry's sales prices for all four pricing products fluctuated during the POI but increased overall.[174] Likewise, U.S. importers' sales prices for U.S. shipments of subject imports for all four pricing products fluctuated but increased overall.[175] Prices for TMPs from all sources generally fluctuated within a narrow band during the 2019-2021 period and then increased substantially in interim 2022.[176]

We have also considered whether subject imports prevented price increases that otherwise would have occurred to a significant degree. The domestic industry's ratio of cost of goods sold ("COGS") to net sales increased from *** percent in 2019 to *** percent in 2020, before decreasing to *** percent in 2021, a level *** percentage points lower than in 2019. The industry's COGS-to-net-sales ratio was *** percentage points lower in interim 2022, at *** percent, than in interim 2021, at *** percent.[177] The trend in this ratio between 2019 and 2021 reflects an overall decline in the industry's per-unit COGS and an overall increase in its net sales average unit value ("AUV"), while the trend in the interim periods reflects higher per-unit COGS in interim 2022 than in interim 2021 but also a *** higher net sales AUV in interim 2022 than in

---

2021, when underselling intensified, and in interim 2022 when underselling further intensified, did not lead to increasing market share shifts from domestic producers to subject imports.

[174] The domestic industry's sales prices for pricing products 1, 2, 3, and 4 increased by *** percent, *** percent, *** percent, and *** percent, respectively, over the POI. CR/PR at Table V-9. Petitioners have submitted e-mails between Cleveland-Cliffs and its customers allegedly showing that these customers used lower-priced subject imports to "put{} pressure on Cleveland-Cliffs to lower its pricing." *See* Exhibit 1 to Petitioners' Postconf. Br. at 30-31; Exhibit 6 and attachments thereto to Petitioners' Postconf. Br.

[175] Prices for pricing product 1 from Canada, China, Germany, the Netherlands, South Korea, Taiwan, and Turkey increased by *** percent, *** percent, *** percent, *** percent, *** percent, *** percent, and *** percent, respectively, over the POI (a change-over-period comparison is not possible for pricing product 1 from the UK). CR/PR at Table V-9.

Prices for pricing product 2 from Canada, China, and the Netherlands increased by *** percent, *** percent, and *** percent, respectively, over the POI (change-over-period comparisons are not possible for pricing product 2 from Germany, South Korea, Taiwan, Turkey, or the UK). CR/PR at Table V-9.

Prices for pricing product 3 from Canada, China, the Netherlands, South Korea, Taiwan, and the UK increased by *** percent, *** percent, *** percent, *** percent, *** percent, and *** percent, respectively, over the POI (change-over-period comparisons are not possible for pricing product 3 from Germany and Turkey). CR/PR at Table V-9.

Prices for pricing product 4 from Canada, China, and South Korea increased by *** percent, *** percent, and *** percent, respectively, over the POI, (change-over-period comparisons are not possible for pricing product 4 from Germany, the Netherlands, Taiwan, Turkey, or the UK). CR/PR at Table V-9.

[176] CR/PR at V-22.

[177] CR/PR at Table VI-1.

interim 2021.[178] However, we observe that the domestic industry's ratio of COGS-to-net sales *** in two of the three full years of the POI.[179]

In sum, based on the record of the preliminary phase of the investigations, we find that subject imports significantly undersold the domestic like product in interim 2022 on a cumulated basis, and cannot conclude that the intensifying underselling in 2021 and significant underselling in interim 2022 did not lead to market share shifts from the domestic industry to subject imports in 2021 and interim 2022.[180] We therefore cannot conclude that cumulated subject imports did not have significant price effects.

E. Impact of the Subject Imports[181]

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

[178] CR/PR at Tables VI-1-2. Between 2019 and 2020, the domestic industry's unit COGS decreased by $*** per short ton and its nets sales AUV decreased by $*** per short ton. While the domestic industry's unit COGS increased by $*** per short ton from 2020 to 2021, the AUV of the domestic industry's net sales increased between these years by a greater amount, $*** per short ton. *Id*. Similarly, while the domestic industry's unit COGS was $*** per short ton greater in interim 2022 than in interim 2021, the AUV of the domestic industry's net sales was $*** per short ton greater in interim 2022 than in interim 2021. *Id*.

[179] CR/PR at Table VI-1. In any final phase of these investigations, we intend to further investigate how subject imports may be affecting prices in the U.S. market, including how subject import prices may influence annual contractual price negotiations for the domestic like product.

[180] As noted in section VII.D, Commissioner Karpel finds that cumulated subject imports significantly undersold the domestic like product during the POI and cannot conclude that subject import underselling, which intensified in 2021 and interim 2022, did not lead to market share shifts from the domestic industry to subject imports during the POI.

[181] Commerce initiated its investigations based on estimated dumping margins of 79.59 percent for subject imports from Canada, 122.52 percent for subject imports from China, 70.15 percent for subject imports from Germany, between 125.10 percent and 296.04 percent for subject imports from the Netherlands, between 13.28 percent and 110.50 percent for subject imports from South Korea, between 46.76 percent and 59.61 percent for subject imports from Taiwan, between 87.73 percent and 97.21 percent for subject imports from Turkey, and 111.92 percent for subject imports from the UK. *Tin Mill Products from Canada, the People's Republic of China, Germany, the Netherlands, the Republic of Korea, Taiwan, the Republic of Turkey, and the United Kingdom: Initiation of Less-Than-Fair-Value Investigations*, 88 Fed. Reg. 9481, 9484 (Feb. 7, 2023).

the context of the business cycle and conditions of competition that are distinctive to the affected industry."[182]

The domestic industry's performance was mixed during the POI by many measures. Although the domestic industry's financial performance improved in interim 2022 compared to interim 2021,[183] the industry's production, net sales quantities, and U.S. shipments were lower, as it lost *** percentage points of market share to cumulated subject imports.[184]

The domestic industry's practical TMP capacity decreased by *** percent from 2019 to 2021, from *** shorts tons in 2019 to *** short tons in 2020 and *** short tons in 2021; it was *** percent lower in interim 2022, at *** short tons, than in interim 2021, at *** short tons.[185] Its production increased overall by *** percent from 2019 to 2021, increasing from *** short tons in 2019 to *** short tons in 2020 before decreasing to *** short tons in 2021; it was *** percent lower in interim 2022, at *** short tons, than in interim 2021, at *** short tons.[186] Its capacity utilization increased from *** percent in 2019 to *** percent in 2020 and *** percent in 2021; it was higher in interim 2022, at *** percent, than in interim 2021, at *** percent.[187]

The domestic industry's employment[188] and hours worked[189] decreased from 2019 to 2021, but were both higher in interim 2022 than in interim 2021. Its wages paid[190] and hourly wages[191] increased from 2019 to 2021 and were both higher in interim 2022 than in interim

[182] 19 U.S.C. § 1677(7)(C)(iii). This provision was amended by the Trade Preferences Extension Act of 2015, Pub. L. 114-27.

[183] CR/PR at Table VI-1

[184] CR/PR at Table IV-10.

[185] CR/PR at Table III-5.

[186] CR/PR at Table III-5.

[187] CR/PR at Table III-5.

[188] Employment decreased by *** percent from 2019 to 2021, from *** production and related workers ("PRWs") in 2019 to *** PRWs in 2020 and *** PRWs in 2021; it was *** percent higher in interim 2022, at *** PRWs, than in in interim 2021, at *** PRWs. CR/PR at Table III-11.

[189] Hours worked decreased by *** percent from 2019 to 2021, from *** hours in 2019 to *** hours in 2020 and *** hours in 2021; it was *** percent higher in interim 2022, at *** hours, than in in interim 2021, at *** hours. CR/PR at Table III-11.

[190] Wages paid increased by *** percent from 2019 to 2021, decreasing from $*** in 2019 to $*** in 2020, before increasing to $*** in 2021; they were *** percent greater in interim 2022, at $***, than in interim 2021, at $***. CR/PR at Table III-11.

[191] Hourly wages increased from $*** per hour in 2019 to $*** per hour in 2020 and $*** per hour in 2021; they were $*** per hour in interim 2022 compared to $*** per hour in interim 2021. CR/PR at Table III-11.

2021. Its productivity increased by *** percent from 2019 to 2021, but was *** percent lower in interim 2022 than in interim 2021.[192]

The domestic industry's U.S. shipments increased overall by *** percent from 2019 to 2021, increasing from *** short tons in 2019 to *** short tons in 2020 before decreasing to *** short tons in 2021; they were *** percent lower in interim 2022, at *** short tons, than in interim 2021, at *** short tons.[193] The domestic industry's share of apparent U.S. consumption decreased by *** percentage points from 2019 to 2021, increasing from *** percent in 2019 to *** percent in 2020 before decreasing to *** percent in 2021; its share of apparent U.S. consumption was *** percentage points lower in interim 2022, at *** percent, than in interim 2021, at *** percent.[194]

The domestic industry's inventories decreased overall by *** percent from 2019 to 2021, decreasing from *** short tons in 2019 to *** short tons in 2020 before increasing to *** short tons in 2021; they were *** percent higher in interim 2022, at *** short tons, than in interim 2021, at *** short tons.[195] As a ratio of total shipments, the domestic industry's end-of-period inventories declined from *** percent in 2019 to *** percent in 2020 before increasing to *** percent in 2021, and were higher in interim 2022, at *** percent, than in interim 2021, at *** percent.[196]

The domestic industry's R&D expenses decreased by *** percent from 2019 to 2021 and were *** percent lower in interim 2022 than in interim 2021.[197] Its capital expenditures declined irregularly by *** percent from 2019 to 2021, but were *** percent higher in interim 2022 than in interim 2021.[198] The domestic industry's return on assets increased from negative *** percent in 2019 to negative *** percent in 2020 and to negative *** percent in 2021.[199] *** reported negative effects on investment, growth, and development due to subject imports.[200]

---

[192] Productivity increased from *** short tons per 1,000 hours in 2019 to *** short tons per 1,000 hours in 2020 and *** short tons per 1,000 hours in 2021; it was *** short tons per 1,000 hours in interim 2022 compared to *** short tons per 1,000 hours in interim 2021. CR/PR at Table III-11.

[193] CR/PR at Table III-8.

[194] CR/PR at Table IV-10.

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

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

[197] The domestic industry's R&D expenses decreased from $*** in 2019 to $*** in 2020 and $*** in 2021; they were $*** in interim 2022 compared to $*** in interim 2021. CR/PR at Table VI-6.

[198] The domestic industry's capital expenditures declined from $*** in 2019 to $*** in 2020 before increasing $*** in 2021; they were $*** in interim 2022 compared to $*** in interim 2021. CR/PR at Table VI-4.

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

[200] CR/PR at Tables VI-11-12.

Many of the domestic industry's indicia of financial performance were poor during the 2019-2021 period but improved markedly in interim 2022 compared to interim 2021. The domestic industry experienced gross losses in 2019 and 2020, a gross profit in 2021, and a gross profit in interim 2022 that was *** percent higher than in interim 2021.[201] The domestic industry incurred generally worsening operating and net losses from 2019 to 2021, before experiencing positive operating and net income in interim 2022 (at $*** and $***, respectively), compared to operating and net losses in interim 2021 (at negative $*** and negative $***, respectively).[202] Consequently, the domestic industry incurred generally worsening negative operating and net margins from 2019 to 2021, but positive operating and net margins in interim 2022 (at *** and *** percent, respectively), compared to negative operating and net margins in interim 2021 (at negative *** and negative *** percent, respectively).[203]

Nevertheless, as subject import underselling intensified in 2021 and interim 2022, the domestic industry lost increasing market share to subject imports, and its net sales quantity, U.S. shipments, and production were lower by ***, *** percent, and *** percent, respectively, in interim 2022 relative to interim 2021. Although the industry improved its performance in interim 2022 compared to interim 2021 by certain measures, including operating and net income, we cannot conclude that increasing subject import underselling and market share did not have an adverse impact on the domestic industry.

Furthermore, Petitioners claim that the domestic industry's improved financial performance in interim 2022 resulted from disruptions to subject import supplies during

[201] The domestic industry's gross losses were $*** in 2019 and $*** in 2020 and its gross profits were $*** in 2021; the domestic industry's gross income was $*** in interim 2022 compared to $*** in interim 2021. CR/PR at Table VI-1.

[202] The domestic industry's operating losses were $*** in 2019, $*** in 2020, and $*** in 2021; the domestic industry experienced an operating income of $*** in interim 2022 compared to an operating loss of $*** in interim 2021. CR/PR at Table VI-1.

The domestic industry's net losses were $*** in 2019, $*** in 2020, and $*** in 2021; the domestic industry experienced a net income of $*** in interim 2022 compared to a net loss of $*** in interim 2021. CR/PR at Table VI-1.

[203] As a ratio to net sales, the domestic industry's operating income was negative *** percent in 2019, negative *** percent in 2020, and negative *** percent in 2021; it was positive *** percent in interim 2022, compared to negative *** percent in interim 2021. CR/PR at Table IV-1.

As a ratio to net sales, the domestic industry's net income was negative *** percent in 2019, negative *** percent in 2020, and negative *** percent in 2021; it was positive *** percent in interim 2022, compared to negative *** percent in interim 2021. CR/PR at Table IV-1.

contract negotiations in 2021, since resolved, that boosted 2022 contract prices.[204] Petitioners have also submitted evidence showing that the domestic industry's performance declined significantly in the fourth quarter of 2022 and the first quarter of 2023, as Cleveland-Cliffs' order books "collapsed" in the face of intensifying subject import competition,[205] and U.S. Steel laid off 244 workers at Gary Works in part "because of the adverse impact of imports."[206] Accordingly, we cannot conclude that cumulated subject imports did not have a significant impact on the domestic industry.

Respondents argue that subject imports are non-injurious because they are allegedly not taking sales from U.S. producers, but rather filling gaps in domestic supply resulting from the domestic producers' supply constraints, U.S. Steel's closures and idlings, and the domestic industry's inability or unwillingness to produce certain TMP specifications.[207] Even with U.S Steel's closures and idlings, however, the domestic industry's reported capacity remained sufficient to supply most or all apparent U.S consumption throughout the POI and its practical capacity utilization did not exceed *** percent, indicating that the industry had substantial unused capacity with which it could have increased production.[208] Moreover, as discussed in section VI.B. above, the record indicates that there was an overlap in the TMP products supplied by the domestic industry and subject importers during the POI, even if certain TMP specifications were available only from importers of subject merchandise.[209] [210]

---

[204] Specifically, Petitioners claim that the "tight" supply of TMP imports in the U.S. market at the end of 2021, caused by global supply chain issues, allowed the domestic industry to negotiate favorable pricing for their 2022 annual contracts, and that consequently, "conditions appeared to improve" temporarily for the domestic industry in interim 2022. However, Petitioners contend that this improvement "did not last long" because supply chains "loosened" in 2022, resulting in intensified subject import competition that adversely impacted the domestic industry's performance later in the year. *See* Tr. at. 11 (Vaughn) and 65-66 (Reynolds); Petitioners' Postconf. Br. at 30, Exhibit 6.

[205] Petitioners' Postconf. Br. at 4, 35, Exhibit 6 (Jarvis Dec'l.) at paras. 12-40, and Attachments D and E to Exhibit 6. Petitioners contend that, ***. *Id*.

[206] Petitioners' Postconf. Br. at 6; *see also* Exhibit 12 to Petitioners' Postconf. Br. (Fastmarkets.com, "U.S. Steel blames tin imports, weak demand for layoffs at Gary Works division" (Jan. 6, 2023)). In any final phase of the investigation, we will investigate further the extent to which the reported idlings and layoffs were attributable to subject import competition.

[207] *See*, *e.g.*, KG Dongbu's Postconf. Br. at 9-10; Silgan's Postconf. Br. at 7-10.

[208] PR/CR at III-5.

[209] Tr. at 60 (Jarvis); Answers to Staff Questions Appended to Dofasco's Postconf. Br. at 4; Answers to Staff Questions Appended to KG Dongbu's Postconf. Br. at 2; Exhibit 3 to Chinese Respondents' Postconf. Br.; Answers to Staff Questions Appended to Tata Steel's Postconf. Br. at 3-4; Exhibit 1 to thyssekrupp's Postconf. Br. at 6; and Exhibit 12 to Tosyalı Toyo's Postconf. Br. We also note that Cleveland-Cliffs has argued that its supply constraints were limited in duration and are entirely or almost entirely resolved. Tr. at 63, 64, and 76 (Jarvis); Tr. at 63-64 (Vaughn).

[210] We intend to further investigate these issues in any final phase of these investigations.

We have also considered whether there are other factors that may have had an adverse impact on the domestic industry during the POI to ensure that we are not attributing injury from such other factors to subject imports.[211] Respondents argue that declines in the domestic industry's capacity and production over the POI stemmed not from subject imports but from U.S. Steel's business decision to devote raw material inputs for TMPs to other, more profitable out-of-scope products, and ***.[212] Both U.S. Steel and *** have indicated that subject imports played a role in limiting their capacity and/or production of TMPs, however.[213] Additionally, if shortages of domestically produced TMPs drew subject imports into the U.S. market in interim 2022, as respondents argue, it might be expected that there would be more overselling by cumulated subject imports instead of the underselling that actually prevailed in interim 2022.[214]

VIII. Conclusion

For the reasons stated above, we determine that there is a reasonable indication that an industry in the United States is materially injured by reason of subject imports of TMPs from Canada, China, Germany, the Netherlands, South Korea, Taiwan, Turkey, and the UK that are allegedly sold in the United States at less than fair value and imports of TMPs from China that are allegedly subsidized by the government of China.

[211] We note that nonsubject imports maintained a relatively minor presence in the U.S. market, never exceeding *** percent of apparent U.S. consumption, and cannot explain the injury resulting from the shift in market share from the domestic industry to cumulated subject imports in interim 2022. CR/PR at Table IV-10. We also note that apparent U.S. consumption increased throughout the POI and therefore demand trends would not have had a negative impact on the domestic industry. *Id.*

[212] *See*, *e.g.*, Tata Steel's Postconf. Br. at 19-20; CMI's Postconf. Br. at 7 and 9; Silgan's Postconf. Br. at 12.

[213] *See*, *e.g.*, *** Producer Questionnaire Response at III-15 (***; *** Producer Questionnaire Response at II-2a (stating that ***). U.S. Steel also argues that its ***. U.S. Steel's Postconf. Br. at 6-7.

[214] CR/PR at Table V-11. We note that the preliminary record indicates that most subject imports have been sold pursuant to annual contracts typically negotiated the previous fall, but a considerable portion have been sold on the spot market. CR/PR at V-8 and Table V-4; Tr. at 160 (Jacobson).

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 Cleveland-Cliffs Inc. ("Cleveland-Cliffs") and the United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union ("USW"), Cleveland, Ohio, and Pittsburgh, Pennsylvania on January 18, 2023, alleging that an industry in the United States is materially injured and threatened with material injury by reason of subsidized and less-than-fair-value ("LTFV") imports of tin mill products[1] from Canada, China, Germany, the Netherlands, South Korea, Taiwan, Turkey, and the United Kingdom. Table I-1 presents information relating to the background of these investigations.[2] [3]

Table I-1
Tin mill products: Information relating to the background and schedule of this proceeding

Effective date	Action
January 18, 2023	Petitions filed with Commerce and the Commission; institution of Commission investigations (88 FR 4206, January 24, 2023)
February 7, 2023	Commerce's initiation of China CVD investigation (88 FR 9476, February 14, 2023) and Canada, China, Germany, the Netherlands, South Korea, Taiwan, Turkey, and the United Kingdom AD investigations (88 FR 9481, February 14, 2023)
February 8, 2023	Commission's conference
March 3, 2023	Commission's vote
March 6, 2023	Commission's determinations
March 13, 2023	Commission's views

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

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

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

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.*

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

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

Organization of report

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

Market summary

Tin mill products are primarily used to manufacture welded cans for food, aerosol, paint, and filtration. The leading U.S. producers of tin mill products are ***, while leading producers of tin mill products outside the United States include ***. The leading U.S. importers of tin mill products from the subject countries are ***. Leading importers of product from nonsubject countries (primarily Japan) include ***. U.S. purchasers of tin mill products are primarily firms that produce cans for food storage.

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

Apparent U.S. consumption of tin mill products totaled approximately *** short tons ($***) in 2021. Currently, three firms are known to produce tin mill products in the United States. U.S. producers' U.S. shipments of tin mill products totaled *** short tons ($***) in 2021 and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value. U.S. importers' U.S. shipments of imports from subject sources totaled *** short tons ($***) in 2021 and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value. U.S. importers' U.S. shipments of imports from nonsubject sources totaled *** short tons ($***) in 2021 and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value.

Summary data and data sources

A summary of data collected in these investigations are presented in appendix C, table C-1. Except as noted, U.S. industry data are based on questionnaire responses of three firms that accounted for virtually all U.S. production of tin mill products during 2021. U.S. imports are based on responses on questionnaire responses from 21 U.S. importers.

Previous and related investigations

Tin mill products have been the subject of a prior antidumping duty investigation in the United States. Additionally, there have been countervailing and antidumping duty investigations on hot-rolled and cold-rolled steel, including substrates used in the production of tin mill products. Table I-2 presents information on previous and related Title VII investigations.

Table I-2
Tin mill products: Previous and related Commission proceedings

Date	Number	Product / Country	ITC Original Determination	Current Status of Order
1998	731-TA-808	Hot-rolled steel flat products / Russia	Affirmative	Order continued after fourth review, 12/09/2022
1999	731-TA-860	Tin- and chromium-coated Steel Sheet / Japan	Affirmative	Order continued after third review, 07/11/2018
2015	701-TA-540	Cold-rolled steel flat products / Brazil	Affirmative	Order revoked after first review, 08/25/2022
2015	701-TA-541	Cold-rolled steel flat products / China	Affirmative	Order continued after first review, 08/19/2022
2015	701-TA-542	Cold-rolled steel flat products / India	Affirmative	Order continued after first review, 08/25/2022
2015	701-TA-543	Cold-rolled steel flat products / South Korea	Affirmative	Order continued after first review, 08/19/2022
2015	701-TA-544	Cold-rolled steel flat products / Russia	Negative	---
2015	731-TA-1283	Cold-rolled steel flat products / Brazil	Affirmative	Order revoked after first review, 08/25/2022
2015	731-TA-1284	Cold-rolled steel flat products / China	Affirmative	Order continued after first review, 08/25/2022
2015	731-TA-1285	Cold-rolled steel flat products / India	Affirmative	Order continued after first review, 08/25/2022
2015	731-TA-1286	Cold-rolled steel flat products / Japan	Affirmative	Order continued after first review, 08/25/2022

Table continued.

Table I-2 Continued
Tin mill products: Previous and related Commission proceedings

Date	Number	Product / Country	ITC Original Determination	Current Status of Order
2015	731-TA-1288	Cold-rolled steel flat products / Netherlands	Negative	---
2015	731-TA-1287	Cold-rolled steel flat products / South Korea	Affirmative	Order continued after first review, 08/25/2022
2015	731-TA-1289	Cold-rolled steel flat products / Russia	Negative	---
2015	731-TA-1290	Cold-rolled steel flat products / United Kingdom	Affirmative	Order continued after first review, 08/25/2022
2015	701-TA-545	Hot-rolled steel flat products / Brazil	Affirmative	Order revoked after first review, 12/22/2022
2015	701-TA-546	Hot-rolled steel flat products / South Korea	Affirmative	Order continued after first review, 12/22/2022
2015	731-TA-1291	Hot-rolled steel flat products / Australia	Affirmative	Order continued after first review, 12/22/2022
2015	731-TA-1292	Hot-rolled steel flat products / Brazil	Affirmative	Order revoked after first review, 12/22/2022
2015	731-TA-1293	Hot-rolled steel flat products / Japan	Affirmative	Order continued after first review, 12/22/2022
2015	731-TA-1294	Hot-rolled steel flat products / Netherlands	Affirmative	Order continued after first review, 12/22/2022
2015	731-TA-1295	Hot-rolled steel flat products / South Korea	Affirmative	Order continued after first review, 12/22/2022
2015	731-TA-1296	Hot-rolled steel flat products / Turkey	Affirmative	Order continued after first review, 12/22/2022
2015	731-TA-1297	Hot-rolled steel flat products / United Kingdom	Affirmative	Order continued after first review, 12/22/2022

Source: U.S. International Trade Commission publications and Federal Register notices.

Note: The dates presented in this table refer to the year in which the petitions were filed.

Safeguard investigations

In 2001, the Commission determined that certain carbon and alloy steel, including tin mill products, was being imported into the United States in such increased quantities as to be a substantial cause of serious injury to the domestic industry producing such articles, and recommended additional duties on imports for a period of four years.[6] On March 5, 2002, President George W. Bush announced the implementation of steel safeguard measures. Import relief relating to tin mill products consisted of an additional tariff for a period of three years and one day (30 percent ad valorem on imports in the first year, 24 percent in the second year, and 18 percent in the third year).[7] Following receipt of the Commission's mid-term monitoring report in September 2003, and after seeking information from the U.S. Secretary of Commerce and U.S. Secretary of Labor, President Bush determined that the effectiveness of the action taken had been impaired by changed circumstances. Therefore, he terminated the U.S. measure with respect to increased tariffs on December 4, 2003.[8]

Nature and extent of alleged subsidies and sales at LTFV

Alleged subsidies

On February 7, 2023, Commerce published a notice in the Federal Register of the initiation of its countervailing duty investigation on tin mill products from China.[9]

Alleged sales at LTFV

On February 7, 2023, Commerce published a notice in the Federal Register of the initiation of its antidumping duty investigations on tin mill products from Canada, China, Germany, the Netherlands, South Korea, Taiwan, Turkey, and the United Kingdom.[10] Commerce has initiated antidumping duty investigations based on estimated dumping margins of 79.59 percent for Canada, 122.52 percent for China, 70.15 percent for Germany, between 125.10 percent and 296.04 percent for the Netherlands, between 13.28 and 110.50 percent for South

[6] 66 FR 67304, December 28, 2001.

[7] 67 FR 10553, March 7, 2002. The President also instructed the Secretaries of Commerce and the Treasury to establish a system of import licensing to facilitate steel import monitoring.

[8] 68 FR 68483, December 8, 2003. Import licensing, however, remained in place through March 21, 2005, and continues in modified form at this time.

[9] For further information on the alleged subsidy programs see Commerce's notice of initiation and related CVD Initiation Checklist. 88 FR 9476, February 14, 2023.

[10] 88 FR 9481, February 14, 2023.

Korea, between 46.76 and 59.61 percent for Taiwan, between 87.73 and 97.21 percent for Turkey, and 111.92 percent for the United Kingdom.

The subject merchandise

Commerce's scope

In the current proceeding, Commerce has defined the scope as follows:[11]

> *The products within the scope of these investigations are tin mill flat-rolled products that are coated or plated with tin, chromium, or chromium oxides. Flat-rolled steel products coated with tin are known as tinplate. Flat-rolled steel products coated with chromium or chromium oxides are known as tin-free steel or electrolytic chromium-coated steel. The scope includes all the noted tin mill products regardless of thickness, width, form (in coils or cut sheets), coating type (electrolytic or otherwise), edge (trimmed, untrimmed or further processed, such as scroll cut), coating thickness, surface finish, temper, coating metal (tin, chromium, chromium oxide), reduction (single- or double-reduced), and whether or not coated with a plastic material.*
>
> *All products that meet the written physical description are within the scope of these investigations unless specifically excluded. The following products are outside and/or specifically excluded from the scope of these investigations:*
>
> - *Single reduced electrolytically chromium coated steel with a thickness 0.238 mm (85 pound base box) (±10%) or 0.251 mm (90 pound base box) (±10%) or 0.255 mm (±10%) with 770 mm (minimum width) (±1.588 mm) by 900 mm (maximum length if sheared) sheet size or 30.6875 inches (minimum width) (± 1/16 inch) and 35.4 inches (maximum length if sheared) sheet size; with type MR or higher (per ASTM) A623 steel chemistry; batch annealed at T2 1/2 anneal temper, with a yield strength of 31 to 42 kpsi (214 to 290 Mpa); with a tensile strength of 43 to 58 kpsi (296 to 400 Mpa); with a chrome coating restricted to 32 to 150 mg/m^2 ; with a chrome oxide coating restricted to 6 to 25 mg/m^2 with a modified 7B ground roll finish or blasted roll finish; with roughness average (Ra) 0.10 to 0.35 micrometers, measured with a stylus instrument with a stylus radius of 2 to 5 microns, a trace length of 5.6 mm, and a cut-off of 0.8 mm, and the measurement traces shall be made*

[11] 88 FR 9476 and 88 FR 9481, February 14, 2023.

perpendicular to the rolling direction; with an oil level of 0.17 to 0.37 grams/base box as type BSO, or 2.5 to 5.5 mg/m^2 as type DOS, or 3.5 to 6.5 mg/m^2 as type ATBC; with electrical conductivity of static probe voltage drop of 0.46 volts drop maximum, and with electrical conductivity degradation to 0.70 volts drop maximum after stoving (heating to 400 degrees F for 100 minutes followed by a cool to room temperature).

- *Single reduced electrolytically chromium- or tin-coated steel in the gauges of 0.0040 inch nominal, 0.0045 inch nominal, 0.0050 inch nominal, 0.0061 inch nominal (55 pound base box weight), 0.0066 inch nominal (60 pound base box weight), and 0.0072 inch nominal (65 pound base box weight), regardless of width, temper, finish, coating or other properties.*

- *Single reduced electrolytically chromium coated steel in the gauge of 0.024 inch, with widths of 27.0 inches or 31.5 inches, and with T-1 temper properties.*

- *Single reduced electrolytically chromium coated steel, with a chemical composition of 0.005% max carbon, 0.030% max silicon, 0.25% max manganese, 0.025% max phosphorous, 0.025% max sulfur 0.070% max aluminum, and the balance iron, with a metallic chromium layer of 70-130 mg/m2, with a chromium oxide layer of 5-30 mg/m2, with a tensile strength of 260-440 N/mm2, with an elongation of 28-48%, with a hardness (HR-30T) of 40-58, with a surface roughness of 0.5-1.5 microns Ra, with magnetic properties of Bm (KG) 10.0 minimum, Br (KG) 8.0 minimum, Hc (Oe) 2.5-3.8, and MU 1400 minimum, as measured with a Riken Denshi DC magnetic characteristic measuring machine, Model BHU-60.*

- *Bright finish tin-coated sheet with a thickness equal to or exceeding 0.0299 inch, coated to thickness of ¾ pound (0.000045 inch) and 1 pound (0.00006 inch).*

- *Electrolytically chromium coated steel having ultra flat shape defined as oil can maximum depth of 5/64 inch (2.0 mm) and edge wave maximum of 5/64 inch (2.0 mm) and no wave to penetrate more than 2.0 inches (51.0 mm) from the strip edge and coilset or curling requirements of average maximum of 5/64 inch (2.0 mm) (based on six readings, three across each cut edge of a 24 inches (61 cm) long sample with no single reading exceeding 4/32 inch (3.2 mm) and no more than two readings at 4/32 inch (3.2 mm)) and (for 85 pound base box item only: crossbuckle maximums of 0.001 inch (0.0025 mm) average having no reading above 0.005 inch (0.127*

mm)), with a camber maximum of 1/4 inch (6.3 mm) per 20 feet (6.1 meters), capable of being bent 120 degrees on a 0.002 inch radius without cracking, with a chromium coating weight of metallic chromium at 100 mg/m^2 and chromium oxide of 10 mg/m^2 , with a chemistry of 0.13% maximum carbon, 0.60% maximum manganese, 0.15% maximum silicon, 0.20% maximum copper, 0.04% maximum phosphorous, 0.05% maximum sulfur, and 0.20% maximum aluminum, with a surface finish of Stone Finish 7C, with a DOS-A oil at an aim level of 2 mg/square meter, with not more than 15 inclusions/foreign matter in 15 feet (4.6 meters) (with inclusions not to exceed 1/32 inch (0.8 mm) in width and 3/64 inch (1.2 mm) in length), with thickness/temper combinations of either 60 pound base box (0.0066 inch) double reduced CADR8 temper in widths of 25.00 inches, 27.00 inches, 27.50 inches, 28.00 inches, 28.25 inches, 28.50 inches, 29.50 inches, 29.75 inches, 30.25 inches, 31.00 inches, 32.75 inches, 33.75 inches, 35.75 inches, 36.25 inches, 39.00 inches, or 43.00 inches, or 85 pound base box (0.0094 inch) single reduced CAT4 temper in widths of 25.00 inches, 27.00 inches, 28.00 inches, 30.00 inches, 33.00 inches, 33.75 inches, 35.75 inches, 36.25 inches, or 43.00 inches, with width tolerance of 1/8 inch, with a thickness tolerance of 0.0005 inch, with a maximum coil weight of 20,000 pounds (9071.0 kg), with a minimum coil weight of 18,000 pounds (8164.8 kg), with a coil inside diameter of 16 inches (40.64 cm) with a steel core, with a coil maximum outside diameter of 59.5 inches (151.13 cm), with a maximum of one weld (identified with a paper flag) per coil, with a surface free of scratches, holes, and rust.

- *Electrolytically tin coated steel having differential coating with 1.00 pound/base box equivalent on the heavy side, with varied coating equivalents in the lighter side (detailed below), with a continuous cast steel chemistry of type MR, with a surface finish of type 7B or 7C, with a surface passivation of 0.7 mg/square foot of chromium applied as a cathodic dichromate treatment, with coil form having restricted oil film weights of 0.3-0.4 grams/base box of type DOS-A oil, coil inside diameter ranging from 15.5 to 17 inches, coil outside diameter of a maximum 64 inches, with a maximum coil weight of 25,000 pounds, and with temper/coating/dimension combinations of: (1) CAT4 temper, 1.00/.050 pound/base box coating, 70 pound/base box (0.0077 inch) thickness, and 33.1875 inch ordered width; or (2) CAT5 temper, 1.00/0.50 pound/base box coating, 75 pound/base box (0.0082 inch) thickness, and 34.9375 inch or 34.1875 inch ordered width; or (3) CAT5 temper, 1.00/0.50 pound/base box coating, 107 pound/base box (0.0118 inch) thickness, and 30.5625 inch or 35.5625 inch ordered width; or (4)*

CADR8 temper, 1.00/0.50 pound/base box coating, 85 pound/base box (0.0093 inch) thickness, and 35.5625 inch ordered width; or (5) CADR8 temper, 1.00/0.25 pound/base box coating, 60 pound/base box (0.0066 inch) thickness, and 35.9375 inch ordered width; or (6) CADR8 temper, 1.00/0.25 pound/base box coating, 70 pound/base box (0.0077 inch) thickness, and 32.9375 inch, 33.125 inch, or 35.1875 inch ordered width.

- *Electrolytically tin coated steel having differential coating with 1.00 pound/base box equivalent on the heavy side, with varied coating equivalents on the lighter side (detailed below), with a continuous cast steel chemistry of type MR, with a surface finish of type 7B or 7C, with a surface passivation of 0.5 mg/square foot of chromium applied as a cathodic dichromate treatment, with ultra flat scroll cut sheet form, with CAT5 temper with 1.00/0.10 pound/base box coating, with a lithograph logo printed in a uniform pattern on the 0.10 pound coating side with a clear protective coat, with both sides waxed to a level of 15-20 mg/216 sq. inch, with ordered dimension combinations of (1) 75 pound/base box (0.0082 inch) thickness and 34.9375 inch x 31.748 inch scroll cut dimensions; or (2) 75 pound/base box (0.0082 inch) thickness and 34.1875 inch x 29.076 inch scroll cut dimensions; or (3) 107 pound/base box (0.0118 inch) thickness and 30.5625 inch x 34.125 inch scroll cut dimension.*

- *Tin-free steel coated with a metallic chromium layer between 100-200 mg/m^2 and a chromium oxide layer between 5-30 mg/m^2 ; chemical composition of 0.05% maximum carbon, 0.03% maximum silicon, 0.60% maximum manganese, 0.02% maximum phosphorous, and 0.02% maximum sulfur; magnetic flux density (Br) of 10 kg minimum and a coercive force (Hc) of 3.8 Oe minimum.*

- *Tin-free steel laminated on one or both sides of the surface with a polyester film, consisting of two layers (an amorphous layer and an outer crystal layer), that contains no more than the indicated amounts of the following environmental hormones: 1 mg/kg BADGE (BisPhenol—A Di-glycidyl Ether), 1 mg/kg BFDGE (BisPhenol—F Di-glycidyl Ether), and 3 mg/kg BPA (BisPhenol—A).*

Tariff treatment

Based upon the scope set forth by Commerce, information available to the Commission indicates that the merchandise subject to these investigations is imported under the following statistical reporting numbers in the Harmonized Tariff Schedule of the United States ("HTSUS" or "HTS"): 7210.11.0000, 7210.12.0000, 7210.50.0000, 7210.50.0020, 7210.50.0090, 7212.10.0000, and 7212.50.0000 if of non-alloy steel, and under HTS 7225.99.0090 and 7226.99.0180 if of alloy steel. The 2023 general rate of duty is "Free" for HTS subheadings 7210.11.00, 7210.12.00, 7210.50.00, 7212.10.00, 7212.50.00, 7225.99.00, and 7226.99.01.[12]

[12] USITC, HTSUS (2023) Basic Edition, Publication 5398, January 2023, pp. 72-17, 72-19, 72-41, 72-42.

Effective March 23, 2018, tin mill products were included in the enumeration of iron and steel articles that became subject to the additional 25 percent ad valorem duty under Section 232 of the Trade Expansion Act of 1962, as amended.[13] At this time, imports of tin mill products originating in Australia, Canada, Mexico, and Ukraine are exempt from Section 232 duties or quotas. Tin mill products originating in Argentina (no quantity permitted), Brazil (15,151 short tons), and South Korea (80,605 short tons) are exempt from these duties but within annual quotas (quantities are for 2022).[14] Tin mill products originating in Germany (151,183 short tons), the Netherlands (215,830 short tons), the other 25 European Union ("EU") member countries (9,617 short tons),[15] Japan (56,119 short tons),[16] and the United Kingdom (38,547 short tons),[17] are exempt from these duties within annual tariff rate quotas ("TRQs") (quantities

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

[14] Quota ID Nos. 9903.80.14: Tin-free steel (HTS 7210.50.00), 9903.80.15: Tin plate (HTS 7210.11.00, 7210.12.00, or 7212.10.00). U.S. Customs and Border Protection ("CBP"), "Fourth Quarter Absolute Quota for Steel Articles of Argentina, Brazil and South Korea," Quota Bulletin No. QB 22-604 2022, October 3, 2022, at https://www.cbp.gov/trade/quota/bulletins/qb-22-604-2022 for a full list of product groups as well as their specified quotas and HTS definitions.

[15] Quota ID Nos. 9903.80.74: Tin-free steel (HTS 7210.50.00), 9903.80.75: Tin plate (HTS 7210.11.00, 7210.12.00, or 7212.10.00). CBP, "Fourth Quarter Tariff Rate Quota T(RQ) for Steel Mill Articles of European Union (EU) Countries," Quota Bulletin No. QB 22-614 2022, December 16, 2022, at https://www.cbp.gov/trade/quota/bulletins/qb-22-614-2022; CBP, "EU Sec 232 Steel Tariff Rate Quota (TRQ) 2022 Q1 and Q2," January 10, 2023, at https://cbp.gov/sites/default/files/assets/documents/2022-Jan/EU%20Steel%20TRQ%20Limit%20Table%202022_Q1_Q2R.pdf for a full list of product groups as well as their specified quotas and HTS definitions. Tin-free steel originating in the Netherlands containing steel "melted and poured" in the United Kingdom is also allowed to enter the U.S. market exempted from these duties under the United Kingdom's TRQ (5,442 short tons, quantity for 2022). CBP, "Fourth Quarter Tariff Rate Quota (TRQ) for Steel Mill Articles of Japan or the United Kingdom," Quota Bulletin No. QB 22-623 2022, December 16, 2022, at https://www.cbp.gov/trade/quota/bulletins/QB%2022-623.

[16] Quota ID Nos. 9903.81.34: Tin-free steel (HTS 7210.50.00), 9903.81.35: Tin plate (HTS 7210.11.00, 7210.12.00, or 7212.10.00). CBP, "Fourth Quarter Tariff Rate Quota (TRQ) for Steel Mill Articles of Japan or the United Kingdom," Quota Bulletin No. QB 22-623 2022, December 16, 2022, at https://www.cbp.gov/trade/quota/bulletins/QB%2022-623.

[17] The United Kingdom officially ceased being an EU member on January 31, 2020. Under the Withdrawal Agreement, the UK subsequently remained a member of the EU Single Market and the EU Customs Union, and EU law continued to apply in the United Kingdom until the end of the year-long transition period. EU, "The history of the European Union – 2020," June 16, 2021, at https://europa.eu/european-union/about-eu/history/2020-today/2020_en, retrieved July 12, 2021.
(continued...)

are for 2022) but imports above the quotas are subject to the Section 232 duties. Otherwise, tin mill products originating in China, Taiwan, Turkey, and any other U.S. trade partner are subject to these 25 percent additional duties.[18]

Quota ID Nos. 9903.81.34: Tin-free steel (HTS 7210.50.00), 9903.81.35: Tin plate (HTS 7210.11.00, 7210.12.00, or 7212.10.00). CBP, "Fourth Quarter Tariff Rate Quota (TRQ) for Steel Mill Articles of Japan or the United Kingdom," Quota Bulletin No. QB 22-623 2022, December 16, 2022, at https://www.cbp.gov/trade/quota/bulletins/QB%2022-623.

[18] The President also issued subsequent Proclamations to exempt or adjust these duties for selected U.S. trade partners:

- Presidential Proclamation 9711, March 22, 2018 (83 FR 13361, March 28, 2018) exempted steel articles originating in Argentina, Australia, Brazil, Canada, the EU member states (including the United Kingdom), South Korea, and Mexico, effective March 23, 2018.
- Presidential Proclamation 9740, April 30, 2018 (83 FR 20683, May 7, 2018) continued the duty exemptions for Argentina, Australia, Brazil, but within annual absolute quota limits on steel articles originating in South Korea, effective May 1, 2018; and did not continue the duty exemptions on iron and steel mill products originating in Canada, Mexico, and the EU member states (including the United Kingdom), effective June 1, 2018.
- Presidential Proclamation 9759, May 31, 2018 (83 FR 25857, June 5, 2018) continued the duty exemptions but within annual absolute quota limits on steel articles originating in Argentina, Brazil, and South Korea, effective June 1, 2018.
- Presidential Proclamation 9772, August 10, 2018 (83 FR 40429, August 15, 2018) continued the duty exemptions on steel articles originating in Australia; continued the duty exemptions within annual absolute quota limits on iron and steel mill products originating in Argentina, Brazil, and South Korea, effective June 1, 2018; but doubled the duty rate to 50 percent on such imported products originating in Turkey, effective August 13, 2018.
- Presidential Proclamation 9886, May 16, 2019 (84 FR 23421, May 21, 2019) restored the original additional duty rate of 25 percent on steel articles originating from Turkey, effective May 21, 2019.
- Presidential Proclamation 9894, May 19, 2019 (84 FR 23987, May 23, 2019) restored the duty exemptions on steel articles originating in Canada and Mexico, effective May 20, 2019.
- Presidential Proclamation 10328, December 27, 2021 (87 FR 11, January 3, 2022) provided duty exemptions within annual TRQs on steel articles originating in EU member countries, effective January 1, 2022. Each EU member country is subject to separate TRQs and the requirement that the steel be "melted and poured" within the EU for the steel articles to qualify for duty exemptions under the TRQs.
- Presidential Proclamation 10356, March 31, 2022 (87 FR 19351, April 1, 2022) provided duty exemptions within annual TRQs on steel articles originating in Japan, effective April 1, 2022. The steel must be "melted and poured" within Japan for the steel articles to qualify for duty exemptions under the TRQs.
- Presidential Proclamation 10403, May 27, 2022 (87 FR 33407, June 2, 2022) provided one-year duty exemptions on steel articles originating in Ukraine, effective June 1, 2022.
- Presidential Proclamation 10406, May 31, 2022 (87 FR 33591, June 3, 2022) provided duty exemptions within annual TRQs on steel articles originating in the United Kingdom, effective June 1, 2022. The steel must be "melted and poured" within the United Kingdom for the steel

(continued...)

Excluded steel articles,[19] including any tin mill products, do not count toward filling the annual TRQs for the EU member countries, effective January 1, 2022.[20] Conversely, these "quota exclusion entries" do count toward filling the annual quotas for Argentina, Brazil, and South Korea, effective August 30, 2018;[21] and the annual TRQs for Japan, effective April 1, 2022;[22] and the annual TRQs for the United Kingdom, effective June 1, 2022.[23] Exclusion quantities are counted against the quarterly quota in place at the time of entry and count towards the annual quota. However, they are exempt from both the quarterly and annual quotas. U.S. Customs and Border Protection ("CBP") tracks and reports exclusion quarterly or annual "exclusion quota overflow" quantities.[24]

---

articles to qualify for duty exemptions under the TRQs. Steel articles originating in Belgium, Germany, Italy, the Netherlands, Portugal, Spain, and Sweden containing steel "melted and poured" in the United Kingdom also can qualify for duty exemptions under the United Kingdom's TRQs. See the CBP quota bulletin No. QB 22-623 2022, "Fourth Quarter Tariff Rate Quota (TRQ) for Steel Mill Articles of Japan or the United Kingdom," December 16, 2022, at https://www.cbp.gov/trade/quota/bulletins/QB%2022-623.

See also HTS heading 9903.80.01 and U.S. notes 16(a)(i), 16(b), 16(e), and 16(f) to subchapter III of chapter 99 and related tariff provisions for this duty treatment. USITC, HTSUS (2023) Basic Edition, Publication 5398, January 2023, pp. 72-47, 99-III-5 – 99-III-8, 99-III-266 – 99-III-267, 99-III-273 – 99-III-274, 99-III-281, 99-III-286.

[19] Under Section 232 of the Trade Expansion Act of 1962, as amended, the President authorized the Secretary of Commerce, in consultation with other appropriate federal agency heads, to provide relief from the additional duties for any steel articles determined "…not to be produced in the United States in a sufficient and reasonably available amount or of a satisfactory quality and is also authorized to provide such relief based upon specific national security considerations. Such relief shall be provided for any article only after a request for exclusion is made by a directly affected party located in the United States." Commerce reviews all exclusion requests and any objections, rebuttals, and sur-rebuttals to the requests and determines whether the items are warranting an exclusion based on the above criteria. U.S. Bureau of Industry and Security ("BIS"), "Section 232 National Security Investigation of Steel Imports, Information on the Exclusion Process," December 2, 2022, https://www.bis.doc.gov/index.php/232-steel.

[20] 87 FR 11, January 3, 2022; BIS, "Quota Bulletin No. QB 22-614 2022: Fourth Quarter Tariff Rate Quota T(RQ) for Steel Mill Articles of European Union (EU) Countries," December 16, 2022, at https://www.cbp.gov/trade/quota/bulletins/qb-22-614-2022.

[21] 83 FR 45025, September 4, 2018.

[22] 87 FR 19351, April 1, 20228.

[23] 87 FR 33591, June 3, 2022.

[24] Exclusion quota overflow quantities are designated with the "ALXC" suffix in the CBC quota fill reports for Argentina, Brazil, and South Korea; and with the "STXC" suffix for the reports for Japan and the United Kingdom. CBP, "Fourth Quarter Absolute Quota for Steel Articles of Argentina, Brazil and South Korea," Quota Bulletin No. QB 22-604 2022, October 3, 2022, at https://www.cbp.gov/trade/quota/bulletins/qb-22-604-2022; BIS, "Quota Bulletin No. QB 22-622 2022," October 5, 2022, https://www.cbp.gov/trade/quota/bulletins/qb-22-622-2022-tariff-rate-quota-trq-

(continued...)

Effective September 1, 2019, tin mill products originating in China are subject to an additional 7.5 percent ad valorem duty under Section 301 of the Trade Act of 1974, as amended.[25] USTR had not excluded any imported products reported under HTS heading 9903.88.15 from these duties on tin mill products originating in China, as of January 2023.[26]

Decisions on the tariff classification and treatment of imported goods are within the authority of CBP.

steel-articles-japan; CBP, "Fourth Quarter Tariff Rate Quota (TRQ) for Steel Mill Articles of Japan or the United Kingdom," Quota Bulletin No. QB 22-623 2022, December 16, 2022, at https://www.cbp.gov/trade/quota/bulletins/QB%2022-623.

[25] Section 301 of the Trade Act, 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. Following investigations into "China's acts, policies, and practices related to technology transfer, intellectual property, and innovation" (82 FR 40213, August 24, 2017), USTR published its determination, on April 6, 2018, that the acts, policies, and practices of China under investigation are unreasonable or discriminatory and burden or restrict U.S. commerce and are thus actionable under section 301(b) of the Trade Act (83 FR 14906, April 6, 2018).

Effective September 1, 2019, USTR included tin mill products in its $300 Billion Trade Action (List 4 or Tranche 4, Annex A rather than Annex C) of products originating in China subject to an initial 10 percent ad valorem duty (84 FR 43304, August 20, 2019) which was subsequently raised to 15 percent ad valorem, with the same effective date of September 1, 2019 (84 FR 45821, August 30, 2019), but was more recently reduced to 7.5 percent ad valorem, effective February 14, 2020 (85 FR 3741, January 22, 2020).

See also HTS heading 9903.88.15 and U.S. notes 20(r) and 20(s) to subchapter III of chapter 99 and related tariff provisions for this duty treatment. USITC, HTSUS (2023) Basic Edition, Publication 5398, January 2023, pp. 72-47, 99-III-86 – 99-III-87, 99-III-96 – 99-III-97, 99-III-296, 99-III-298 – 99-III-301.

[26] HTS headings 9903.88.66 and 9903.88.66, and U.S. notes 20(sss)(iv) and 20(ttt)(iv) to subchapter III of chapter 99 and related tariff provisions for this duty treatment. USITC, HTSUS (2023) Basic Edition, Publication 5398, January 2023, pp. 99-III-223 – 99-III-224, 99-III-240 – 99-III-242, 99-III-296.

The product

Description and applications[27]

Tinplate

Tinplate is a tin-coated flat-rolled steel product made from black plate, an uncoated flat-rolled steel that is the basic material used to produce tin mill products.[28] To create tinplate, black plate is coated on both sides with commercially pure tin via electrolytic deposition. Tin coatings vary by thickness, depending on intended end use. A common commercial weight for tin is 20 pounds/base box.[29] In addition, tinplate is available with different coating weights on the two sides of the sheet. Single-reduced electrolytic tinplate is commonly produced by cold rolling in thicknesses of 0.38 mm and lighter while double-reduced electrolytic tinplate is normally produced by cold rolling and annealing, followed by further cold reduction in thicknesses of 0.28 mm and lighter. Tinplate is commonly manufactured to standard specifications issued by the American Society for Testing and Materials ("ASTM"), including A623, A624, and A626.

Single-reduced tinplate is produced with different surface finishes. The five following basic surface finishes are available, however, for general can-making operations, a bright or stone finish is most common.[30]

- Bright finish – Consists of a surface provided by a flow-brightened tin coating on a smooth finish steel base. Bright finishes are normally for general use.
- Light stone finish – Consists of a surface provided by a flow-brightened tin coating on a steel base finish characterized by a light directional pattern.
- Stone finish – Consists of a surface provided by a flow-brightened tin coating on a steel base finish characterized by a directional pattern. This type of finish makes the scratches of printing and can making less conspicuous.

---

[27] Unless otherwise noted, this information is based on Tin- and chromium-coated Steel Sheet from Japan, Investigation No. 731-TA-860 (Third Review), USITC Publication 4795, June 2018, pp. I-17-I-19 and the petition, pp. 10-11.

[28] The steel feedstock used to make tin mill products traditionally comes from integrated steel mills because of the purity and quality requirements of the steel needed to make it. Conference transcript, p. 85 (Goncalves).

[29] A base box is a unit of sale that refers to an area equivalent to 31,360 square inches (or 217.78 square feet).

[30] Satyendra Kumar Sarna, "Tinplate," ISPAT Guru, July 14, 2013, https://www.ispatguru.com/tinplate/; JFE Steel Corp., *Tin* Mill *Products*, no date, p. 16, https://www.jfe-steel.co.jp/en/products/sheets/catalog/b1e-006.pdf; ITRI Ltd., *Guide to Tinplate*, ©2000, 29, https://www.tinplategroup.com/wp-content/uploads/2019/08/Guide-toTinplate.pdf.

- Matte finish – Consists of a surface provided by an un-melted coating normally on a shot blast finish steel base. This is dull type of finish and mainly used for making bottle crowns.
- Silver finish – Consists of a matt finish product which has been flow melted. This type of finish is also called satin finish. This is rough dull finish mainly used for making artistic cans.

Double reduced tinplate is customarily supplied with a stone finish; however, it is also available with an un-melted tin coating.[31]

Chromium-coated steel sheet

Chromium-coated steel sheet, also known in the industry as "tin-free steel" or "TFS," generally consists of black plate that is further processed by the electrolytic deposition of chromium metal and chromium oxide on both sides. Like tinplate, single-reduced chromium-coated steel sheet is commonly available in thicknesses of 0.38 mm and lighter, while double reduced chromium-coated steel sheet is normally available in thicknesses of 0.28 mm and lighter. Minimum and maximum coating weights for chromium-coated steel sheet range from 3 to 13 milligrams per square foot of metallic chromium and 0.7 to 2.5 milligrams per square foot of chromium oxide. Chromium-coated steel sheet is manufactured to ASTM Standard Specification A657.

Primary applications

Tinplate is used primarily to manufacture welded cans for food, aerosol, paint, filtration and general line applications. Cans for food and drinks may be constructed out of either two or three pieces of metal.[32] Three-piece cans consist of a cylindrical body rolled from a piece of flat metal with a longitudinal seam (usually formed by welding) together with two can ends, which are seamed onto each end of the body.[33] Two-piece cans (have only one seam around the top end and are formed from a disc of metal, cut from a sheet, which is reformed into a cylinder

[31] Satyendra Kumar Sarna, "Tinplate," ISPAT Guru, July 14, 2013, https://www.ispatguru.com/tinplate/.

[32] Metal Packaging Manufacturers Association, "How food and drink cans are made," https://www.mpma.org.uk/information/how-cans-are-made/#:~:text=Drawn, accessed February 13, 2023.

[33] Metal Packaging Manufacturers Association, "How food and drink cans are made," https://www.mpma.org.uk/information/how-cans-are-made/#:~:text=Drawn, accessed February 13, 2023.

with one completed end.[34] To this is seamed a loose end to close the can. A two-piece can is manufactured by taking a flat piece of tinplate and pushing it through progressively smaller rings (drawing and ironing) to form the base and body of the can out of one piece of steel.[35] The production process involves reforming of sheet metal without changing its thickness "drawing" and thinning the walls of the can by passing through circular dies "ironing".[36] According to the Can Manufacturers Institute ("CMI"), a trade association composed of many of the leading U.S. metal can manufacturers, over the past 10 years, demand has been shifting away from three-piece cans towards two-piece cans, a trend that accelerated during the COVID-19 pandemic.[37] Some can producers stated that two-piece cans are lighter and faster to produce than three-piece cans, and provide superior quality standards and a simpler supply chain.[38] The shift in demand is reflected in data collected by CMI showing a trend away from three-piece and toward two-piece food cans from 2015 to 2022; two-piece cans accounted for 75 percent of food cans produced in the United States in 2022.[39]

Two-piece cans are made from drawn and walled ironed ("DWI" or "D&I") tinplate, sometimes sold in wider coils than tinplate used in other applications.[40] At the Commission's staff conference, several U.S. can manufacturers stated that they make two-piece cans using wide DWI tinplate (typically in widths greater than 44.5 inches) to produce two-piece cans with maximum efficiency.[41] Historically, tinplate has been produced in widths below one meter (39.4 inches).[42] The petitioners noted that DWI products account for a relatively small percentage of

[34] Metal Packaging Manufacturers Association, "How food and drink cans are made," https://www.mpma.org.uk/information/how-cans-are-made/#:~:text=Drawn, accessed February 13, 2023.

[35] Can Manufacturers Institute's postconference brief, pp. 19–20.

[36] Metal Packaging Manufacturers Association, "How food and drink cans are made," https://www.mpma.org.uk/information/how-cans-are-made/#:~:text=Drawn, accessed February 13, 2023.

[37] Respondent Can Manufacturers Institute's postconference brief, p. 20.

[38] Conference transcript, p. 142 (Dietrich).

[39] Respondent Can Manufacturers Institute's postconference brief, p. 20.

[40] According to respondents, DWI steel is harder to make than standard tinplate used in three-piece cans, because the steel used to produce DWI tinplate must satisfy the industry's "clean steel" criteria, which means that it is a higher quality product than other tinplate steel. This tinplate has certain mechanical properties and tensile strength which allow it to be elongated and drawn into a two-piece can. Conference transcript, pp. 203–4 (Brolly, Biele). *** Petitioners' postconference brief, Exh 15, p.3.

[41] Respondent Can Manufacturers Institute's postconference brief, p. 20; Conference transcript, p. 142 (Dietrich), p. 159 (Jacobson), pp. 173-4 (Biele).

[42] Conference transcript, p. 56 (Concalves).

the overall U.S. tinplate market.[43] The wide DWI products that are used to make two-piece tin cans are made by domestic producer U.S. Steel and by some foreign producers.[44]

Chromium-coated steel sheet is used primarily for certain two-piece drawn cans and ends for food cans, as well as caps and closures for glass containers. Tinplate is used for can bodies because of its corrosion-resistance qualities. Chromium-coated steel sheet is used for ends of cans because the end of a can have less of a need for corrosion-resistance, given that the ends of cans have less contact with the contents of the can.

Manufacturing processes[45]

Both tinplate and chromium-coated steel sheet are manufactured in five major steps. Producers need not engage in all five production steps, as steel inputs can be obtained from outside a tin mill production facility. For example, in the Tin- and Chromium-Coated Steel Sheet from Japan review in 2018, the Commission found that Ohio Coatings neither produces nor rolls steel – instead, it obtains black plate and begins its production process with the coating step. The five major production steps are described below.

i. Hot rolling and cold reduction

Both tinplate and chromium-coated steel sheet are produced from molten steel that is either cast into slabs or poured as ingots that are rolled into slabs in a separate mill. While hot, the slabs are reduced in thickness and greatly elongated by further rolling through a series of roughing and finishing stands in a hot-strip mill. The hot strip passes between rolls in successive roll stands being reduced to a predetermined thickness, typically between 1.6 and 2.5 mm. On leaving the last finishing stand, the strip is coiled.

---

[43] Petitioners' postconference brief, p. 38. *** Petitioners' postconference brief, Exh. 15, p. 4.

[44] At the staff conference, some respondents from subject countries stated that they produce this product for the domestic industry. For example, Canadian producer ArcelorMittal Dofasco's stated that a large portion of its supply is drawn and ironed tin mill products, which are wider and thicker than typical tin mill steel products. ArcelorMittal claimed that a lot of the recent investments by the U.S. can makers have been to expand manufacturing of drawn and ironed two-piece cans. https://www.ussteel.com/customers/products/tin; Conference transcript, p. 159 (Jacobson), U.S. Steel's postconference brief, p. 1.

[45] Unless otherwise noted, this information is based on Tin- and chromium-coated Steel Sheet from Japan, Investigation No. 731-TA-860 (Third Review), USITC Publication 4795, June 2018, pp. I-19-I-22 and the petitions, pp. 12-15.

After cooling, the hot-rolled strip is uncoiled and pickled[46] by passing it through a series of tanks or sprays of diluted acid to remove the oxide scale formed during the hot-rolling process. The pickled strip is then typically dried, oiled, and recoiled.[47] The hot-rolled and pickled strip is cold reduced by passing it through a series of rolls, in much the same manner as in the hot-rolling operation, except that a lubricant is applied between the stands as an aid in reduction and to prevent undue heating of the rolls and strip. Because the cold-reduction process hardens the strip, the strip must be annealed.

ii. Annealing

Annealing is a heat treatment process that changes the physical (and sometimes the chemical) properties of a material to increase ductility and reduce the hardness to make the material more workable.[48] There are two basic types of annealing operations for cold-rolled strip: batch annealing and continuous annealing.

In batch annealing, the coiled strips are placed in a sealed container and slowly heated to, and cooled from, a subcritical temperature to soften the steel and to relieve stresses produced during rolling. To reduce oxidation, an inert or slightly reducing gas is introduced into the container during the operation. Batch annealing produces a steel product with a relatively bright surface finish and relatively greater flexibility than continuous annealing.

Continuous annealing takes place by passing the cold-reduced strip through a series of vertical passes within a furnace consisting of heating, soaking, and cooling zones. The strip is heated rapidly to the desired temperature and cooled before leaving the process. This process results in a product with less flexibility than batch-annealed steel.

Once the strip is annealed, it undergoes further processing. Single-reduced strip is temper rolled, while double-reduced strip (as its name implies) is subjected to a second cold reduction process. Each of these processes is described below.

---

[46] Pickling is an acid bath process to remove the unusable iron oxide scale that forms on hot worked steels as well as other impurities. https://metalsupermarkets.com/what-is-steel-pickling/.

[47] The oil serves as protection against rusting prior to and as a lubricant during cold reduction.

[48] Annealing is a heat treatment process that changes the physical and sometimes also the chemical properties of a material to increase ductility and reduce the hardness to make it more workable. https://www.twi-global.com/technical-knowledge/faqs/what-is-annealing#:~:text=Annealing%20is%20a%20heat%20treatment,to%20make%20it%20more%20workable.

iii. Temper rolling

After annealing, single-reduced strip is rolled in one or more passes through a temper mill. The object of temper rolling is to improve mechanical and surface properties by imparting the desired degree of stiffness and hardness, minimizing fluting and stretcher straining, and producing the desired surface type or texture.

iv. Additional cold reduction

Double-reduced strip is typically not temper rolled; instead, it is subjected to a second cold-reduction process after annealing to impart mechanical and surface properties to the steel. This reduction is accomplished by passing the strip through either a single roller, or a series of rollers, using a suitable lubricant. This second cold reduction supplies the final thickness and finish and the desired stiffness, strength, and flatness. It also produces a stronger, lighter weight product.

After final reduction, the coils are ready to be trimmed and sheared, which occurs in a series of operations. This product, known as “black plate,” is highly susceptible to rusting in storage and transportation. Therefore, it is typically oiled – or chemically treated and then oiled – after cold reduction. The oil is later removed prior to coating.

v. Coating

In the electroplating process, the temper-rolled or double-reduced coiled strip travels through a lower and upper plating unit where individual plating cells are arranged in tandem. The plating cells contain the plating solution – either a stannous tin-containing sulphonic acid for tinplate, or a chromate solution for chromium-coated steel sheet. A conductor roll at the end of each cell rides along the top surface of the strip and serves as the cathode, while the tin- or -chromium-coating material is deposited in the bottom of each cell and serves as the anode. The coating material dissolves into the plating solution and is electrochemically deposited on the steel substrate. The electroplating process is followed by rinsing, drying, quenching, and applying a lubricating film.

Tinplate and chromium-coated steel sheet are produced in varying coating weights and can be differentially coated, where the heavier coated surface is employed as the more protected inside of containers. Most producers that manufacture both tinplate and chromium-coated steel sheet do so in the same mill, but on different coating lines. While the coating process is similar for both products, it is impractical to shift product to another production line because of the expense that would be involved in retrofitting the production line.

Domestic like product issues

The petitioners contends that there is a single like product covering all tin mill products as defined by the scope of these investigations.[49] Respondents Dofasco, TKR, and TKSNA do not challenge the definition of the domestic like product proposed by the petitioners.[50] Respondent Duferco does not challenge the petitioner's position but may raise domestic like product issues in any final phase investigation.[51] Respondents KG Dongbu, KG Steel, Tosyali Toyo, TSIJ, and TSUK; domestic producer U.S. Steel; and the CMI did not comment on the domestic like product definition in their postconference briefs.

[49] Petitioners' postconference brief, p. 12.

[50] Respondent Dofasco's postconference brief p. 5 and respondents TKR and TKSNA's postconference brief, p. 5.

[51] Respondent Duferco's postconference brief, p. 3.

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

U.S. market characteristics

Tin mill products are a component in the manufacturing of containers, especially cans. The largest use for tin mill products is for food cans, both household and for restaurants, but also for cans used for aerosol sprays and paint. Tin mill products face competition from substitute materials as well as pressure from can manufacturers to reduce the weight of tin mill products used per container.[1]

The U.S. tin mill product market was supplied by U.S. producers, subject imports, and nonsubject imports during January 2019-September 2022.[2] [3]

Apparent U.S. consumption of tin mill products increased by *** percent in 2020 and *** percent in 2021 for an overall decrease of *** percent. Apparent U.S. consumption was *** percent higher in January-September 2022 ("interim 2022") than in January-September 2021 ("interim 2021").

Distinctive conditions of competition

Two of three U.S. producers and 8 of 20 importers indicated that the U.S. tin mill products market was subject to distinctive conditions of competition other than business cycles. Specifically, U.S. producer *** cited the relatively small number of customers for the product and *** reported that increased subject imports have "eroded our sales volumes and transaction prices." Importers reporting distinct conditions noted various issues: supply conditions, specifically limited domestic supply; a small number of mills worldwide so disruptions such as tariffs, exchange rate changes, and shipping disruption can have a large impact on the market. They also reported demand conditions such as competition from substitutes like plastics and aluminum as well as from other steel products.[4]

[1] Conference transcript, p. 151 (Haynes) and *Tin- and Chromium-Coated Steel Sheet from Japan, Inv. No. 731-TA-860 (Second Review),* USITC Publication 4325, May 2012, p. II-1.

[2] In 2021, U.S.-produced tin mill products accounted for *** percent of the U.S. market, subject imports accounted for *** percent, and nonsubject imports accounted for *** percent.

[3] Responding U.S. producers were ***.

[4] Importer Reynolds Services stated "***."

One importer reported that the U.S. industry typically has annual negotiations for sales unlike other steel products which are often sold on a spot or quarterly contract basis, and another importer reported that contracts are on a calendar year basis which differs from the harvest season. One importer reported large fluctuations in tin mill products pricing over the period, which it reported was directly linked to changes in hot-rolled coil pricing.

One of three U.S. producers and 7 of 20 responding importers reported changes to the product mix or marketing of tin mill products since January 1, 2019. U.S. producer *** reported increased customer demand for wider D&I tin mill products.[5] Importers reported a wide variety of changes including COVID pandemic-related changes, such as a change in the product mix of cans toward more individual consumer sizes as consumers increased at home meals and purchases of non-perishable foods, and record production and demand for aerosol cleaning products.[6] Other changes reported by importers included customer demands for more consistent supply, wider material, and higher quality; U.S. producers eliminating certain specifications from the products they are willing to produce; increased use of plastic for large size containers used by institutions and industrial users; the use of paper boxes for dry foods; and demand and supply growth for D&I product.

[5] Importers and purchasers, such as ThyssenKrupp and Trivium also noted the increasing and widespread use of wide tin mill products to produce cans more efficiently and create less scrap. See, e.g., conference transcript, pp. 142 (Dietrich) and 173 (Biele). Importer ThyssenKrupp asserts that Cleveland-Cliffs would have to invest approximately $1 billion to install the requisite pickling, rolling, and annealing equipment to make wider tin mill products at its Weirton facility – much higher than the $50 million it has already invested to bring the facility back up to "the standard" it should have. Respondent ThyssenKrupp's postconference brief, p. 12 and conference transcript, p. 101 (Goncalves).

[6] ***.

U.S. purchasers

The Commission received 12 usable lost sale/lost revenue survey responses from firms that had purchased tin mill products during January 2019-September 2022.[7] [8] Ten purchasers are can producers and two are steel service centers. Large purchasers of tin mill products include ***.

Impact of section 301 tariffs

As discussed in Part I, tin mill products are currently subject to section 301 tariffs of 7.5 percent *ad valorem* (see Part I). Two U.S. producers reported that the section 301 tariffs did impact the U.S. tin mill products market and one reported it did not know. Most importers (13) reported that they did not know the impact, four reported no impact, and three reported that there was an impact. U.S. producer *** reported that subject imports from China have experienced a "dramatic increase" which would have likely been even higher without the section 301 tariffs. *** reported that the section 301 tariffs created an initial decrease in tin mill imports from China when the section 301 tariffs were applied at 15 percent but that the 7.5 percent rate has not reduced or curtailed imports. Importers reported adding the 7.5 percent tariff to tin mill product prices, losing competitiveness due price increases, decreased volume of Chinese imports, and increased difficulty in getting new business because of the constant threat of increased tariffs.

[7] The following firms provided purchaser questionnaire responses: ***. *** are steel service centers, while the remaining *** are can producers.

[8] Of the 12 responding purchasers, 12 purchased domestic tin mill products, 12 purchased or imported tin mill products from subject countries (10 from Canada, 7 from China, 7 from Germany, 6 from the Netherlands, 11 from South Korea, 10 from Taiwan, 5 from Turkey, and 4 from the United Kingdom), and 10 purchased or imported tin mill products from nonsubject countries.

Channels of distribution

U.S. producers sold mainly to canning end users during each full year and in interim 2022 but a slight majority to distributors in interim 2021, as shown in table II-1. The vast majority of subject imports (over *** percent), as well as most imports from nonsubject sources, were shipped to canning end users throughout the period of investigation. Most shipments of imports from six of the subject countries (Canada, China, Germany, the Netherlands, Taiwan, and the United Kingdom) went to canning end users during January 2019-September 2022. A slight majority of shipments from South Korea went to distributors in 2019, 2021, and both interim periods, and to canning end users in 2020. The majority of shipments of imports from Turkey were to other end users in 2019 and 2020 and to canning end users in 2021 and both interim periods.

Table II-1
Tin mill products: Share of U.S. shipments by source, channel of distribution, and period

Shares in percent

Source	Channel	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
United States	Distributor	***	***	***	***	***
United States	Canning end user	***	***	***	***	***
United States	Other end user	***	***	***	***	***
China	Distributor	***	***	***	***	***
China	Canning end user	***	***	***	***	***
China	Other end user	***	***	***	***	***
Canada	Distributor	***	***	***	***	***
Canada	Canning end user	***	***	***	***	***
Canada	Other end user	***	***	***	***	***
Germany	Distributor	***	***	***	***	***
Germany	Canning end user	***	***	***	***	***
Germany	Other end user	***	***	***	***	***
Netherlands	Distributor	***	***	***	***	***
Netherlands	Canning end user	***	***	***	***	***
Netherlands	Other end user	***	***	***	***	***
South Korea	Distributor	***	***	***	***	***
South Korea	Canning end user	***	***	***	***	***
South Korea	Other end user	***	***	***	***	***
Taiwan	Distributor	***	***	***	***	***
Taiwan	Canning end user	***	***	***	***	***
Taiwan	Other end user	***	***	***	***	***
Turkey	Distributor	***	***	***	***	***
Turkey	Canning end user	***	***	***	***	***
Turkey	Other end user	***	***	***	***	***
United Kingdom	Distributor	***	***	***	***	***
United Kingdom	Canning end user	***	***	***	***	***
United Kingdom	Other end user	***	***	***	***	***
Subject sources	Distributor	***	***	***	***	***
Subject sources	Canning end user	***	***	***	***	***
Subject sources	Other end user	***	***	***	***	***
Nonsubject	Distributor	***	***	***	***	***
Nonsubject	Canning end user	***	***	***	***	***
Nonsubject	Other end user	***	***	***	***	***
All imports	Distributor	***	***	***	***	***
All imports	Canning end user	***	***	***	***	***
All imports	Other end user	***	***	***	***	***

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

Geographic distribution

U.S. producers and importers from subject countries reported selling tin mill products to all regions in the United States (table II-2). Importers reported selling subject imports from four countries – *** – in all contiguous U.S. regions. Importers of tin mill products from the remaining four countries – *** – did not report selling to some U.S. regions in 2021, most often the Mountain and Pacific Coast regions.

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

Table II-2
Tin mill products: Count of U.S. producers' and U.S. importers' geographic markets

Count in number of firms reporting

Region	U.S.	Canada	China	Germany	Nether-lands	South Korea	Taiwan	Turkey	United Kingdom	Subject sources
Northeast	3	3	3	***	***	1	1	1	***	10
Midwest	3	3	5	***	***	2	5	1	***	14
Southeast	3	2	3	***	***	3	3	3	***	13
Central Southwest	2	1	2	***	***	1	4	0	***	11
Mountains	1	1	3	***	***	1	0	0	***	7
Pacific Coast	2	1	3	***	***	3	5	0	***	13
Other	0	0	0	***	***	0	1	0	***	4
All regions (except Other)	1	1	1	***	***	0	0	0	***	3
Reporting firms	3	3	7	1	1	3	7	3	2	17

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 tin mill products from U.S. producers and responding producers from subject countries.

Table II-3
Tin mill products: 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 in number of firms reporting

Factor	Measure	United States	Canada	China	Germany	Netherlands
Capacity 2019	Quantity	***	***	***	***	***
Capacity 2021	Quantity	***	***	***	***	***
Capacity utilization 2019	Ratio	***	***	***	***	***
Capacity utilization 2021	Ratio	***	***	***	***	***
Ending inventories 2019	Share	***	***	***	***	***
Ending inventories 2021	Share	***	***	***	***	***
Home market 2021	Share	***	***	***	***	***
Non-US export markets 2021	Share	***	***	***	***	***
Ability to shift production (firms reporting “yes”)	Count	***	***	***	***	***

Factor	Measure	South Korea	Taiwan	Turkey	United Kingdom	Subject sources
Capacity 2019	Quantity	***	***	***	***	6,991
Capacity 2021	Quantity	***	***	***	***	7,060
Capacity utilization 2019	Ratio	***	***	***	***	90.3
Capacity utilization 2021	Ratio	***	***	***	***	95.0
Ending inventories 2019	Share	***	***	***	***	6.2
Ending inventories 2021	Share	***	***	***	***	5.5
Home market 2021	Share	***	***	***	***	41.4
Non-US export markets 2021	Share	***	***	***	***	41.5
Ability to shift production (firms reporting “yes”)	Count	***	***	***	***	1 of 14

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

Note: Capacity utilization is measured as a ratio of production to capacity, ending inventories is measured as a share of total shipments, home market 2021 and non-U.S. export market 2021 shipments are measured as a share of total shipments.

Domestic production

Based on available capacity information, U.S. producers of tin mill products have the ability to respond to changes in demand with moderate to large changes in the quantity of shipments of U.S.-produced tin mill products to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of large amounts of unused capacity. Factors mitigating responsiveness of supply include a limited ability to shift shipments from export markets, moderate quantities of inventories, and no ability to shift production to or from alternate products.

Domestic capacity decreased during 2019-21 while production increased irregularly, resulting in increased capacity utilization.[9] U.S. shipments increased by *** percent from 2019 to 2021, but were *** percent lower in interim 2022 than in interim 2021. Ending inventories ratio to total shipments decreased by *** percent from 2019 to 2021 but were higher in interim 2022 than interim 2021 by *** percent. Exports comprised a very small share of U.S. producer shipments (less than *** percent) throughout the period. Capacity is projected to decrease with the upcoming closure and sale of UPI's production facility in California in 2023. As noted below, purchasers reported decreased availability of domestic product, including only being able to secure minimum contracted amounts of tin mill products during the period, particularly in 2021 and 2022. Petitioner noted, however, that its order books for 2023 are "very open."[10]

All three U.S. producers reported being unable to produce other products on the same equipment used to product tin mill products. ***.

[9] Capacity decreased by *** percent and production increased by *** percent during 2019-21.
[10] Conference transcript, p. 33 (Jarvis).

Subject imports

Based on available information, producers of tin mill products from subject countries have the ability to respond to changes in demand with small to moderate changes in the quantity of shipments of tin mill products to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity, relatively low inventories, and the inability to shift production to or from alternate products for 13 of 14 foreign producers.[11] Increasing the responsiveness of supply, however, are relatively large non-U.S. export shipments of foreign producers.

Questionnaire responses indicate that for foreign producers' capacity, production, and capacity utilization increased during 2019-21 while the ratio of inventories to total shipments decreased. Capacity was slightly higher in interim 2022 compared with interim 2022 while production and capacity utilization were lower. Reported capacity was higher in 2021 than in 2019 in China, Germany, and the United Kingdom; was lower in Canada, the Netherlands, and South Korea; and was stable in Taiwan and Turkey. Foreign producers in six of the subject countries (China, Germany, the Netherlands, Taiwan, Turkey, and the United Kingdom) reported higher capacity utilization in 2021 compared with 2019 while foreign producers in two countries (Canada and South Korea) reported lower capacity utilization in 2021. Foreign producers generally reported that they were unable to shift production between tin mill products and other products, with 13 of 14 responding firms reporting the inability to shift production.

Foreign producers reported that about 42 percent of their shipments of tin mill products were to non-U.S. export markets and 41 percent were to their respective home markets. More than half of shipments from producers in China, Turkey, and the United Kingdom were to their respective home markets whereas foreign producers in the other five subject countries ship most of their tin mill products to export markets, with producers in Canada shipping almost all their tin mill products to the U.S. market.

[11] This foreign producer ***.

Imports from nonsubject sources

Imports from nonsubject countries comprised less than *** percent of total imports during 2019-21 (see Part IV).[12] Importers reported importing tin mill products from the following nonsubject countries: Belgium, Brazil, France, India, Italy, Japan, Malaysia, Serbia, Spain, and Vietnam.

Supply constraints

U.S. producers and importers were asked if they had refused, declined, or been unable to supply tin mill products at any time since January 1, 2019. Two of three U.S. producers and 10 of 19 responding importers reported that they had experienced such supply constraints.

Among U.S. producers, ***.

Importers reported supply constraints resulting from section 232 tariffs and quotas, market scarcity because of high demand for tin mill products during pandemic stay-at-home orders, U.S. mills placing customers on allocation starting in 2020 for calendar-year 2021 supply, supply chain disruptions (including lack of warehouse availability and trucking capacity, and port congestion), mills running at full capacity, Taiwan mill not accepting orders in September 2022 because of low domestic pricing, and occasional production reliability issues (***). *** reported worsening supply chain disruptions since 2020, with some materials held for 4 months at the ports in 2022. Importer *** noted that domestic mills placed customers on allocations, limited volume and specifications produced, reduced contract volume from prior years' contractual volume, "***." Importer *** supplied documentation of weekly late

[12] Nonsubject imports made up *** percent of total imports in interim 2022.

supply orders from *** also noted that "'Monthly Ton Allocation' or 'Contract Minimums' limited availability for additional needs, driving end users and customers to whom and where-ever tons could be sought, domestic and or foreign."[13]

U.S. demand

Based on available information, the overall demand for tin mill products is likely to experience moderate changes in response to changes in price. The main contributing factors are the availability of substitute products and the moderate-to-high cost share of tin mill products in its end-use products. This responsiveness is somewhat mitigated by the investment required for purchasers to change from use of cans to containers made from other materials.

End uses and cost share

U.S. demand for tin mill products depends on the demand for cans for food and other products. Tin mill products account for a moderate-to-large share of the cost of the end-use products in which it is used. Most reported cost shares for cans and other downstream products were 60 to 80 percent, with reported shares ranging from 5 to 95 percent. As noted by respondent CMI, "The cost of metal cans is by far the largest component of production cost for companies that package fruits and vegetables. For example, the steel for canned corn represents about twice the value of the corn and almost half of the total input cost.[14]

Business cycles

All three U.S. producers and 10 of 20 importers indicated that the tin mill products market was subject to business cycles. Many firms reported seasonality in demand, with higher demand in the summer when food and produce is packaged and slightly lower demand in winter, although firms noted that demand timing can vary throughout the year based on the specific product being packaged. Firms reported that some tin mill product specifications are seasonal while others have more consistent use throughout the year and that weather and other conditions affecting harvests can affect demand.

[13] Email from ***.

[14] Respondent CMI's postconference brief, p. 42.

Firms also reported increased demand in 2020 during the COVID-19 pandemic because of concerns regarding food availability and security and higher demand for aerosol cleaning products such as Lysol. During that time, demand for food cans from restaurants, which use three-piece cans, dropped, while demand for two-piece food cans which are the type of cans that individual consumers buy at the supermarket, increased.[15] In 2020, food can sales increased 12.8 percent and another 1 percent in 2021, but decreased 8.5 percent in 2022. In all, food can sales are 3 percent above 2019 levels.[16] A representative for petitioner Cleveland-Cliffs stated that it is limited in its ability to supply two-piece cans. As restaurants have reopened, demand for three-piece cans has been increasing.[17]

Other factors may have contributed to demand pattern changes as well. The large change in contract pricing levels in 2022 may also have contributed to changes in tin mill product demand patterns. As noted in Part V, pricing for the following year is determined in the fall. During the summer 2021 contract negotiations, prices were anticipated to increase considerably for 2022 based on the mid-2021 price of tin mill product raw materials (e.g., hot-rolled steel in coils), which may have incentivized purchasers to try to increase 2021 purchases rather than waiting for 2022. Despite this, petitioner Cleveland-Cliffs reported that it had ***.[18] ***.[19] Additionally, *** reported that *** were switching to using plastic paint cans, ***.[20]

[15] Conference transcript, p. 72 (Goncalves).

[16] Conference transcript, p. 186 (Budway).

[17] Conference transcript, pp. 72-73 (Goncalves and Vaughn).

[18] Petitioner's postconference brief, answers to staff questions, question 2.

[19] ***. A representative for Cleveland-Cliffs noted that during 2021 and 2022, after it had purchased the Weirton facility from ArcelorMittal, it invested over $50 million in capital improvements which it implemented while producing tin mill products and caused somewhat decreased production during that time, similar to "trying to renovate your whole house while trying to live in it. There's going to be certain things you can't do in that house during that project. Or trying to rebuild the engine in your car while you're trying to drive it. That's going to place some limitations on you." Conference transcript, pp. 19 (Goncalves) and 64 (Jarvis).

[20] ***.

Importer *** reported that there are also long-term cycles tied to cycles for steel products and end-use products while importer *** reported that the metal food can industry is non-cyclical and has been generally consistent for the last five years. It added that while some end uses demand have declined, such as consumers moving away from canned fruits and vegetables, this has been offset by increased demand for canned pet food. At the staff conference, a representative for Trivium stated that demand for cans with EZ-Open and EZ-Peel ends has been increasing and accelerated in the COVID-19 pandemic.[21]

Demand trends

U.S. producers and importers were asked how demand for tin mill products have changed since January 1, 2019. U.S. producers provided varying responses with one each reporting no change, fluctuate up, and fluctuate down for U.S. demand, and one each reporting a decrease and fluctuate up for demand outside the United States (table II-4). Most importers reported a steady increase or fluctuation upward in both U.S. and foreign demand.

Table II-4
Tin mill products: Firms' responses regarding overall domestic and foreign demand since 2019, by firm type

Count in number of firms reporting

Market	Firm type	Steadily increase	Fluctuate up	No change	Fluctuate down	Steadily decrease
Domestic demand	U.S. producers	0	1	1	1	0
Domestic demand	Importers	9	6	3	1	0
Foreign demand	U.S. producers	0	0	1	1	0
Foreign demand	Importers	8	2	4	1	0

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

[21] Conference transcript, p. 144 (Dietrich). The representative also noted that these products require certain specifications that Cleveland-Cliffs would not produce for Trivium.

Substitute products

Two of the three U.S. producers (***) and a minority of importers (7 of 17) reported that there were substitutes for tin mill products. U.S. producers listed as substitutes Tetra Paks and plastic, aluminum, and glass containers for food and beverage packaging, as well as aluminum for aerosol cans and plastic for paint cans. Importers that reported substitutes generally reported the same substitutes as U.S. producers well as other types of steel, laminates, paper, and imported finished steel containers.

U.S. producers generally reported that changes in the prices of these substitutes have not affected the price for tin mill products. However, *** stated that ***. Unlike U.S. producers, importers that reported substitutes generally reported that changes in the prices of substitutes had affected the price for tin mill products. *** reported that aluminum has replaced tin in the beverage can industry; has made significant inroads in the aerosol can industry; that laminates can be substituted in aerosol cans and closures and are affecting tin mill product pricing and volumes since they are not subject to section 232 tariffs; and that plastics are a less costly alternative despite a shorter shelf life. Importer *** stated that cost has been a driver for tin mill products and that increasing costs for tin mill products relative to substitutes has reduced the demand for the product over the long term.

Substitutability issues

This section assesses the degree to which U.S.-produced tin mill products and imports of tin mill products from subject countries can be substituted for one another by examining the importance of certain purchasing factors and the comparability of tin mill products from domestic and imported sources based on those factors. Based on available data, staff believes that there is a moderate degree of substitutability between domestically produced tin mill products and those imported from subject sources.[22] The main factors limiting substitutability were availability/available capacity to produce domestic tin mill products, elevated rejection rates and lack of qualification for certain types of domestic tin mill products, and certain types of tin mill products only being available only from certain sources. For tin mill products of the same type, substitutability is higher, as there is reportedly general interchangeability among tin mill products of similar quality and usage.

Factors affecting purchasing decisions

Most important purchase factors

Purchasers responding to lost sales/lost revenue survey[23] were asked to identify the main purchasing factors their firm considered in their purchasing decisions for tin mill products. The major purchasing factors identified by firms include quality and availability (including available capacity). As shown in table II-6, the most often cited top-three factors that firms consider in their purchasing decisions for tin mill products were quality and price (nine firms), on-time delivery or reliability (eight firms) and the ability to qualify or produce certain specifications such as wide-width tin mill products (seven firms). This ability to qualify and/or produce certain specifications was the most frequently cited first-most important factor, however (cited by five firms), followed by quality (four firms); quality, availability, and on-time delivery/reliability were the most frequently reported second-most important factors (three firms); and price was the most frequently reported third-most important factors (five firms).

[22] The degree of substitution between domestic and imported tin mill products depends upon the extent of product differentiation between the domestic and imported products and reflects how easily purchasers can switch from domestically produced tin mill products to the tin mill products 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.).

[23] This information is compiled from responses by purchasers identified by Petitioners or other U.S. producers to the lost sales/lost revenue allegations.

Table II-5
Tin mill products: Count of ranking of factors used in purchasing decisions as reported by purchasers, by factor

Factor	First	Second	Third	Total
Ability to qualify/produce specifications/wide product	5	2	0	7
Quality	4	3	2	9
Price	2	2	5	9
On-time delivery/reliability	1	3	4	8
Availability	1	3	1	5
Technical support	0	1	0	1
Payment terms	0	0	1	1

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

Note: Some firms reported more than two characteristics for each ranking. Both were included.
Note: Seven purchasers reported additional factors beyond their top-three factors. Two (***) reported terms/conditions of sale, one reported on-time delivery performance (***), and one (***) reported availability, noting that availability and delivery drove market prices in 2021-22 but those factors have dissipated. Three others reported a large number of other factors. *** stated "Reliability of the mill, technical expertise and support, R&D and Innovation, Quality, Lead times, Price and Payment terms, constant investment in production equipment and R&D by the supplier to stay competitive in terms of price, quality and product portfolio (commitment to tinplate business), Proximity to can plant, all other contractual terms and conditions, solvency of supplier, Abiding by {its Code of Conduct and Conflict Minerals laws}, number of facilities, raw material sources and contingencies, partner countries, past history, overall industry relationship. Availability of laminated material not available from domestic producers but Japan." *** reported that it "prioritizes a reliable supply chain, ability to prove compliance with U.S. regulatory controls, limited future trade risk (stable U.S. political relationship), ability to comply with {its} qualification requirements, ability to access raw materials (e.g. OCC does not have consistent access to black plate), and the ability of a supplier to make a long-term commitment to supply high-quality product. In the past, U.S. Steel was open to long-term agreements but in recent years when the price of tin mill spiked, U.S. Steel was unwilling to engage in these types of commitments. We have always bought all products we could from domestic suppliers given supply restrictions from ***." Lastly, *** ranked the next three factors: "(4) Material Performance (5) Customer Service and Reliability (6) Price Competitiveness."

Lead times

Tin mill products are primarily produced-to-order, with over 99 percent of both U.S producer and importer shipments in 2021 produced-to-order. U.S. producers and importers reported average lead times for produced-to-order product of 67 days and 93 days, respectively.

Comparison of U.S.-produced and imported tin mill products

In order to determine whether U.S.-produced tin mill products can generally be used in the same applications as imports from subject countries, U.S. producers and importers were asked whether the products can always, frequently, sometimes, or never be used interchangeably. All U.S. producers reported that tin mill products from all countries are always interchangeable. On the other hand, as shown in table II-6, most importers reported that tin mill products from each country source were sometimes interchangeable. Responses from importers noting that tin mill products from different country sources are not always interchangeable generally focused on imported product specifications that are not available from domestic producers, with several importers reporting that wide coil, D&I product, and EZ ends are not available from domestic producers. A representative for importer and purchaser Trivium noted that U.S. Steel stopped making wide coil D&I tin mill products up to 44 inches in 2021 due to production equipment, process limitations, and resulting quality issues.[24] In addition, importers reported that lengthy qualification processes;[25] quality differences; lead times; and transportation issues/delivery also limited interchangeability between different sources.

*** reported that subject imports were sometimes interchangeable with domestic product because of differences in product capabilities, D&I product, delivery, and quality. *** reported that the domestic product and imported product from *** are never interchangeable since the types of tin mill products imported from *** are not available from U.S. producers and have received exclusions from section 232 measures. *** reported that domestic product and imported product from *** is sometimes interchangeable since "the vast majority of material" it sells in the U.S. market is wide-DWI tinplate or laminated tin-free steel which is not produced domestically. *** reported that tin mill products from Canada and China were frequently or always interchangeable, respectively, with domestic product, while tin mill products from Taiwan were sometimes interchangeable since domestic mills cannot meet the same consistency and quality levels for certain types of tin mill products. *** reported that subject imports from South Korea were never interchangeable with domestic product since the product it imports

[24] Conference transcript, p. 142 (Dietrich).

[25] Qualification is reportedly a complex process and typically takes more than a year. Conference transcript, pp. 67 (Vaughn), 147 (Zal), and 182 (Brolly). Importer *** noted that qualification processes can take a year or more can take up to three years for some can types, such as plain cans for highly acidic fruits.

(***) is not made domestically. *** reported that certain products are not available domestically, specifically, widths greater than 40 inches that are imported from Canada, Taiwan, and the United Kingdom, and easy-open ends imported from Taiwan, Turkey, and the United Kingdom. *** reported that "valve mounting cups (laminated)" and D&I wide dimensions were not fully available from domestic producers and subject countries except Canada and Netherlands.

*** reported that U.S. producers are not able to produce all specifications required by U.S. can manufacturers, including wide-coil DWI and easy open can ends specifications. It added that most of its imports are of specifications that Ohio Coatings and Cleveland-Cliffs have never produced, and that in 2021, U.S. Steel stopped production of wide coil DWI because of quality and production equipment issues. *** reported that domestic product and subject imports were sometimes interchangeable because of domestic producers' limited production capabilities, which cover about 60 percent of U.S. demand, but that, for those specifications made by domestic mills, the products are frequently interchangeable. It added that for certain specifications only offered by foreign mills, such as wider material, thinner material, unique mechanical properties (such as high elongation), tighter tolerance, and better-quality finish, the products are often never interchangeable. Lastly, it stated that equipment changeovers required to produce different types of tin mill products may not be feasible for producers.

In comparing domestic tin mill products and produced in ***, *** reported that U.S. producers are unable to make polymer laminated TFS, wider width material for DWI food cans (around over 1,150mm) or higher elongation material for EZ-Open, and that U.S. producers are also unable to meet volume and quality requirements.

In addition, U.S. producers and importers were asked to assess how often differences other than price were significant in sales of tin mill products from the United States, subject, or nonsubject countries. As seen in tables II-7 and II-8, U.S. producers reported that factors other than price were sometimes or never significant in comparing domestic product and subject countries and never significant in comparing domestic product and nonsubject countries and in comparing among each subject country. Importer responses were more varied. Most importers reported that difference other than price were always significant in comparing domestic product to subject imports from China, Netherlands, South Korea, and the United Kingdom and were always or frequently important in comparing domestic product to subject imports from Canada, Germany, and Turkey. In comparing domestic product to subject imports from Taiwan, most purchasers reported that such differences were frequently or sometimes important.

Table II-6
Tin mill products: Count of importers reporting the interchangeability between product produced in the United States and in other countries, by country pair

Country pair	Always	Frequently	Sometimes	Never
U.S. vs. Canada	0	1	4	0
U.S. vs. China	1	1	6	0
U.S. vs. Germany	0	0	5	0
U.S. vs. Netherlands	0	0	5	0
U.S. vs. South Korea	1	0	5	1
U.S. vs. Taiwan	0	2	6	0
U.S. vs. Turkey	0	0	3	0
U.S. vs. United Kingdom	0	0	4	2
Canada vs. China	1	1	3	0
Canada vs. Germany	1	1	3	0
Canada vs. Netherlands	1	0	3	0
Canada vs. South Korea	1	0	4	0
Canada vs. Taiwan	0	2	3	0
Canada vs. Turkey	0	0	2	0
Canada vs. United Kingdom	1	0	3	0
China vs. Germany	1	0	3	0
China vs. Netherlands	1	0	2	0
China vs. South Korea	1	0	3	0
China vs. Taiwan	0	1	3	0
China vs. Turkey	0	0	2	0
China vs. United Kingdom	1	0	2	1
Germany vs. Netherlands	1	1	2	0
Germany vs. South Korea	1	0	4	0
Germany vs. Taiwan	0	1	3	0
Germany vs. Turkey	0	0	3	0
Germany vs. United Kingdom	1	1	3	0
Netherlands vs. South Korea	1	0	3	0
Netherlands vs. Taiwan	0	1	2	0
Netherlands vs. Turkey	0	0	2	0
Netherlands vs. United Kingdom	1	1	3	0
South Korea vs. Taiwan	0	1	2	0
South Korea vs. Turkey	0	0	2	0
South Korea vs. United Kingdom	1	0	2	0
Taiwan vs. Turkey	0	0	3	0
Taiwan vs. United Kingdom	1	1	2	0
Turkey vs. United Kingdom	1	0	2	0

Table continued.

Table II-6 Continued
Tin mill products: Count of importers reporting the interchangeability between product produced in the United States and in other countries, by country pair

Country pair	Always	Frequently	Sometimes	Never
U.S. vs. other	0	0	3	1
Canada vs. other	0	0	3	0
China vs. other	0	0	3	0
Germany vs. other	0	0	3	0
Netherlands vs. other	0	0	3	0
South Korea vs. other	0	0	3	0
Taiwan vs. other	0	0	4	0
Turkey vs. other	0	0	3	0
United Kingdom vs. other	0	0	3	0

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

Table II-7
Tin mill products: Count of U.S. producers reporting the significance of differences other than price between product produced in the United States and in other countries, by country pair

Country pair	Always	Frequently	Sometimes	Never
U.S. vs. Canada	0	0	2	1
U.S. vs. China	0	0	1	2
U.S. vs. Germany	0	0	2	1
U.S. vs. Netherlands	0	0	2	1
U.S. vs. South Korea	0	0	1	2
U.S. vs. Taiwan	0	0	1	2
U.S. vs. Turkey	0	0	1	2
U.S. vs. United Kingdom	0	0	2	1
Canada vs. China	0	0	0	2
Canada vs. Germany	0	0	0	2
Canada vs. Netherlands	0	0	0	2
Canada vs. South Korea	0	0	0	2
Canada vs. Taiwan	0	0	0	2
Canada vs. Turkey	0	0	0	2
Canada vs. United Kingdom	0	0	0	2
China vs. Germany	0	0	0	2
China vs. Netherlands	0	0	0	2
China vs. South Korea	0	0	0	2
China vs. Taiwan	0	0	0	2
China vs. Turkey	0	0	0	2
China vs. United Kingdom	0	0	0	2

Table continued.

Table II-7 Continued
Tin mill products: Count of U.S. producers reporting the significance of differences other than price between product produced in the United States and in other countries, by country pair

Country pair	Always	Frequently	Sometimes	Never
Germany vs. Netherlands	0	0	0	2
Germany vs. South Korea	0	0	0	2
Germany vs. Taiwan	0	0	0	2
Germany vs. Turkey	0	0	0	2
Germany vs. United Kingdom	0	0	0	2
Netherlands vs. South Korea	0	0	0	2
Netherlands vs. Taiwan	0	0	0	2
Netherlands vs. Turkey	0	0	0	2
Netherlands vs. United Kingdom	0	0	0	2
South Korea vs. Taiwan	0	0	0	2
South Korea vs. Turkey	0	0	0	2
South Korea vs. United Kingdom	0	0	0	2
Taiwan vs. Turkey	0	0	0	2
Taiwan vs. United Kingdom	0	0	0	2
Turkey vs. United Kingdom	0	0	0	2
U.S. vs. other	0	0	0	2
Canada vs. other	0	0	0	2
China vs. other	0	0	0	2
Germany vs. other	0	0	0	2
Netherlands vs. other	0	0	0	2
South Korea vs. other	0	0	0	2
Taiwan vs. other	0	0	0	2
Turkey vs. other	0	0	0	2
United Kingdom vs. other	0	0	0	2

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

Table II-8
Tin mill products: Count of U.S. importers reporting the significance of differences other than price between product produced in the United States and in other countries, by country pair

Country pair	Always	Frequently	Sometimes	Never
U.S. vs. Canada	2	2	0	0
U.S. vs. China	6	1	1	0
U.S. vs. Germany	2	2	0	0
U.S. vs. Netherlands	4	1	0	0
U.S. vs. South Korea	4	2	0	0
U.S. vs. Taiwan	2	3	3	0
U.S. vs. Turkey	2	2	0	0
U.S. vs. United Kingdom	4	1	0	0

Table continued.

Table II-8 Continued
Tin mill products: Count of U.S. importers reporting the significance of differences other than price between product produced in the United States and in other countries, by country pair

Country pair	Always	Frequently	Sometimes	Never
Canada vs. China	1	2	0	0
Canada vs. Germany	1	1	1	0
Canada vs. Netherlands	1	1	0	0
Canada vs. South Korea	1	2	0	0
Canada vs. Taiwan	1	2	1	0
Canada vs. Turkey	1	1	0	0
Canada vs. United Kingdom	1	1	0	0
China vs. Germany	0	2	0	0
China vs. Netherlands	0	1	0	0
China vs. South Korea	0	2	0	0
China vs. Taiwan	0	1	3	0
China vs. Turkey	0	1	0	0
China vs. United Kingdom	0	1	0	0
Germany vs. Netherlands	0	1	1	0
Germany vs. South Korea	0	2	1	0
Germany vs. Taiwan	0	1	2	0
Germany vs. Turkey	0	1	1	0
Germany vs. United Kingdom	0	1	2	0
Netherlands vs. South Korea	0	2	0	0
Netherlands vs. Taiwan	0	1	1	0
Netherlands vs. Turkey	0	1	0	0
Netherlands vs. United Kingdom	0	1	1	0
South Korea vs. Taiwan	0	1	1	0
South Korea vs. Turkey	0	2	0	0
South Korea vs. United Kingdom	0	1	1	0
Taiwan vs. Turkey	0	1	0	0
Taiwan vs. United Kingdom	0	1	0	0
Turkey vs. United Kingdom	0	1	0	0
U.S. vs. other	3	2	0	0
Canada vs. other	1	1	0	0
China vs. other	1	1	0	0
Germany vs. other	1	1	1	0
Netherlands vs. other	1	1	0	0
South Korea vs. other	1	2	0	0
Taiwan vs. other	1	1	0	0
Turkey vs. other	1	1	0	0
United Kingdom vs. other	1	1	0	0

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

Most (17 of 20) responding importers reported at least one factor other than price that was important in the tin mill products market. Importers reported a variety of factors, and on average reported more than three different factors. Factors noted most frequently as distinguishing tin mill products between sources were quality (noted by 14 importers); on-time delivery (8 importers); production capabilities (6 importers); technical support (5 importers); wide tin mill plate and wide D&I tin mill products (3 importers); availability, consistency, and laminated tin-free steel (3 importers); D&I tin mill products, lead time, and long-term relationships (2 importers); and a number of factors noted only by 1 importer. The majority of these importers reported these differences pertaining specifically to domestic tin mill products compared with those imported from subject countries.

Many purchasers also noted a number of these factors other than price in their lost sale/lost revenue survey responses, in testimony at the staff conference, or in their postconference briefs. The most common issues noted by these purchasers were with respect to the more frequent quality issues with domestic tin mill products compared with subject imports, certain specifications being unavailable from domestic producers, reliability or on-time delivery issues with domestic producers. These purchasers also reported issues with availability of domestic product – either supplying below contracted amounts, at the minimum of the contracted amounts, or an inability to supply additional amounts requested by the purchasers. At least one of these issues was noted by *** responding purchasers that manufacture cans, but *** noted any of these issues. Table II-9 shows which purchasers noted each of these issues.

Table II-9
Tin mill products: Types of issues encountered by U.S. purchasers sourcing product from domestic producers

Firm	Quality issues	Unavailable specification issues	Reliability or lead time issues	Order size issues
***	***	***	***	***
***	***	***	***	***
***	***	***	***	***
***	***	***	***	***
***	***	***	***	***
***	***	***	***	***
***	***	***	***	***
***	***	***	***	***
***	***	***	***	***
***	***	***	***	***
***	***	***	***	***
***	***	***	***	***
Number of purchasers	8	6	10	7

Source: Compiled from data submitted in response to Commission questionnaires, in postconference briefs, or from testimony during the preliminary staff conference.

Note: "---" indicates that the issue was not noted by that purchaser.

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

The Commission analyzes a number of factors in making injury determinations (see 19 U.S.C. §§ 1677(7)(B) and 1677(7)(C)). Information on the subsidies and dumping margins was presented in Part I of this report and information on the volume and pricing of imports of the subject merchandise is presented in Part IV and Part V. Information on the other factors specified is presented in this section and/or Part VI and (except as noted) is based on the questionnaire responses of three firms that accounted for all known U.S. production of tin mill products during 2021.

U.S. producers

The Commission issued a U.S. producer questionnaire to three firms based on information contained in the petitions. Three firms provided usable data on their operations. Staff believes that these responses represent all known U.S. production of tin mill products.

Table III-1 lists U.S. producers of tin mill products, their production locations, positions on the petitions, and shares of total production.

Table III-1
Tin mill products: U.S. producers, their positions on the petitions, production locations, and shares of reported production, 2021

Firm	Position on petitions	Production location(s)	Share of production
Cleveland-Cliffs	Petitioner	Weirton, WV	***
Ohio Coatings	***	Yorkville, OH	***
U.S. Steel	***	Gary, IN Portage, IN East Chicago, IN Pittsburg, CA	***
All firms	Various	Various	100.0

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

Note: ***.

As indicated in table III-2, *** is related to a U.S. importer of the subject merchandise through common ownership. No responding U.S. producer imported or purchased the subject merchandise from the U.S. importers.

Table III-2
Tin mill products: U.S. producers' ownership, related and/or affiliated firms

Reporting firm	Relationship type and related firm	Details of relationship
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***

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

Table III-3 presents events in the U.S. industry since January 1, 2019.

Table III-3
Tin mill products: Important industry events since January 1, 2019

Item	Firm	Event
Plant idling	U.S. Steel	In the fourth quarter of 2019, U.S. Steel indefinitely idled production at its East Chicago Tin mill located in East Chicago, IN. The company stated that the idling was "primarily due to increased tin import levels in the U.S." The mill produced subject tin mill products and had a pickling line, a cold reduction mill, two annealing facilities, a temper mill, a tin coating line, and a tin-free steel line.
Acquisition	U.S. Steel	In March 2020, U.S. Steel acquired POSCO California Corp.'s 50 percent share of joint-venture USS-POSCO Industries Inc., ("UPI") steel mill (rolling mill without melt shop) in Pittsburg, CA, to take full ownership. UPI produces cold-rolled and galvanized sheet and subject tin mill products, from hot bands principally provided by U.S. Steel. UPI primarily serves customers in the western United States and has a total annual production capability of 1.5 million short tons of flat steel.
Acquisition	Cleveland-Cliffs	In December 2020, Cleveland-Cliffs completed the acquisition of "substantially all of the operations of ArcelorMittal USA LLC and its subsidiaries", including the Weirton, WV steel mill that produces subject tin mill products.
Plant closing	U.S. Steel	In March 2022, U.S. Steel permanently idled tin mill production at its East Chicago tin operations. The mill had been idled on an indefinite basis since the fourth quarter of 2019.

Table continued.

Table III-3 Continued
Tin mill products: Important industry events since January 1, 2019

Item	Firm	Event
Plant closing	U.S. Steel	In December 2022, U.S. Steel indefinitely idled the majority of the tin mill operations at its Gary Works steel mill in Gary, IN. The idling included tin line #5, which was previously temporarily idled in the third quarter of 2022, and tin line #6. It was reported that the company plans to lay off 244 workers at the mill in February 2023. In a notification to the state of Indiana Department of Labor, a U.S. Steel official stated that "these actions are due to market conditions which were out of the company's control, including the continuing reduced demand for the Company's tin products and significantly increased tin mill imports."
Plant closing	U.S. Steel	According to metals industry publication Fastmarkets AMM, U.S. Steel plans to close its UPI steel mill (Pittsburg, CA) at some point in late 2023. According to unnamed sources, U. S. Steel plans to sell the property for warehousing to a developmental company. No further updates on this closure were available and this information was not confirmed officially by U.S. Steel.

Source: U.S. Steel, "U.S. Steel Acquires Remaining 50 Percent Ownership Interest in USS-POSCO Industries (UPI) From POSCO-California Corporation," March 1, 2020, https://investors.ussteel.com/news/news-details/2020/U.-S.-Steel-Acquires-Remaining-50-Percent-Ownership-Interest-in-USS-POSCO-Industries-UPI-From-POSCO-California-Corporation/default.aspx. Cleveland Cliffs Inc., "Cleveland-Cliffs Inc. Completes Acquisition of ArcelorMittal USA," December 8, 2020, https://www.clevelandcliffs.com/news/news-releases/detail/8/cleveland-cliffs-inc-completes-acquisition-of. www.nwitimes.com, "U.S. Steel to lay off 244 workers when it idles tin operations at Gary Works," December 29, 2022. U.S. Steel's 2022 Form 10-K, pp. 9, 49 (as filed). U.S. Steel's 2019 Form 10-K, pp. 34, 74 (as filed). Fastmarkets/AMM, "US Steel to close UPI, sell property in 2023," January 18, 2022, https://www.fastmarkets.com/insights/us-steel-to-close-upi-sell-property-in-2023.

Producers in the United States were asked to report any change in the character of their operations or organization relating to the production of tin mill products since January 1, 2019. Two producers indicated in their questionnaires that they had experienced such changes. Table III-4 presents the changes identified by these producers.

Table III-4
Tin mill products: U.S. producers' reported changes in operations, since January 1, 2019

Item	Firm name and narrative response on changes in operations
Plant closings	***
Acquisitions	***
Acquisitions	***
Prolonged shutdowns or curtailments	***

Table continued.

Table III-4
Tin mill products: U.S. producers' reported changes in operations, since January 1, 2019

Item	Firm name and narrative response on changes in operations
Prolonged shutdowns or curtailments	***
Other	***
Other	***

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

U.S. production, capacity, and capacity utilization

Table III-5 presents U.S. producers' installed capacity, practical capacity, and production on the same equipment. Virtually all of the production capacity is dedicated to the production of tin mill products as none of the responding U.S. producers reported production of other products on the same equipment used to produce tin mill products.[1]

[1] U.S. producers' reported narratives regarding practical production constraints are presented in table III-7. *** reported small amounts of production of excluded tin mill products in 2021 and interim 2022.

Table III-5
Tin mill products: U.S. producers' overall capacity and production on the same equipment as subject production, by period

Capacity and production in short tons; utilization in percent

Item	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Installed overall	Capacity	***	***	***	***	***
Installed overall	Production	***	***	***	***	***
Installed overall	Utilization	***	***	***	***	***
Practical overall	Capacity	***	***	***	***	***
Practical overall	Production	***	***	***	***	***
Practical overall	Utilization	***	***	***	***	***
Practical tin mill products	Capacity	***	***	***	***	***
Practical tin mill products	Production	***	***	***	***	***
Practical tin mill products	Utilization	***	***	***	***	***

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

Note: Installed overall production capacity is the level of production that a firm's establishment(s) could have attained, assuming the firm's optimal product mix, and based solely on existing capital investments, i.e., machinery and equipment that is in place and ready to operate. This capacity measure does not account for other constraints to production such as existing workforce constraints, availability of raw materials, or downtime for maintenance, repair, and clean-up. This capacity measure is sometimes referred to as "nameplate" or "theoretical" capacity in some industries.

Note: Practical overall production capacity is the level of production that a firm's establishment(s) could reasonably have expected to attain, accounting for the firm's actual product mix over the period for which data were collected. This capacity measure is based on not only existing capital investments, i.e., machinery and equipment that is in place and ready to operate but also non-capital investment constraints, such as (1) normal operating conditions, including normal downtime for maintenance, repair, and cleanup; (2) the firm's existing in-place and readily available labor force; (3) availability of material inputs; and (4) any other constraints that may have limited the firm's ability to produce the reported products. Importantly, this capacity measure is the maximum "practical" production a firm could have achieved without hiring new personnel or expanding the number of shifts operated in the period.

Table III-6 and figure III-1 present U.S. producers' production, capacity, and capacity utilization. Responding U.S. producers' practical production capacity decreased in each year during 2019-21, ending *** percent lower in 2021 than in 2019. ***, accounted for the majority of the decrease during this period.[2] *** in its practical production capacity during 2019-21 and *** reported a more modest decrease. Responding U.S. producers' practical production capacity was *** percent lower in interim 2022 than in interim 2021. ***

[2] All of the decrease in *** practical production capacity occurred from 2019 to 2020, which *** attributes to ***. Email from ***, February 6, 2023.

reported lower capacity in interim 2022 than in interim 2021, while *** reported *** practical production capacity in both interim periods.

Responding U.S. producers' production fluctuated, increasing from 2019 to 2020, then decreasing from 2020 to 2021, ending *** percent higher in 2021 than in 2019. *** reported an increase in production in each year during 2019-21, while *** reported an irregular decrease.[3] Responding U.S. producers' collective production was *** percent lower in interim 2022 than in interim 2021. *** reported less production in interim 2022 than in interim 2021, while *** reported more production.[4] [5]

Responding U.S. producers' average practical capacity utilization increased by *** percentage points during 2019-21, with nearly all of the increase occurring from 2019 to 2020. All three firms reported an increase in their capacity utilization from 2019 to 2020. The increase in *** capacity utilization largely offset the decrease in *** from 2020 to 2021, resulting in a modest increase during that period. The increase in *** practical capacity utilization is a result of its production increasing in each year despite the reduction in its practical production capacity. Responding producers' average practical capacity utilization was *** percentage points higher in interim

[3] ***. Email from ***, February 6, 2023. ***. Email from ***, February 6, 2023.

[4] ***. Email from ***, February 6, 2023. Additionally, the change in U.S. Steel's production between these periods may also reflect *** and the reduction of production at its Gary, Indiana facility by late August 2022. Conference transcript, pp. 11 and 21 (Vaughn) (Goncalves). As presented in table III-3, ***. Email from ***, February 2, 2023.

[5] ***. Email from ***, February 6, 2023.

2022 than in interim 2021, with *** higher level of capacity utilization offsetting *** lower level of capacity utilization.

Table III-6
Tin mill products: U.S. producer' capacity, production, capacity utilization, and share of production, by firm and period

Capacity

Capacity in short tons

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Cleveland-Cliffs	***	***	***	***	***
Ohio Coatings	***	***	***	***	***
U.S. Steel	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table III-6 Continued
Tin mill products: U.S. producer' capacity, production, capacity utilization, and share of production, by firm and period

Production

Production in short tons

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Cleveland-Cliffs	***	***	***	***	***
Ohio Coatings	***	***	***	***	***
U.S. Steel	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table III-6 Continued
Tin mill products: U.S. producer' capacity, production, capacity utilization, and share of production, by firm and period

Capacity utilization

Ratio in percent

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Cleveland-Cliffs	***	***	***	***	***
Ohio Coatings	***	***	***	***	***
U.S. Steel	***	***	***	***	***
All firms	***	***	***	***	***

Note: Capacity utilization ratio represents the ratio of the U.S. producer's production to its production capacity.

Table continued.

Table III-6 Continued
Tin mill products: U.S. producer' capacity, production, capacity utilization, and share of production, by firm and period

Share of production

Share in percent

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Cleveland-Cliffs	***	***	***	***	***
Ohio Coatings	***	***	***	***	***
U.S. Steel	***	***	***	***	***
All firms	100.0	100.0	100.0	100.0	100.0

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

Figure III-1
Tin mill products: U.S. producers' production, capacity, and capacity utilization, by period

* * * * * * *

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

Table III-7 presents U.S. producers' reported narratives regarding practical production constraints.

Table III-7
Tin mill products: U.S. producers' reported production constraints since January 1, 2019

Item	Firm name and narrative response on production constraints
Existing labor force	***
Supply of material inputs	***

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

Alternative products

*** reported *** short tons and *** short tons of production of excluded tin mill products on the same machinery used to produce in-scope merchandise in 2021 and interim 2022, respectively. No other producer reported production of out-of-scope merchandise on the same machinery used to produce in-scope merchandise during the period of investigation.

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

Table III-8 presents data on U.S. producers' U.S. shipments, export shipments, and total shipments. U.S. shipments accounted for *** of responding U.S. producers' total shipments in each year during 2019-21 and in both interim periods.[6] Responding U.S. producers' collective U.S. shipments fluctuated during 2019-21, increasing from 2019 to 2020, then decreasing from 2020 to 2021, ending *** percent higher in 2021 than in 2019. U.S. shipments for each responding U.S. producer fluctuated in the aforementioned direction during 2019-21, ending higher in 2021 than in 2019.[7] [8] The responding U.S. producers' collective

[6] There was no reported internal consumption or transfers to related firms during 2019-21 or in interim 2022.

[7] ***. Email from ***, February 6, 2023.

[8] *** U.S. shipments increased more modestly during 2019-21 because the increases in U.S. shipments from 2019 to 2020 was largely offset by near equivalent

U.S. shipments were *** percent lower in interim 2022 than in interim 2021. *** reported less U.S. shipments in interim 2022 than interim 2021, while *** reported slightly more. The value of responding U.S. producers' collective U.S. shipments increased in each year during 2019-21, ending *** percent higher in 2021 than in 2019. It was *** percent higher in interim 2022 than in interim 2021, reaching a period high.

The average unit value of responding U.S. producers' U.S. shipments fluctuated modestly year to year, decreasing from 2019 to 2020, then increasing from 2020 to 2021, ending *** percent higher in 2021 than in 2019. It reached a period high of $*** per short ton in interim 2022, which was more than *** percent greater than in any other period for which data were collected. The unit values of each U.S. producers' U.S. shipments were noticeably higher in interim 2022 than in any other period for which data were collected.[9]

By quantity, export shipments accounted for *** percent of responding U.S. producers' total shipments throughout 2019-21 and in interim 2022.[10] The quantity of responding U.S. producers' export shipments fluctuated, increasing from 2019 to 2020, then decreasing from 2020 to 2021, ending *** percent higher in 2021 than in 2019. It was *** percent lower in interim 2022 than in interim 2021. The value of responding U.S. producers' export shipments moved in the same direction as quantity during 2019-21, ending *** percent higher in 2021 than in 2019. It was *** percent higher in interim 2022 than in interim 2021. The average unit value of responding U.S. producers' export shipments fluctuated year to year, decreasing from 2019 to 2020, then increasing from 2020 to 2021, ending *** percent higher in 2021 than in 2019. It reached period-high $*** per short ton in interim 2022, which was *** the unit value in any other period for which data were collected.

decreases from 2020 to 2021. ***. Email from ***, February 6, 2023.

[9] ***. Email from ***, February 6, 2023; email from ***, February 2, 2023; and email from ***, February 6, 2023.

[10] ***.

Table III-8
Tin mill products: U.S. producers' shipments, by destination and period

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

Item	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
U.S. shipments	Quantity	***	***	***	***	***
Export shipments	Quantity	***	***	***	***	***
Total shipments	Quantity	***	***	***	***	***
U.S. shipments	Value	***	***	***	***	***
Export shipments	Value	***	***	***	***	***
Total shipments	Value	***	***	***	***	***
U.S. shipments	Unit value	***	***	***	***	***
Export shipments	Unit value	***	***	***	***	***
Total shipments	Unit value	***	***	***	***	***
U.S. shipments	Share of quantity	***	***	***	***	***
Export shipments	Share of quantity	***	***	***	***	***
Total shipments	Share of quantity	100.0	100.0	100.0	100.0	100.0
U.S. shipments	Share of value	***	***	***	***	***
Export shipments	Share of value	***	***	***	***	***
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.

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**.** Responding U.S. producers' end-of-period inventories fluctuated year to year, decreasing from 2019 to 2020, then increasing from 2020 to 2021, ending *** percent lower in 2021 than in 2019.[11] They were *** percent higher in interim 2022 than in interim 2021, reaching a period-high, as all three producers reported more end-of-period inventories.

The ratio of the responding U.S. producers' end-of-period inventories to U.S. production fluctuated year to year, decreasing from 2019 to 2020, then increasing from 2020 to 2021, ending *** percentage points lower in 2021 than in 2019. They were *** percentage points higher in interim 2022 than in interim 2021. The ratio of their end-of-period inventories to their U.S. shipments also fluctuated, decreasing from 2019 to 2020, then increasing from 2020 to 2021, ending *** percentage points lower in 2021 than in 2019. It was *** percentage points higher in interim 2022 than in interim 2021.

[11] The overall fluctuation in the quantity of end-of-period inventories largely reflects *** operations as it accounted for the majority of end-of-period inventories and is the only firm to report a fluctuation in its quantity.

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

Quantity in short tons; ratio in percent

Item	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
End-of-period inventory quantity	***	***	***	***	***
Inventory ratio to U.S. production	***	***	***	***	***
Inventory ratio to U.S. shipments	***	***	***	***	***
Inventory ratio to total shipments	***	***	***	***	***

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

U.S. producers' imports from subject sources

Table III-10 presents data on responding U.S. producers' U.S. production and U.S. imports of tin mill products from subject sources by related importers. No U.S. producer directly imported tin mill products from subject sources during the period of investigation. However, *** is related to subject importer *** through common ownership.[12] *** reported imports from *** in each year during 2019-21 and in both interim periods. The ratio of those imports to *** U.S. production did not exceed *** percent in any year during 2019-21 and was *** percent in interim 2022, compared with *** percent in interim 2021.

Table III-10
Tin mill products: * U.S. production, subject imports from affiliated importer ***, and ratio of subject imports to production, by source and period**

Quantity in short tons; ratio in percent

Item	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
U.S. production	Quantity	***	***	***	***	***
Imports from ***	Quantity	***	***	***	***	***
Imports from *** to U.S. production	Ratio	***	***	***	***	***

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

U.S. producers' purchases of imports from subject sources

No responding U.S. producer reported purchases of imports of tin mill products from subject sources during 2019-21 or in interim 2022.

[12] As presented in table III-2 ***.

U.S. employment, wages, and productivity

Table III-11 presents U.S. producers' employment-related data. The number of production-related workers ("PRWs") decreased in each year during 2019-21, ending *** percent lower in 2021 than in 2019. The number of PRWs was *** percent higher in interim 2022 than in interim 2021 but remained lower than in 2019 or 2020. Productivity increased in each year during 2019-21, ending *** percent higher in 2021 than in 2019. It was *** percent lower in interim 2022 than in interim 2021. Unit labor costs fluctuated, decreasing from 2019 to 2020, then increasing from 2020 to 2021, ending *** percent higher in 2021 than in 2019. They were *** percent higher in interim 2022 than in interim 2021, reaching a period-high. Hours worked per PRW, wages paid, and hourly wages were higher in 2021 than in 2019, while total hours worked was lower. Total hours worked, wages paid, and hourly wages were higher in interim 2022 than in interim 2021, while hours worked per PRW was virtually the same in both periods.

Table III-11
Tin mill products: U.S. producers' employment related information, by period

Item	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Production and related workers (PRWs) (number)	***	***	***	***	***
Total hours worked (1,000 hours)	***	***	***	***	***
Hours worked per PRW (hours)	***	***	***	***	***
Wages paid ($1,000)	***	***	***	***	***
Hourly wages (dollars per hour)	***	***	***	***	***
Productivity (short tons per 1,000 hours)	***	***	***	***	***
Unit labor costs (dollars per short ton)	***	***	***	***	***

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

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

U.S. importers

The Commission issued importer questionnaires to 25 firms believed to be importers of subject tin mill products, as well as to all U.S. producers of tin mill products.[1] Usable questionnaire responses were received from 21 companies, representing *** U.S. imports from Canada, *** percent of imports from China, *** percent of imports from Germany, *** from the Netherlands, *** percent of imports from South Korea, *** percent of imports from Taiwan, *** from Turkey, *** from the United Kingdom, *** percent of subject imports, and *** percent of imports from nonsubject sources in 2021.[2] Table IV-1 lists all responding U.S. importers of tin mill products from Canada, China, Germany, the Netherlands, South Korea, Taiwan, Turkey, the United Kingdom, and other sources, their locations, and their shares of U.S. imports, in 2021.

[1] The Commission issued questionnaires to those firms identified in the petitions, 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 7210.11.00, 7210.12.00, 7210.50.00, 7212.10.00, and 7212.50.00, 7225.99.00, and 7226.99.01 in 2021.

[2] These percentages represent the share of imports under HTS subheadings 7210.11.00, 7210.12.00, 7210.50.00, 7212.10.00, and 7212.50.00, 7225.99.00, and 7226.99.01, which are “basket” categories.

Table IV-1
Tin mill products: U.S. importers, their headquarters, and share of imports within each source, 2021

Share in percent

Firm	Headquarters	Canada	China	Germany	Netherlands
ArcelorMittal	Hamilton, ON	***	***	***	***
ArcelorMittal International	Chicago, IL	***	***	***	***
CSN	Chicago, IL	***	***	***	***
Duferco Steel	Houston, TX	***	***	***	***
EP Steel	South River, NJ	***	***	***	***
IMG	Taylorsville, NC	***	***	***	***
JFE Shoji America	Long Beach, CA	***	***	***	***
Kemeny	Fort Myers, FL	***	***	***	***
KG Steel	Fountain Valley, CA	***	***	***	***
Metal One	Rosemont, IL	***	***	***	***
Mitsui	New York, NY	***	***	***	***
POSCO	Teaneck, NJ	***	***	***	***
Reynolds Services	Greenville, PA	***	***	***	***
Songlin	Buena Park, CA	***	***	***	***
Tata Americas	Schaumburg, IL	***	***	***	***
TSIJ	Ijmuiden, Netherlands	***	***	***	***
TSUK	London,	***	***	***	***
TCC America	Torrance, CA	***	***	***	***
ThyssenKrupp	Southfield, MI	***	***	***	***
Titan	Baltimore, MD	***	***	***	***
Trivium	Chicago, IL	***	***	***	***
All firms	Various	100.0	100.0	100.0	100.0

Table continued.

Table IV-1 Continued
Tin mill products: U.S. importers, their headquarters, and share of imports within each source, 2021

Share in percent

Firm	Headquarters	South Korea	Taiwan	Turkey	United Kingdom
ArcelorMittal	Hamilton, ON	***	***	***	***
ArcelorMittal International	Chicago, IL	***	***	***	***
CSN	Chicago, IL	***	***	***	***
Duferco Steel	Houston, TX	***	***	***	***
EP Steel	South River, NJ	***	***	***	***
IMG	Taylorsville, NC	***	***	***	***
JFE Shoji America	Long Beach, CA	***	***	***	***
Kemeny	Fort Myers, FL	***	***	***	***
KG Steel	Fountain Valley, CA	***	***	***	***
Metal One	Rosemont, IL	***	***	***	***
Mitsui	New York, NY	***	***	***	***
POSCO	Teaneck, NJ	***	***	***	***
Reynolds Services	Greenville, PA	***	***	***	***
Songlin	Buena Park, CA	***	***	***	***
Tata Americas	Schaumburg, IL	***	***	***	***
TSIJ	Ijmuiden, Netherlands	***	***	***	***
TSUK	London, United Kingdom	***	***	***	***
TCC America	Torrance, CA	***	***	***	***
ThyssenKrupp	Southfield, MI	***	***	***	***
Titan	Baltimore, MD	***	***	***	***
Trivium	Chicago, IL	***	***	***	***
All firms	Various	100.0	100.0	100.0	100.0

Table continued.

Table IV-1 Continued
Tin mill products: U.S. importers, their headquarters, and share of imports within each source, 2021

Share in percent

Firm	Headquarters	Subject sources	Nonsubject sources	All import sources
ArcelorMittal	Hamilton, ON	***	***	***
ArcelorMittal International	Chicago, IL	***	***	***
CSN	Chicago, IL	***	***	***
Duferco Steel	Houston, TX	***	***	***
EP Steel	South River, NJ	***	***	***
IMG	Taylorsville, NC	***	***	***
JFE Shoji America	Long Beach, CA	***	***	***
Kemeny	Fort Myers, FL	***	***	***
KG Steel	Fountain Valley, CA	***	***	***
Metal One	Rosemont, IL	***	***	***
Mitsui	New York, NY	***	***	***
POSCO	Teaneck, NJ	***	***	***
Reynolds Services	Greenville, PA	***	***	***
Songlin	Buena Park, CA	***	***	***
Tata Americas	Schaumburg, IL	***	***	***
TSIJ	Ijmuiden, Netherlands	***	***	***
TSUK	London,	***	***	***
TCC America	Torrance, CA	***	***	***
ThyssenKrupp	Southfield, MI	***	***	***
Titan	Baltimore, MD	***	***	***
Trivium	Chicago, IL	***	***	***
All firms	Various	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. imports

Table IV-2 and figure IV-1 present data for U.S. imports of tin mill products from Canada, China, Germany, the Netherlands, South Korea, Taiwan, Turkey, the United Kingdom, and all other sources.

Table IV-2
Tin mill products: U.S. imports by source and period

Quantity in short tons; value in 1,000 dollars

Source	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Canada	Quantity	***	***	***	***	***
China	Quantity	***	***	***	***	***
Germany	Quantity	***	***	***	***	***
Netherlands	Quantity	***	***	***	***	***
South Korea	Quantity	***	***	***	***	***
Taiwan	Quantity	***	***	***	***	***
Turkey	Quantity	***	***	***	***	***
United Kingdom	Quantity	***	***	***	***	***
Subject sources	Quantity	***	***	***	***	***
Nonsubject sources	Quantity	***	***	***	***	***
All import sources	Quantity	***	***	***	***	***
Canada	Value	***	***	***	***	***
China	Value	***	***	***	***	***
Germany	Value	***	***	***	***	***
Netherlands	Value	***	***	***	***	***
South Korea	Value	***	***	***	***	***
Taiwan	Value	***	***	***	***	***
Turkey	Value	***	***	***	***	***
United Kingdom	Value	***	***	***	***	***
Subject sources	Value	***	***	***	***	***
Nonsubject sources	Value	***	***	***	***	***
All import sources	Value	***	***	***	***	***

Table continued.

Table IV-2 Continued
Tin mill products: U.S. imports by source and period

Unit value in dollars per short ton; share in percent

Source	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Canada	Unit value	***	***	***	***	***
China	Unit value	***	***	***	***	***
Germany	Unit value	***	***	***	***	***
Netherlands	Unit value	***	***	***	***	***
South Korea	Unit value	***	***	***	***	***
Taiwan	Unit value	***	***	***	***	***
Turkey	Unit value	***	***	***	***	***
United Kingdom	Unit value	***	***	***	***	***
Subject sources	Unit value	***	***	***	***	***
Nonsubject sources	Unit value	***	***	***	***	***
All import sources	Unit value	***	***	***	***	***
Canada	Share of quantity	***	***	***	***	***
China	Share of quantity	***	***	***	***	***
Germany	Share of quantity	***	***	***	***	***
Netherlands	Share of quantity	***	***	***	***	***
South Korea	Share of quantity	***	***	***	***	***
Taiwan	Share of quantity	***	***	***	***	***
Turkey	Share of quantity	***	***	***	***	***
United Kingdom	Share of quantity	***	***	***	***	***
Subject sources	Share of quantity	***	***	***	***	***
Nonsubject sources	Share of quantity	***	***	***	***	***
All import sources	Share of quantity	100.0	100.0	100.0	100.0	100.0

Table continued.

Table IV-2 Continued
Tin mill products: U.S. imports by source and period

Share and ratio in percent

Source	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Canada	Share of value	***	***	***	***	***
China	Share of value	***	***	***	***	***
Germany	Share of value	***	***	***	***	***
Netherlands	Share of value	***	***	***	***	***
South Korea	Share of value	***	***	***	***	***
Taiwan	Share of value	***	***	***	***	***
Turkey	Share of value	***	***	***	***	***
United Kingdom	Share of value	***	***	***	***	***
Subject sources	Share of value	***	***	***	***	***
Nonsubject sources	Share of value	***	***	***	***	***
All import sources	Share of value	***	***	***	***	***
Canada	Ratio	***	***	***	***	***
China	Ratio	***	***	***	***	***
Germany	Ratio	***	***	***	***	***
Netherlands	Ratio	***	***	***	***	***
South Korea	Ratio	***	***	***	***	***
Taiwan	Ratio	***	***	***	***	***
Turkey	Ratio	***	***	***	***	***
United Kingdom	Ratio	***	***	***	***	***
Subject sources	Ratio	***	***	***	***	***
Nonsubject sources	Ratio	***	***	***	***	***
All import sources	Ratio	***	***	***	***	***

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

Note: Share of quantity is the share of U.S. imports by quantity; share of value is the share of U.S. imports by value; ratio are U.S. imports to production. 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 “---“.

Figure IV-1
Tin mill products: U.S. import quantities and average unit values, by source and period

* * * * * * *

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

The three largest sources of subject imports were Canada, Germany, and the Netherlands. Collectively, these three sources accounted for the majority of total imports in each calendar year during 2019-21, and in both interim periods. They were the only sources to account for more than *** percent of total imports throughout 2019-21 and in interim 2022. China, South Korea, and the United Kingdom were the next largest sources of subject imports, accounting for between *** percent and *** percent of total imports during 2019-21 and between *** percent and *** percent in interim 2022. Taiwan and Turkey were the smallest sources of subject imports in each year during 2019-21 and in interim 2022, each accounting for no more than *** percent of total imports during those periods. Nonsubject imports accounted for *** percent of total imports throughout 2019-21 and *** percent in interim 2022. Most of the reported imports from nonsubject sources were from Japan. Overall, subject imports, by quantity, accounted for *** percent of total imports in each calendar year during 2019-21 and *** percent in interim 2022.

U.S. imports from Canada, by quantity, fluctuated, increasing from 2019 to 2020, then decreasing from 2020 to 2021, ending *** percent higher in 2021 than in 2019.[3] It was *** percent lower in interim 2022 than in interim 2021. U.S. imports from Germany increased in each year during 2019-21, ending *** percent higher in 2021 than in 2019. U.S. imports from the Netherlands fluctuated year to year, decreasing from 2019 to 2020, then increasing from 2020 to 2021, ending *** percent lower in 2021 than in 2019.[4] U.S. imports from Germany and the Netherlands were *** percent and *** percent higher, respectively, in interim 2022 than in interim 2021.

[3] The change in the quantity of imports from Canada reflects *** operations as it accounted for *** imports from Canada during 2019-21. According to firm representatives, the increase in *** imports from 2019 to 2020 was due to ***. Email from ***, February 6, 2023.

[4] *** were the only firms to report imports from Germany and the Netherlands, respectively, during the period of investigation. According to ***. Email from ***, February 2, 2023. Representatives from ***. Email from ***, February 6, 2023.

U.S. imports from China fluctuated year to year, decreasing from 2019 to 2020, then increasing from 2020 to 2021, ending *** percent lower in 2021 than in 2019.[5] It was *** percent higher in interim 2022 than in interim 2021.[6] U.S. imports from South Korea also fluctuated year to year, increasing from 2019 to 2020, then decreasing from 2020 to 2021, ending *** percent higher in 2021 than in 2019.[7] Imports from the United Kingdom increased in each year during 2019-21, ending *** percent higher in 2021 than in 2019.[8] Imports from South Korea were *** percent higher, respectively, in interim 2022 than in interim 2021, while imports from the United Kingdom were *** percent lower.

[5] The fluctuation in the quantity of imports from China largely reflects *** operations as it accounted for the majority of imports from China and is the only firm to report a year-to-year fluctuation of such imports. ***. Email from ***, February 8, 2023.

[6] All three firms that imported from China in both interim periods reported more imports in interim 2022 than in interim 2021, with *** and *** accounting for the vast majority of the increase between those periods. *** reported a more modest increase in its imports between the interim periods. ***, February 3, 2023. Representatives from ***. Email from ***, February 9, 2023.

[7] The fluctuation in imports from South Korea during 2019-21 largely reflects *** operations as it accounted for the vast majority of imports from South Korea and reported a fluctuation in its imports during this period. ***. Email from ***, February 3, 2023.

[8] *** accounted for all imports from the United Kingdom during the period for which data were collected. ***. Email from ***, February 6, 2023.

U.S. imports from Taiwan and Turkey, while accounting for the smallest share of total imports among the subject sources, experienced the largest percentage increases during 2019-21, increasing by *** and by ***, respectively.[9] Imports from Taiwan and Turkey were *** percent and *** percent higher, respectively, in interim 2022 than in interim 2021.[10]

Overall, the quantity of subject imports increased in each year during 2019-21, ending *** percent higher in 2021 than in 2019. Imports from six of the eight subject sources were higher in 2021 than in 2019, with imports from Germany, Taiwan, and the United Kingdom accounting for the majority of the increase. The quantity of subject imports was *** percent higher in interim 2022 than in interim 2021. The quantity of imports from nonsubject sources fluctuated year to year, decreasing from 2019 to 2020, then increasing from 2020 to 2021, ending *** percent higher in 2021 than in 2019. It was *** percent higher in interim 2022 than in interim 2021.

The value of U.S. imports from Canada increased irregularly by *** percent from 2019 to 2021, while the value of imports from the Netherlands decreased irregularly by *** percent, reflecting the changes in quantity. The value of imports from Germany increased in each year during 2019-21, ending *** percent higher in 2021 than in 2019. The values of imports from Canada, Germany, and the Netherlands were *** percent, *** percent, and *** percent higher, respectively, in interim 2022 than in interim 2021.

[9] The increase in imports from Turkey reflects *** operations. ***. Among the *** importers that reported imports from Taiwan in every year during 2019-21, *** reported more imports in 2021 than in 2019, with *** accounting for the vast majority of that increase. ***. ***, February 7, 2023, Attachment, p. 1.

[10] The difference in the quantity of imports from Turkey between the two interim periods reflects *** operations, whose imports were roughly *** higher in interim 2022 than in interim 2021. ***. Email from ***, February 8, 2023.

The values of imports from China, South Korea, and the United Kingdom increased irregularly by *** percent, *** percent, and *** percent, respectively, from 2019 to 2021. The values of imports from China, South Korea, and the United Kingdom were *** percent, *** percent, and *** percent higher, respectively, in interim 2022 than in interim 2021. Similar to quantity, the value of U.S. imports from Taiwan and Turkey experienced the largest increase among the subject sources during 2019-21 and were *** percent and *** percent higher, respectively, in interim 2022 than in interim 2021.

Overall, the value of subject imports increased in each year during 2019-21, ending *** percent higher in 2021 than in 2019. It was *** percent higher in interim 2022 than in interim 2021. The value of imports from nonsubject sources, however, fluctuated, decreasing from 2019 to 2020, then increasing from 2020 to 2021, ending *** percent higher in 2021 than in 2019. It was *** percent higher in interim 2022 than in interim 2021.

The unit values of imports from Canada, China, and Taiwan moved in the same direction, decreasing from 2019 to 2020, then increasing from 2020 to 2021, ending higher in 2021 than in 2019. The unit values of imports from Germany, the Netherlands, and the United Kingdom moved in the same direction, decreasing from 2019 to 2020, then increasing from 2020 to 2021, ending lower in 2021 than in 2019. The unit value of imports from South Korea increased in each year during 2019-21. The unit value of imports from Turkey experienced the largest percentage increase (*** percent), while the unit value of imports from Germany experienced the largest percentage decrease (*** percent). The unit values of imports from every subject source reached a period-high in interim 2022.[11]

Overall, the unit value of subject imports fluctuated year to year, decreasing from 2019 to 2020, then increasing from 2020 to 2021, ending *** percent higher in 2021 than in 2019. It reached a period-high in interim 2022. The unit value of imports from nonsubject sources decreased in each year during 2019-21 but reached a period-high in interim 2022.

[11] Witnesses for the petitioner, Cleveland-Cliffs, and the respondents testified that prices for tin mill products in each year are based primarily on annual contracts negotiated in the fall of the prior year. Conference transcript, pp. 10, 30, and 160 (Vaughn) (Jarvis) (Jacobson). ***. Email from ***, February 6, 2023; Email from ***, February 6, 2023; and email from ***, February 6, 2023.

Table IV-3 presents data on the changes in import quantity, value, and unit value between the comparison periods.

Table IV-3
Tin mill products: Changes in import quantity, value, and unit value between comparison periods

Change in percent

Source	Measure	2019-21	2019-20	2020-21	Jan-Sep 2021-22
Canada	%Δ Quantity	▲***	▲***	▼***	▼***
China	%Δ Quantity	▼***	▼***	▲***	▲***
Germany	%Δ Quantity	▲***	▲***	▲***	▲***
Netherlands	%Δ Quantity	▼***	▼***	▲***	▲***
South Korea	%Δ Quantity	▲***	▲***	▼***	▲***
Taiwan	%Δ Quantity	▲***	▲***	▲***	▲***
Turkey	%Δ Quantity	▲***	▼***	***	▲***
United Kingdom	%Δ Quantity	▲***	▲***	▲***	▼***
Subject sources	%Δ Quantity	▲***	▲***	▲***	▲***
Nonsubject sources	%Δ Quantity	▲***	▼***	▲***	▲***
All import sources	%Δ Quantity	▲***	▲***	▲***	▲***
Canada	%Δ Value	▲***	▲***	▼***	▲***
China	%Δ Value	▲***	▼***	▲***	▲***
Germany	%Δ Value	▲***	▲***	▲***	▲***
Netherlands	%Δ Value	▼***	▼***	▲***	▲***
South Korea	%Δ Value	▲***	▲***	▼***	▲***
Taiwan	%Δ Value	▲***	▲***	▲***	▲***
Turkey	%Δ Value	▲***	▼***	***	▲***
United Kingdom	%Δ Value	▲***	▼***	▲***	▲***
Subject sources	%Δ Value	▲***	▲***	▲***	▲***
Nonsubject sources	%Δ Value	▲***	▼***	▲***	▲***
All import sources	%Δ Value	▲***	▲***	▲***	▲***
Canada	%Δ Unit value	▲***	▼***	▲***	▲***
China	%Δ Unit value	▲***	▼***	▲***	▲***
Germany	%Δ Unit value	▼***	▼***	▲***	▲***
Netherlands	%Δ Unit value	▼***	▼***	▲***	▲***
South Korea	%Δ Unit value	▲***	▲***	▲***	▲***
Taiwan	%Δ Unit value	▲***	▼***	▲***	▲***
Turkey	%Δ Unit value	▲***	▼***	***	▲***
United Kingdom	%Δ Unit value	▼***	▼***	▲***	▲***
Subject sources	%Δ Unit value	▲***	▼***	▲***	▲***
Nonsubject sources	%Δ Unit value	▼***	▼***	▼***	▲***
All import sources	%Δ Unit value	▲***	▼***	▲***	▲***

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

Note: Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Negligibility

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.[12] 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.[13] By quantity, imports from Canada, China, Germany, the Netherlands, South Korea, Taiwan, Turkey, and the United Kingdom each accounted for more than *** percent of total imports of tin mill products by quantity during 2021. Table IV-4 presents the share of total U.S. imports, by quantity, attributable to Canada, China, Germany, the Netherlands, South Korea, Taiwan, Turkey, the United Kingdom, and nonsubject sources during the most recent twelve-month period preceding the filing of the petitions.

[12] 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)).

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

Table IV-4
Tin mill products: U.S. imports in the twelve-month period preceding the filing of the petitions, January 2022 through December 2022

Quantity in short tons; share in percent

Source of imports	Quantity	Share of quantity
Canada	***	***
China	***	***
Germany	***	***
Netherlands	***	***
South Korea	***	***
Taiwan	***	***
Turkey	***	***
United Kingdom	***	***
Subject sources	***	***
Nonsubject sources	***	***
All import sources	***	100.0

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

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-5 and figure IV-2 present data on U.S. producers' and U.S. importers' U.S. shipments of tin mill products by coating type in 2021. Tin plate steel accounted for either the majority or vast majority of U.S. producers' U.S. shipments and U.S. shipments of imports from each subject source, expect the United Kingdom. There were no U.S. shipments of imports of tin free steel from Turkey.

U.S. producers accounted for the largest share of total U.S. shipments of tin plate steel and tin free steel. Imports from the Netherlands accounted for the second-largest share of U.S. shipments of tin plate steel and imports from Germany accounted for the third-largest share. Imports from the United Kingdom accounted for the second-largest share of U.S. shipments of tin free steel and imports from Canada accounted for the third-largest share.

Table IV-5
Tin mill products: U.S. producers' and U.S. importers' U.S. shipments, by source and coating type, 2021

Quantity in short tons

Source	Tin plate	Tin free steel	All coating types
U.S. producers	***	***	***
Canada	***	***	***
China	***	***	***
Germany	***	***	***
Netherlands	***	***	***
South Korea	***	***	***
Taiwan	***	***	***
Turkey	***	***	***
United Kingdom	***	***	***
Subject sources	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***

Table continued.

Table IV-5 Continued
Tin mill products: U.S. producers' and U.S. importers' U.S. shipments, by source and coating type, 2021

Share across in percent

Source	Tin plate	Tin free steel	All coating types
U.S. producers	***	***	100.0
Canada	***	***	100.0
China	***	***	100.0
Germany	***	***	100.0
Netherlands	***	***	100.0
South Korea	***	***	100.0
Taiwan	***	***	100.0
Turkey	***	***	100.0
United Kingdom	***	***	100.0
Subject sources	***	***	100.0
Nonsubject sources	***	***	100.0
All import sources	***	***	100.0
All sources	***	***	100.0

Table continued.

Table IV-5 Continued
Tin mill products: U.S. producers' and U.S. importers' U.S. shipments, by source and coating type, 2021

Share down in percent

Source	Tin plate	Tin free steel	All coating types
U.S. producers	***	***	***
Canada	***	***	***
China	***	***	***
Germany	***	***	***
Netherlands	***	***	***
South Korea	***	***	***
Taiwan	***	***	***
Turkey	***	***	***
United Kingdom	***	***	***
Subject sources	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	100.0	100.0	100.0

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

Note: Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Figure IV-2
Tin mill products: U.S. producers' and U.S. importers' U.S. shipments, by source and coating type, 2021

* * * * * * *

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

Table IV-6 and figure IV-3 present data on U.S. producers' and U.S. importers' U.S. shipments of tin mill products by base weight in 2021. Tin mill products with a base weight between 75 and 107 accounted for the largest share of U.S. producers' U.S. shipments and U.S. shipments of imports from Canada, China, Germany, the Netherlands, Taiwan, and the United Kingdom. Tin mill products with a base weight of less than 73 accounted for the largest share of U.S. shipments of imports from South Korea and Turkey. There were no U.S. shipments of imports of tin mill products with a base weight of greater than 112 from Turkey.

U.S. producers accounted for the largest share of U.S. shipments of tin mill products of all base weights. Imports from Canada accounted for the second-largest share of U.S. shipments of tin mill products with a base weight less than 73 and imports from South Korea accounted for the third-largest share. Imports from the Netherlands accounted for the second-largest share of U.S. shipments of tin mill products with a base weight between 75 and 107 as well as U.S. shipments of tin mill products with a base weight greater than 112 and imports from Germany accounted for the third-largest share of U.S. shipments of both types of tin mill products.

Table IV-6
Tin mill products: U.S. producers' and U.S. importers' U.S. shipments, by source and base weight, 2021

Quantity in short tons

Source	Base weight ≤ 73	Base weight 75-107	Base weight ≥ 112	All base weights
U.S. producers	***	***	***	***
Canada	***	***	***	***
China	***	***	***	***
Germany	***	***	***	***
Netherlands	***	***	***	***
South Korea	***	***	***	***
Taiwan	***	***	***	***
Turkey	***	***	***	***
United Kingdom	***	***	***	***
Subject sources	***	***	***	***
Nonsubject sources	***	***	***	***
All import sources	***	***	***	***
All sources	***	***	***	***

Table continued.

Table IV-6 Continued
Tin mill products: U.S. producers' and U.S. importers' U.S. shipments, by source and base weight, 2021

Share across in percent

Source	Base weight ≤ 73	Base weight 75-107	Base weight ≥ 112	All base weights
U.S. producers	***	***	***	100.0
Canada	***	***	***	100.0
China	***	***	***	100.0
Germany	***	***	***	100.0
Netherlands	***	***	***	100.0
South Korea	***	***	***	100.0
Taiwan	***	***	***	100.0
Turkey	***	***	***	100.0
United Kingdom	***	***	***	100.0
Subject sources	***	***	***	100.0
Nonsubject sources	***	***	***	100.0
All import sources	***	***	***	100.0
All sources	***	***	***	100.0

Table continued.

Table IV-6 Continued
Tin mill products: U.S. producers' and U.S. importers' U.S. shipments, by source and base weight, 2021

Share down in percent

Source	Base weight ≤ 73	Base weight 75-107	Base weight ≥ 112	All base weights
U.S. producers	***	***	***	***
Canada	***	***	***	***
China	***	***	***	***
Germany	***	***	***	***
Netherlands	***	***	***	***
South Korea	***	***	***	***
Taiwan	***	***	***	***
Turkey	***	***	***	***
United Kingdom	***	***	***	***
Subject sources	***	***	***	***
Nonsubject sources	***	***	***	***
All import sources	***	***	***	***
All sources	100.0	100.0	100.0	100.0

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

Note: Zeroes, null values, and undefined calculations are suppressed and shown as "---". Base weight also indicates the thickness of the product. A base weight of less than 73 is less than or equal to 0.2 mm/0.0080 inches in thickness. Base weight of 75-107 is greater than 0.2 mm/0.0080 inches but less than or equal to 0.3 mm/0.0118 inches in thickness. Base weight of greater than 112 is greater than 0.3 mm/0.0118 inches in thickness.

Figure IV-3
Tin mill products: U.S. producers' and U.S. importers' U.S. shipments, by source and base weight, 2021

* * * * * * *

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

Table IV-7 and figure IV-4 present data on U.S. producers' and U.S. importers' U.S. shipments of tin mill products by finish in 2021. The majority of U.S. producers' U.S. shipments and U.S. shipments of imports from Canada and Taiwan were tin mill products with a bright finish. All or a vast majority of U.S. shipments of imports from China, Germany, the Netherlands, South Korea, Turkey, and the United Kingdom were tin mill products with a non-bright finish.

U.S. producers accounted for the vast majority of U.S. shipments of tin mill products with a bright finish. Imports from Canada were the only other source to account for more than *** percent of U.S. shipments of tin mill products with a bright finish. U.S. producers accounted for the largest share of U.S. shipments of tin mill products with a non-bright finish. Imports from the Netherlands and Germany accounted for the second and third-largest shares, respectively, of U.S. shipments of tin mill products with a non-bright finish.

Table IV-7
Tin mill products: U.S. producers' and U.S. importers' U.S. shipments, by source and finish type, 2021

Quantity in short tons

Source	Bright	Other	All finish types
U.S. producers	***	***	***
Canada	***	***	***
China	***	***	***
Germany	***	***	***
Netherlands	***	***	***
South Korea	***	***	***
Taiwan	***	***	***
Turkey	***	***	***
United Kingdom	***	***	***
Subject sources	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***

Table continued.

Table IV-7 Continued
Tin mill products: U.S. producers' and U.S. importers' U.S. shipments, by source and finish type, 2021

Share across in percent

Source	Bright	Other	All finish types
U.S. producers	***	***	100.0
Canada	***	***	100.0
China	***	***	100.0
Germany	***	***	100.0
Netherlands	***	***	100.0
South Korea	***	***	100.0
Taiwan	***	***	100.0
Turkey	***	***	100.0
United Kingdom	***	***	100.0
Subject sources	***	***	100.0
Nonsubject sources	***	***	100.0
All import sources	***	***	100.0
All sources	***	***	100.0

Table continued.

Table IV-7 Continued
Tin mill products: U.S. producers' and U.S. importers' U.S. shipments, by source and finish type, 2021

Share down in percent

Source	Bright	Other	All finish types
U.S. producers	***	***	***
Canada	***	***	***
China	***	***	***
Germany	***	***	***
Netherlands	***	***	***
South Korea	***	***	***
Taiwan	***	***	***
Turkey	***	***	***
United Kingdom	***	***	***
Subject sources	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	100.0	100.0	100.0

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. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Figure IV-4
Tin mill products: U.S. producers' and U.S. importers' U.S. shipments, by source and finish type, 2021

* * * * * * *

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

Geographical markets

Table IV-8 presents data on U.S. imports of tin mill products by border of entry in 2021. According to official import statistics, imports from China, Germany, the Netherlands, and South Korea entered the United States through ports in every region. Imports from Canada and the United Kingdom entered the United States through ports in every region except in the South. Imports from Taiwan entered the United States through ports in every region except the North, while imports from Turkey entered through every port in the United States except for the West.

The majority of imports from Germany, the Netherlands, and Taiwan entered the United States through ports located in the East, while the majority of imports from Canada, Turkey, and the United Kingdom entered the United States through ports located in the North. Nearly all imports from China entered the United States through ports located in the East, North, or South, while nearly all imports from South Korea enter the United States through ports located in the East, South, or West.

Table IV-8
Tin mill products: U.S. imports by source and border of entry, 2021

Quantity in short tons

Source	East	North	South	West	All borders
Canada	94,282	146,802	---	41	241,125
China	45,821	45,566	36,208	2,236	129,831
Germany	160,227	93,353	30,881	2	284,463
Netherlands	140,507	118,120	38	5,803	264,467
South Korea	30,905	3,379	51,627	22,449	108,360
Taiwan	53,970	---	18,385	3,622	75,977
Turkey	482	15,897	46	---	16,425
United Kingdom	28,644	77,030	---	15,488	121,161
Subject sources	554,838	500,146	137,184	49,640	1,241,809
Nonsubject sources	50,713	10,237	73,952	15,539	150,440
All import sources	605,551	510,382	211,136	65,179	1,392,249

Table continued.

Table IV-8 Continued
Tin mill products: U.S. imports by source and border of entry, 2021

Share across in percent

Source	East	North	South	West	All borders
Canada	39.1	60.9	---	0.0	100.0
China	35.3	35.1	27.9	1.7	100.0
Germany	56.3	32.8	10.9	0.0	100.0
Netherlands	53.1	44.7	0.0	2.2	100.0
South Korea	28.5	3.1	47.6	20.7	100.0
Taiwan	71.0	---	24.2	4.8	100.0
Turkey	2.9	96.8	0.3	---	100.0
United Kingdom	23.6	63.6	---	12.8	100.0
Subject sources	44.7	40.3	11.0	4.0	100.0
Nonsubject sources	33.7	6.8	49.2	10.3	100.0
All import sources	43.5	36.7	15.2	4.7	100.0

Table continued.

Table IV-8 Continued
Tin mill products: U.S. imports by source and border of entry, 2021

Share down in percent

Source	East	North	South	West	All borders
Canada	15.6	28.8	---	0.1	17.3
China	7.6	8.9	17.1	3.4	9.3
Germany	26.5	18.3	14.6	0.0	20.4
Netherlands	23.2	23.1	0.0	8.9	19.0
South Korea	5.1	0.7	24.5	34.4	7.8
Taiwan	8.9	---	8.7	5.6	5.5
Turkey	0.1	3.1	0.0	---	1.2
United Kingdom	4.7	15.1	---	23.8	8.7
Subject sources	91.6	98.0	65.0	76.2	89.2
Nonsubject sources	8.4	2.0	35.0	23.8	10.8
All import sources	100.0	100.0	100.0	100.0	100.0

Source: Compiled from official U.S. import statistics of the U.S. Department of Commerce Census Bureau using HTS statistical reporting numbers 7210.11.0000, 7210.12.0000, 7210.50.0000, 7210.50.0020, 7210.50.0090, 7212.10.0000, and 7225.99.0090 accessed January 31, 2023. Imports are based on the imports for consumption data series.

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 "---". HTS statistical reporting numbers 7212.50.0000 and 7226.99.0180 are excluded from these data because staff believes that the vast majority of imports classified under these HTS statistical reporting numbers are outside the scope of these investigations.

Presence in the market

Table IV-9 and figures IV-5 and IV-6 present monthly data for subject and nonsubject imports of tin mill products during January 2019-September 2022. U.S. imports of tin mill products from each subject source, except for Turkey, were present in every month during January 2019-September 2022. Imports from Turkey were present in 20 out of 45 months.

Table IV-9
Tin mill products: Quantity of U.S. imports, by source and month

Quantity in short tons

Year	Month	Canada	China	Germany	Netherlands
2019	January	15,872	15,214	13,244	18,319
2019	February	17,551	4,505	14,664	22,320
2019	March	21,404	23,188	12,087	29,674
2019	April	21,104	10,431	23,142	17,728
2019	May	20,457	7,370	10,537	19,955
2019	June	22,808	18,445	35,326	29,199
2019	July	17,498	9,109	18,072	26,724
2019	August	19,263	11,299	15,135	33,359
2019	September	21,629	3,430	14,956	21,624
2019	October	20,801	2,607	21,550	11,526
2019	November	13,651	1,524	9,440	25,715
2019	December	16,503	2,912	20,403	8,779
2020	January	25,190	3,694	7,502	3,645
2020	February	22,299	2,230	15,249	20,379
2020	March	25,597	3,404	19,092	17,753
2020	April	22,847	7,057	13,278	22,031
2020	May	24,450	7,388	20,921	27,896
2020	June	23,960	9,343	19,112	16,015
2020	July	24,498	29,349	20,831	21,920
2020	August	21,268	9,408	18,720	26,845
2020	September	21,276	3,219	24,949	19,944
2020	October	17,838	4,419	27,412	14,514
2020	November	19,499	16,622	20,750	20,542
2020	December	19,874	7,451	22,084	39,852

Table continued.

Table IV-9 Continued
Tin mill products: Quantity of U.S. imports, by source and month

Quantity in short tons

Year	Month	South Korea	Taiwan	Turkey	United Kingdom
2019	January	14,323	170	31	5,888
2019	February	6,939	317	---	7,860
2019	March	3,995	2,876	---	9,147
2019	April	15,250	3,149	---	5,000
2019	May	9,310	1,869	104	6,713
2019	June	11,035	3,074	163	12,062
2019	July	12,680	1,404	---	5,810
2019	August	10,786	618	---	5,742
2019	September	5,612	953	---	9,275
2019	October	5,637	283	---	6,290
2019	November	12,171	1,025	19	5,627
2019	December	6,197	403	---	6,372
2020	January	22,223	1,118	117	4,026
2020	February	3,001	2,446	---	1,675
2020	March	7,218	889	---	3,958
2020	April	10,448	7,226	---	6,589
2020	May	14,875	2,853	---	12,347
2020	June	8,094	892	---	9,400
2020	July	11,506	4,100	---	10,674
2020	August	7,114	3,668	---	10,876
2020	September	7,638	6,901	---	8,572
2020	October	6,928	2,314	---	6,542
2020	November	6,565	6,339	3	8,407
2020	December	5,285	7,003	188	10,772

Table continued.

Table IV-9 Continued
Tin mill products: Quantity of U.S. imports, by source and month

Quantity in short tons

Year	Month	Subject sources	Nonsubject sources	All import sources
2019	January	83,062	8,215	91,277
2019	February	74,158	6,031	80,189
2019	March	102,372	13,268	115,640
2019	April	95,804	12,971	108,775
2019	May	76,315	10,801	87,115
2019	June	132,111	14,609	146,720
2019	July	91,298	13,374	104,673
2019	August	96,203	11,130	107,333
2019	September	77,479	9,837	87,317
2019	October	68,694	7,075	75,769
2019	November	69,171	6,766	75,937
2019	December	61,570	11,439	73,008
2020	January	67,515	11,581	79,096
2020	February	67,279	11,245	78,524
2020	March	77,911	9,215	87,127
2020	April	89,476	12,145	101,621
2020	May	110,730	10,876	121,606
2020	June	86,817	7,779	94,596
2020	July	122,878	9,769	132,647
2020	August	97,900	6,717	104,617
2020	September	92,499	14,830	107,330
2020	October	79,967	8,156	88,123
2020	November	98,727	5,208	103,935
2020	December	112,510	13,007	125,518

Table continued.

Table IV-9 Continued
Tin mill products: Quantity of U.S. imports, by source and month

Quantity in short tons

Year	Month	Canada	China	Germany	Netherlands
2021	January	17,170	2,960	619	1,338
2021	February	23,188	17,515	28,047	20,896
2021	March	24,740	3,426	39,690	31,511
2021	April	20,253	1,948	8,925	6,013
2021	May	18,715	23,738	42,183	35,791
2021	June	18,775	1,440	26,761	24,101
2021	July	18,153	8,101	26,177	31,512
2021	August	18,923	6,637	30,024	22,328
2021	September	22,637	24,223	28,582	24,202
2021	October	19,416	2,070	18,604	21,010
2021	November	18,188	4,487	18,386	24,902
2021	December	20,968	33,287	16,466	20,863
2022	January	26,948	39,020	12,440	16,905
2022	February	29,379	5,594	20,133	23,066
2022	March	31,194	10,821	22,628	15,918
2022	April	26,523	38,195	32,506	22,571
2022	May	28,572	4,616	32,016	30,196
2022	June	33,718	27,226	22,530	27,334
2022	July	20,308	6,445	14,618	27,076
2022	August	21,010	23,140	34,669	28,643
2022	September	17,956	20,754	31,992	18,489

Table continued.

Table IV-9 Continued
Tin mill products: Quantity of U.S. imports, by source and month

Quantity in short tons

Year	Month	South Korea	Taiwan	Turkey	United Kingdom
2021	January	11,332	4,076	46	1,438
2021	February	8,204	5,487	---	9,059
2021	March	8,595	172	247	10,720
2021	April	7,706	4,764	---	6,355
2021	May	9,496	5,530	---	8,803
2021	June	9,442	15,145	5,353	9,743
2021	July	13,296	8,055	20	17,253
2021	August	9,608	8,473	3	7,125
2021	September	5,119	6,662	---	20,282
2021	October	9,469	5,228	---	3,545
2021	November	9,665	1,910	---	12,301
2021	December	6,429	10,475	10,756	14,537
2022	January	10,574	7,088	2,998	4,406
2022	February	7,428	201	2,202	6,095
2022	March	9,061	12,557	8,100	5,193
2022	April	8,117	7,077	11,099	6,953
2022	May	14,343	10,393	---	7,874
2022	June	8,229	13,678	6,281	12,235
2022	July	14,701	12,520	9,133	6,287
2022	August	5,461	418	---	12,457
2022	September	5,500	12,236	5,935	15,246

Table continued.

Table IV-9 Continued
Tin mill products: Quantity of U.S. imports, by source and month

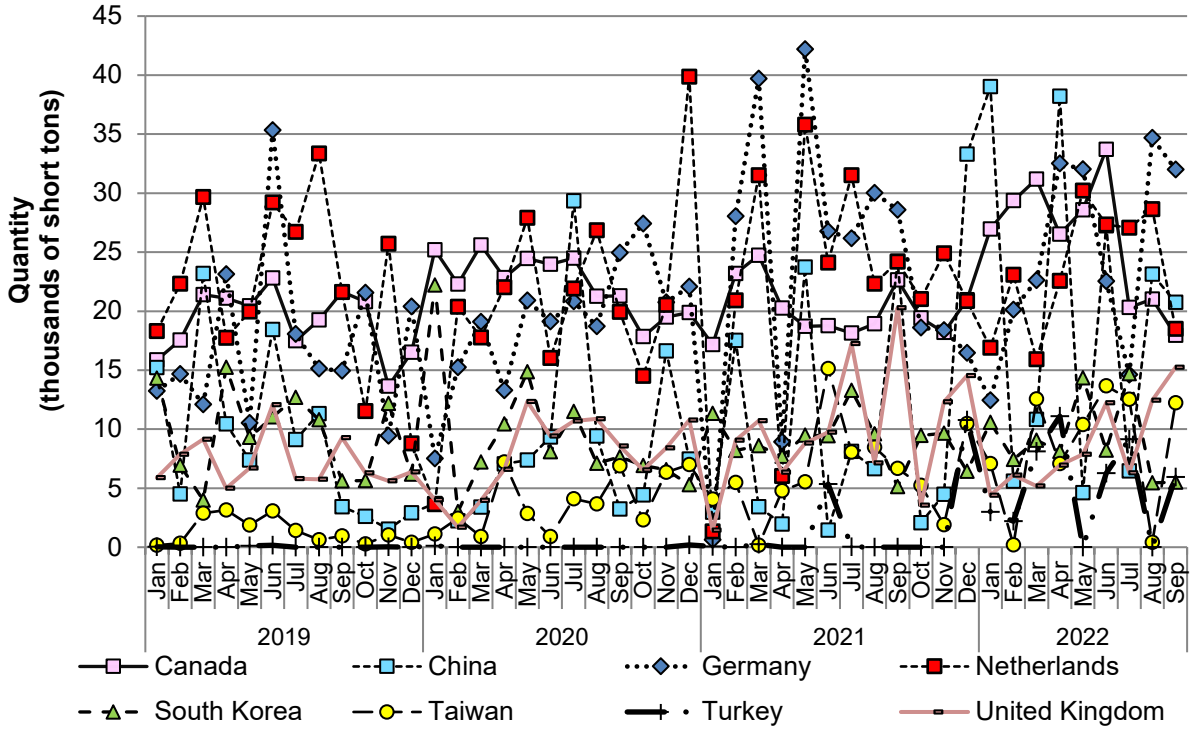
Quantity in short tons

Year	Month	Subject sources	Nonsubject sources	All import sources
2021	January	38,978	7,032	46,010
2021	February	112,396	15,063	127,459
2021	March	119,102	14,741	133,843
2021	April	55,964	6,722	62,686
2021	May	144,256	18,213	162,469
2021	June	110,760	10,989	121,749
2021	July	122,567	12,773	135,340
2021	August	103,120	4,563	107,683
2021	September	131,706	11,868	143,574
2021	October	79,341	11,948	91,289
2021	November	89,838	18,278	108,116
2021	December	133,780	18,249	152,029
2022	January	120,379	29,888	150,267
2022	February	94,098	15,897	109,995
2022	March	115,472	22,917	138,389
2022	April	153,040	13,841	166,881
2022	May	128,010	7,517	135,527
2022	June	151,231	16,467	167,698
2022	July	111,089	13,720	124,809
2022	August	125,798	10,626	136,424
2022	September	128,108	10,398	138,506

Source: Compiled from official U.S. import statistics of the U.S. Department of Commerce Census Bureau using HTS statistical reporting numbers 7210.11.0000, 7210.12.0000, 7210.50.0000, 7210.50.0020, 7210.50.0090, 7212.10.0000, and 7225.99.0090 accessed January 31, 2023. Imports are based on the imports for consumption data series.

Note: Zeroes, null values, and undefined calculations are suppressed and shown as "---". HTS statistical reporting numbers 7212.50.0000 and 7226.99.0180 are excluded from these data because staff believes that the vast majority of imports classified under these HTS statistical reporting numbers are outside the scope of these investigations.

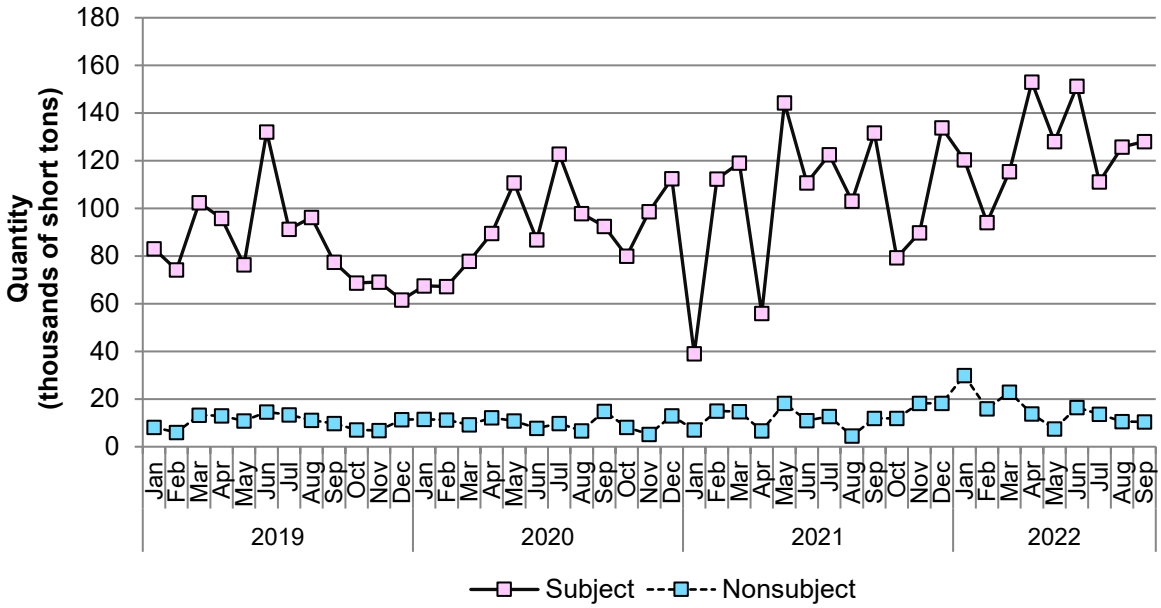
Figure IV-5
Tin mill products: U.S. imports from individual subject sources, by source and month



Source: Compiled from official U.S. import statistics of the U.S. Department of Commerce Census Bureau using HTS statistical reporting numbers 7210.11.0000, 7210.12.0000, 7210.50.0000, 7210.50.0020, 7210.50.0090, 7212.10.0000, and 7225.99.0090 accessed January 31, 2023. Imports are based on the imports for consumption data series.

Note: HTS statistical reporting numbers 7212.50.0000 and 7226.99.0180 are excluded from these data because staff believes that the vast majority of imports classified under these HTS statistical reporting numbers are outside the scope of these investigations.

Figure IV-6
Tin mill products: U.S. imports from aggregated subject and nonsubject sources, by source and month



Source: Compiled from official U.S. import statistics of the U.S. Department of Commerce Census Bureau using HTS statistical reporting numbers 7210.11.0000, 7210.12.0000, 7210.50.0000, 7210.50.0020, 7210.50.0090, 7212.10.0000, 7212.50.0000, and 7225.99.0090, accessed January 31, 2023. Imports are based on the imports for consumption data series.

HTS statistical reporting numbers 7212.50.0000 and 7226.99.0180 are excluded from these data because staff believes that the vast majority of imports classified under these HTS statistical reporting numbers are outside the scope of these investigations.

Apparent U.S. consumption and market shares

Quantity

Table IV-10 and figure IV-7 present data on apparent U.S. consumption and U.S. market shares by quantity for tin mill products. Apparent U.S. consumption increased in each year during 2019-21, ending *** percent higher in 2021 than in 2019. It was *** percent higher in interim 2022 than in interim 2021. The increase in apparent U.S. consumption generally reflects the increase in U.S. producers' U.S. shipments and the increases in the U.S. shipments of imports from Canada, Germany, Taiwan, and the United Kingdom.[14] These changes offset the decreases in U.S. shipments of imports from China and the Netherlands. The difference in apparent U.S. consumption between the interim periods largely reflects U.S. shipments of imports from subject sources. U.S. producers' U.S. shipments were lower in interim 2022 than in interim 2021. U.S. shipments of imports from every source, except the United Kingdom, were higher in interim 2022 than in interim 2021.

U.S. producers' market share, by quantity, fluctuated, increasing from 2019 to 2020, then decreasing from 2020 to 2021, ending *** percentage points lower in 2021 than in 2019. It was *** percentage points lower in interim 2022 than in interim 2021, reaching a period-low. U.S. shipments of imports from Canada, Germany, and the Netherlands accounted for the highest market shares among the subject sources during 2019-21 (between *** percent and *** percent). The market share of U.S. shipments of imports from Canada fluctuated, increasing from 2019 to 2020, then decreasing from 2020 to 2021, ending *** percentage points lower in 2021 than in 2019. The market share of U.S. shipments of imports from Germany experienced minimal change from 2019 to 2020, then increased by *** percentage points from 2020 to 2021. The market share of U.S. shipments of imports from the Netherlands fluctuated, decreasing from 2019 to 2020, then increasing from 2020 to 2021, ending *** percentage points lower in 2021 than in 2019. The market shares of U.S. shipments of imports from Canada and the Netherlands were *** percentage points and *** percentage points lower, respectively, in interim 2022 than in interim 2021, while the market share of U.S. shipments of imports from Germany was *** percentage points higher, reaching a period-high.

[14] For further discussion on the trends in U.S. producers' U.S. shipments see Part III.

Table IV-10
Tin mill products: Apparent U.S. consumption and market shares based on quantity, by source and period

Quantity in short tons; share in percent

Source	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
U.S. producers	Quantity	***	***	***	***	***
Canada	Quantity	***	***	***	***	***
China	Quantity	***	***	***	***	***
Germany	Quantity	***	***	***	***	***
Netherlands	Quantity	***	***	***	***	***
South Korea	Quantity	***	***	***	***	***
Taiwan	Quantity	***	***	***	***	***
Turkey	Quantity	***	***	***	***	***
United Kingdom	Quantity	***	***	***	***	***
Subject sources	Quantity	***	***	***	***	***
Nonsubject sources	Quantity	***	***	***	***	***
All import sources	Quantity	***	***	***	***	***
All sources	Quantity	***	***	***	***	***
U.S. producers	Share	***	***	***	***	***
Canada	Share	***	***	***	***	***
China	Share	***	***	***	***	***
Germany	Share	***	***	***	***	***
Netherlands	Share	***	***	***	***	***
South Korea	Share	***	***	***	***	***
Taiwan	Share	***	***	***	***	***
Turkey	Share	***	***	***	***	***
United Kingdom	Share	***	***	***	***	***
Subject sources	Share	***	***	***	***	***
Nonsubject sources	Share	***	***	***	***	***
All import sources	Share	***	***	***	***	***
All sources	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.

Figure IV-7
Tin mill products: Apparent U.S. consumption based on quantity, by source and period

* * * * * * *

Source: Compiled from data submitted in response to Commission questionnaires

U.S. shipments of imports from China, South Korea, and the United Kingdom accounted for the next largest market shares among the subject sources during 2019-21 (between *** percent and *** percent). The market share of U.S. shipments of imports from China fluctuated, decreasing from 2019 to 2020, then increasing from 2020 to 2021, ending *** percentage points lower in 2021 than in 2019. The market share of U.S. shipments of imports from South Korea, while it fluctuated, ended at approximately the same level in 2021 as in 2019. The market share of U.S. shipments of imports from the United Kingdom increased in each year during 2019-21, ending *** percentage points higher in 2021 than in 2019. The market shares of U.S. shipments of imports from China and South Korea were *** percentage points and *** percentage points higher, respectively, in interim 2022 than in interim 2021, while the market share of U.S. shipments of imports from the United Kingdom was *** percentage points lower.

U.S. shipments of imports from Taiwan and Turkey accounted for the smallest market shares among the subject sources during 2019-21 (no more than *** percent). The market shares of U.S. shipments of imports from each of those sources increased by *** percentage points and *** percentage points, respectively, from 2019 to 2021. The market share of U.S. shipments of imports from Taiwan and Turkey each were *** percentage points and *** percentage points higher, respectively in interim 2022 than in interim 2021, reaching period-highs.

Overall, the market share of U.S. shipments of subject imports fluctuated, decreasing from 2019 to 2020, then increasing from 2020 to 2021, ending *** percentage points higher in 2021 than in 2019. It was *** percentage points higher in interim 2022 than in interim 2021, reaching a period-high. The market share of U.S. shipments of imports from nonsubject sources was approximately the same in 2019 and 2020 and increased modestly from 2020 to 2021. It was *** percentage points higher in interim 2022 than in interim 2021, reaching a period-high.

Value

Table IV-11 and figure IV-8 present data on apparent U.S. consumption and U.S. market shares by value for tin mill products. The value of apparent U.S. consumption moved in the same direction as quantity, ending *** percent higher in 2021 than in 2019. It was *** percent higher in interim 2022 than in interim 2021. As with quantity, the increase in the value of apparent U.S. consumption during 2019-21 largely reflects the increase in the values of U.S. producers' U.S. shipments' and U.S. shipments of imports from Canada, Germany, Taiwan, and the United Kingdom. These changes offset the decreases in the values of U.S. shipments of imports from China and the Netherlands. The values of U.S. producers' U.S. shipments and U.S. shipments of imports from every subject source were higher in interim 2022 than in interim 2021 and each reached a period-high in interim 2022.

U.S. producers' market share, by value, fluctuated, increasing from 2019 to 2020, then decreasing from 2020 to 2021, ending *** percentage points lower in 2021 than in 2019. It was *** percentage points lower in interim 2022 than in interim 2021, reaching a period-low. As with quantity, U.S. shipments of imports from Canada, Germany, and the Netherlands accounted for the largest market shares among the subject sources during 2019-21 (between *** percent and *** percent). The market share of imports from Canada fluctuated, increasing from 2019 to 2020, then decreasing from 2020 to 2021, ending *** percentage points lower in 2021 than in 2019. The market share of imports from Germany fluctuated, decreasing from 2019 to 2020, then increasing from 2020 to 2021, ending *** percentage points higher in 2021 than in 2019. The market share of U.S. shipments of imports from the

Netherlands also fluctuated, decreasing from 2019 to 2020, then increasing from 2020 to 2021, ending *** percentage points lower in 2021 than in 2019. The market share of U.S. shipments of imports from Canada was *** percentage points higher in interim 2022 than in interim 2021, while the market shares of imports from Germany and the Netherlands were *** percentage points and *** percentage points lower, respectively.

Table IV-11
Tin mill products: Apparent U.S. consumption and market shares based on value, by source and period

Value in 1,000 dollars; share in percent

Source	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
U.S. producers	Value	***	***	***	***	***
Canada	Value	***	***	***	***	***
China	Value	***	***	***	***	***
Germany	Value	***	***	***	***	***
Netherlands	Value	***	***	***	***	***
South Korea	Value	***	***	***	***	***
Taiwan	Value	***	***	***	***	***
Turkey	Value	***	***	***	***	***
United Kingdom	Value	***	***	***	***	***
Subject sources	Value	***	***	***	***	***
Nonsubject sources	Value	***	***	***	***	***
All import sources	Value	***	***	***	***	***
All sources	Value	***	***	***	***	***
U.S. producers	Share	***	***	***	***	***
Canada	Share	***	***	***	***	***
China	Share	***	***	***	***	***
Germany	Share	***	***	***	***	***
Netherlands	Share	***	***	***	***	***
South Korea	Share	***	***	***	***	***
Taiwan	Share	***	***	***	***	***
Turkey	Share	***	***	***	***	***
United Kingdom	Share	***	***	***	***	***
Subject sources	Share	***	***	***	***	***
Nonsubject sources	Share	***	***	***	***	***
All import sources	Share	***	***	***	***	***
All sources	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.

Figure IV-8
Tin mill products: Apparent U.S. consumption based on value, by source and period

* * * * * * *

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

U.S. shipments of imports from China, South Korea, and the United Kingdom accounted for the next largest market shares among the subject sources during 2019-21 (between *** percent and *** percent). The market share of U.S. shipments of imports from China fluctuated, decreasing from 2019 to 2020, then increasing from 2020 to 2021, ending *** percentage points lower in 2021 than in 2019. The market share of U.S. shipments of imports from South Korea also fluctuated, increasing from 2019 to 2020, then decreasing from 2020 to 2021, ending *** percentage points lower in 2021 than in 2019. The market share of U.S. shipments of imports from the United Kingdom increased in each year during 2019-21, ending *** percentage points higher in 2021 than in 2019. The market shares of U.S. shipments from China and South Korea were *** percentage points and *** percentage points higher, respectively, in interim 2022 than in interim 2021, while the market share of U.S. shipments of imports from the United Kingdom was *** percentage points lower.

U.S. shipments of imports from Taiwan and Turkey accounted for the smallest market shares during 2019-21 (no more than *** percent). The market shares of U.S. shipments of imports from Taiwan and Turkey increased by *** percentage points and *** percentage points, respectively, from 2019 to 2021. They were *** percentage points and *** percentage points higher, respectively, in interim 2022 than in interim 2021.

Overall, the market share of U.S. shipments of subject imports fluctuated, decreasing from 2019 to 2020, then increasing from 2020 to 2021, ending *** percentage points higher in 2021 than in 2019. It was *** percentage points higher in interim 2022 than in interim 2021, reaching a period-high. The market U.S. shipments of imports from nonsubject sources was approximately the same in 2019 and 2020 and increased by *** percentage points from 2020 to 2021. It was *** percentage points lower in interim 2022 than in interim 2021.

Part V: Pricing data

Factors affecting prices

Raw material costs

U.S. producers' raw material costs decreased as a share of cost of goods sold from *** percent in 2019 to *** percent in 2021 but was *** percent in January-September ("interim") 2022 compared with *** percent in interim 2021. The cost of steel, rather than tin or chromium, is the single largest raw material cost in producing tin mill products; tin and/or chromium materials accounted for *** percent of raw material costs in 2021. Prices for cold-rolled coil (in particular tin mill black plate) and hot-rolled coil (used to produce tin mill black plate) fluctuated between January 2019 and December 2022 (figure V-1 and table V-1). Prices decreased slightly from January 2019 through August 2020 – by *** percent for hot-rolled coil and *** percent for cold-rolled coil. Between August 2020 and September 2021, however, hot-rolled coiled prices increased by *** percent and cold-rolled coil prices increased by *** percent. Except for price increases in March/April 2022, prices have decreased for both products: by *** percent for hot-rolled coil and *** percent for cold-rolled coil from September 2021 to September 2022, and even further through December 2022 (*** percent and *** percent, respectively, since the September2021 peak).

Two of 3 U.S. producers and 14 of 18 responding importers reported that raw material prices had fluctuated since January 2019 but ended higher and all but one of the other firms reported that raw material prices increased steadily.[1] One of three producers and slightly fewer than half of importers reported that tin mill product prices correlate with the price of the raw materials used to make them. One other producer and two importers noted that tin mill product prices do not fluctuate with raw material costs, but that those expected costs are included in the annual contract prices. Because contracts are negotiated in the second half of the prior year, there is a lag between the raw material prices and the prices that are in effect in the tin mill products market.[2]

[1] One importer (***) reported that raw material prices fluctuated, with some raw material costs ending at a higher price and some ending at a lower price than in January 2019.

[2] Conference transcript, p. 30 (Jarvis).

Figure V-1
Hot-rolled and cold-rolled coil, monthly average prices, January 2019-December 2022

* * * * * * *

Source: ***.

Table V-1
Raw materials: Hot-rolled and cold-rolled coil, monthly average prices, January 2019-December 2022

Price in dollars per short ton

Item	Hot-rolled coil	Cold-rolled coil
January 2019	***	***
February 2019	***	***
March 2019	***	***
April 2019	***	***
May 2019	***	***
June 2019	***	***
July 2019	***	***
August 2019	***	***
September 2019	***	***
October 2019	***	***
November 2019	***	***
December 2019	***	***

Table continued.

Table V-1 Continued
Raw materials: Hot-rolled and cold-rolled coil, monthly average prices, January 2019-December 2022

Price in dollars per short ton

Item	Hot-rolled coil	Cold-rolled coil
January 2020	***	***
February 2020	***	***
March 2020	***	***
April 2020	***	***
May 2020	***	***
June 2020	***	***
July 2020	***	***
August 2020	***	***
September 2020	***	***
October 2020	***	***
November 2020	***	***
December 2020	***	***
January 2021	***	***
February 2021	***	***
March 2021	***	***
April 2021	***	***
May 2021	***	***
June 2021	***	***
July 2021	***	***
August 2021	***	***
September 2021	***	***
October 2021	***	***
November 2021	***	***
December 2021	***	***
January 2022	***	***
February 2022	***	***
March 2022	***	***
April 2022	***	***
May 2022	***	***
June 2022	***	***
July 2022	***	***
August 2022	***	***
September 2022	***	***
October 2022	***	***
November 2022	***	***
December 2022	***	***

Source: American Metal Market LLC, accessed January 27, 2023.

Impact of section 232 tariffs

U.S. producers and importers were asked to report the impact of section 232 trade measures on steel and/or aluminum, and any effects of exclusions from those section 232 measures, on raw material costs and sales prices for tin mill products, along with any effects on demand, domestic supply, and import supply of tin mill products (table V-2).[3] Each year since 2019, importers of tin mill products have filed for exclusion from 232 measures, which counsel for petitioners described as "very, very large" in number, some of which domestic producers have objected, while deciding not to object to others.[4] Commerce has granted a large number of these exclusions, covering substantial volumes of imported tin mill products.[5]

Table V-2
Tin mill products: U.S. producers' and importers' perceptions regarding impact of section 232 measures on market prices and dynamics

Number of firms reporting

Market	Firm type	Steadily increase	Fluctuate up	No change	Fluctuate down	Steadily decrease
Raw material cost	U.S. producers	1	2	0	0	0
Raw material cost	Importers	6	6	4	1	0
Price of tin mill products	U.S. producers	0	2	1	0	0
Price of tin mill products	Importers	6	9	0	1	0
Domestic supply in market	U.S. producers	0	1	0	1	1
Domestic supply in market	Importers	2	1	7	2	1
Imported supply in market	U.S. producers	1	0	0	1	0
Imported supply in market	Importers	3	2	3	5	0
Overall demand in market	U.S. producers	0	0	3	0	0
Overall demand in market	Importers	2	2	8	2	0

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

Note: Three importers that reported increasing prices of tin mill products noted a reason other than section 232 duties in explaining the price increase.

[3] These trade measures include 25 percent duties on subject imports from China, Taiwan, and Turkey, a tariff-rate quota on imports from the United Kingdom, and annual quotas on imports from Germany and the Netherlands (as part of the quota for the European Union), as well as for South Korea. Respondent ArcelorMittal Dofasco's postconference brief, p. 7 and Chinese respondents' postconference brief, p. 21. For more information, see Part I.

[4] Conference transcript, pp. 93-96 (Vaughn and Reynolds).

[5] See, e.g., Respondent CMI's postconference brief, answers to staff questions, question 1. Various respondents argue that these section 232 exclusions demonstrate that many of the imported tin mill products are not produced domestically. See, e.g., respondent Tata Steel's postconference brief, p. 1 and respondent Silgan's postconference brief, p. 7.

Most firms reported that the section 232 measures made the raw material costs fluctuate upward or steadily increase since 2019. Fourteen of 15 responding importers and two of three U.S. producers also reported that the price of tin mill products also steadily increased or fluctuated during the period but ended higher than at the start of the period.[6]

A majority of responding importers (8 of 14) and all U.S. producers indicated that the section 232 measures, or the exclusion from them, did not change demand for tin mill products. Responses regarding the impact on the supply of tin mill products from domestic or imported sources were more varied. A majority of importers reported that there was no change in domestic supply because of the duties, with most noting an inability or refusal of domestic suppliers to increase their production or delivery of tin mill products, or a decrease via idling of domestic tin mill products manufacturing facilities. An equal number of responding importers indicated that domestic supplies had been positively impacted (steadily increased or fluctuated upward) as those that indicated that domestic supplies had been negatively impacted (had steadily decreased or fluctuated downward). Two producers indicated domestic supplies had fluctuated due to section 232 measures (with one noting that domestic supply had increased over the period and one noting it had decreased), and one indicated steadily decreasing domestic supply. With respect to import supplies of tin mill products, an equal number of responding producers and importers indicated that import supplies had been positively impacted (steadily increased or fluctuated upward) as those that indicated that import supplies had been negatively impact (had steadily decreased or fluctuated downward).

Impact of section 301 tariffs

As noted in Part II of this report, responses from U.S. producers and importers were mixed with respect to the impact of the 7.5 percent *ad valorem* section 301 duties on imports of tin mill products from China during the period. Two importers (EP Steel and Kemeny) reported that the 7.5 percent tariff has been passed on to their customers.

[6] One importer (***) reported that it had fluctuated and ended both upward and downward.

Transportation costs to the U.S. market

Transportation costs for tin mill products shipped from the eight subject countries to the United States during 2021 were 0.6 percent of the customs value of product imported from Canada, 9.4 percent for China, 7.6 percent for Germany, 6.2 percent for the Netherlands, 8.9 percent for South Korea, 11.0 percent for Taiwan, 7.2 percent for Turkey, and 6.2 percent for the United Kingdom. These estimates were derived from official import data and represent the transportation and other charges on imports.[7]

U.S. inland transportation costs

All three responding U.S. producers and 13 of 19 responding importers reported that transportation is arranged by the seller. U.S. producers reported U.S. inland transportation costs of *** percent and most responding importers reported costs ranging from 2 to 15 percent and averaging 5.5 percent.[8]

Pricing practices

Pricing methods

U.S. producers and importers reported typically setting prices using contracts and transaction-by-transaction negotiations (table V-3).[9] Three importers reported price setting using price lists. Respondent Tata Steel noted that prices for tin mill products "are built from a base price that is adjusted based on specification specific extras or allowances." [10] Respondent ArcelorMittal Dofasco notes that U.S. Steel is the largest supplier of tin mill products in the U.S. market and is acknowledged to be the price leader; the market reportedly follows the pricing that U.S. Steel sets during contract negotiations season. [11] ***.

[7] The estimated transportation costs were obtained by subtracting the customs value from the c.i.f. value of the imports for 2021 and then dividing by the customs value based on the HTS statistical reporting numbers 7210.11.0000, 7210.12.0000, 7210.50.0000, 7210.50.0020, 7210.50.0090, 7212.10.0000, and 7225.99.0090, accessed January 31, 2023.

[8] This calculation does not include any firms that reported 0 percent.

[9] Multiple firms reported using more than one method to set prices. One importer categorized its method as a combination of contract and spot sales. This response is shown in table V-3 as both contract and transaction-by-transaction methods.

[10] Respondent Tata Steel's postconference brief, Answers to staff question 5.

[11] ArcelorMittal Dofasco's postconference brief, pp. 16-17 and conference transcript, p. 164 (Klacik).

Table V-3
Tin mill products: Count of U.S. producers' and importers' reported price setting methods

Count in number of firms reporting

Method	U.S. producers	U.S. importers
Transaction-by-transaction	2	13
Contract	3	14
Set price list	0	3
Other	0	0
Responding firms	3	19

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 a large majority of tin mill products via annual contracts, with the remainder on the spot market (table V-3). A representative for petitioner stated that a great majority of its sales are made via annual contracts which are negotiated in the preceding fall.[12] All three producers noted that their contracts fix prices (with *** also noting that they fix quantities), are not indexed to raw material prices, and that prices are not re-negotiable. The quantities that are agreed upon may include a range with a minimum and maximum that may vary some percentage above or below that amount, such as 5 or 10 percent. During fall 2021, when steel prices were nearing their peak during the investigation period, the 2022 contracts were negotiated. U.S. Steel started negotiating 2022 tin mill prices in July 2021 with "price increases of 50 percent or more."[13] Purchaser *** reported that negotiations with Cleveland-Cliffs also began in July 2021, with "pricing that was 80-100 percent higher than the previous year." As a result, pricing for tin mill products were substantially higher in 2022. *** noted substantial changes to its contracts with *** for 2022 and 2023 shipments such as ***.[14] *** importer Trivium also reported domestic producer Cleveland-Cliffs reduced its contractual volume for 2022 from 2021 levels and ***.[15]

[12] Conference transcript, pp. 10 (Vaughn) and 30 (Jarvis).
[13] Conference transcript, p. 164 (Klacik).
[14] ***.
[15] Respondent CMI's postconference brief, p. 14.

Table V-4
Tin mill products: U.S. producers' and importers' shares of commercial U.S. shipments by type of sale, 2021

Share in percent

Item	U.S. producers	Subject U.S. importers
Long-term contracts	***	---
Annual contract	***	77.7
Short-term contracts	***	3.3
Spot sales	***	19.0
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.

More than three-quarters of importers' tin mill product sales were also made pursuant to annual contracts, a considerable portion of their sales were made on the spot market as well. All responding importers' annual contracts were reported to fix both price and quantity, not be indexed to raw material prices, and not have prices that can be renegotiated. Slightly more importers reported using short-term contracts (9) than annual contracts (7), but the volumes were much smaller. All these short-term contracts also fix price and quantity, but only one allowed for indexing to raw material prices, and two for price re-negotiation.

Sales terms and discounts

All U.S. producers reported typically quoting prices for tin mill products on an f.o.b. basis, whereas 12 of 18 responding importers reported quoting on a delivered basis. *** reported not offering discounts, but *** discounts and ***. Seventeen of 20 responding importers also reported having no discount policy. The three that reported offering discounts offered either loyalty, case-by-case, or payment terms discounts.

Price data

The Commission requested U.S. producers and importers to provide quarterly data for the total quantity and f.o.b. value of the following tin mill products shipped to unrelated U.S. customers during January 2019-September 2022.

Product 1.-- Single reduced, electrolytic tinplate with base box weights of 75–95 lbs. inclusive, in coils.

Product 2.-- Double reduced, electrolytic tinplate with base box weights of 55–65 lbs. inclusive, in coils.

Product 3.-- Single reduced, electrolytic chromium-coated steel with base box weights of 65–80 lbs. inclusive, in coils.

Product 4.-- Double reduced, electrolytic chromium-coated steel with base box weights of 55–65 lbs. inclusive, in coils.

Three U.S. producers and 12 importers provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.[16] Pricing data reported by these firms accounted for approximately *** percent of U.S. producers' U.S. shipments of tin mill products in 2021, along with *** percent of U.S. shipments of subject imports from Canada, *** percent from China, *** percent from Germany, *** percent from the Netherlands, *** percent from South Korea, *** percent from Taiwan, *** percent from Turkey, and *** percent from the United Kingdom.[17] U.S. producers reported price data for all quarters and all four products. Price data were received for at least one quarter for imports for each of the four pricing products from four of the eight subject countries. Pricing data for Germany and Turkey were reported only for product 1. Pricing data for the Netherlands and Taiwan were reported for three of the four pricing products (products 1-3). Price data for products 1-4 are presented in tables V-5 to V-8 and figures V-2 to V-5.

[16] 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.

[17] Pricing coverage is based on U.S. shipment quantities reported in questionnaires.

Table V-5
Tin mill products: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 and margins of underselling/(overselling), by source and quarter

Price in dollars per short ton, quantity in short tons, margin in percent.

Period	U.S. price	U.S. quantity	Canada price	Canada quantity	Canada margin	China price	China quantity	China margin
2019 Q1	***	***	***	***	***	***	***	***
2019 Q2	1,155	42,539	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***	***	***
2019 Q4	1,140	40,714	***	***	***	***	***	***
2020 Q1	1,066	46,367	***	***	***	***	***	***
2020 Q2	1,021	62,872	***	***	***	***	***	***
2020 Q3	1,010	69,456	***	***	***	***	***	***
2020 Q4	1,021	65,704	***	***	***	--	0	--
2021 Q1	1,086	51,918	***	***	***	--	0	--
2021 Q2	1,137	51,200	***	***	***	***	***	***
2021 Q3	1,139	57,310	***	***	***	***	***	***
2021 Q4	1,250	65,388	***	***	***	***	***	***
2022 Q1	1,810	43,271	***	***	***	***	***	***
2022 Q2	2,007	54,179	***	***	***	***	***	***
2022 Q3	2,109	45,295	***	***	***	***	***	***

Table continued.

Period	U.S. price	U.S. quantity	Germany price	Germany quantity	Germany margin	Nether-lands price	Nether-lands quantity	Nether-lands margin
2019 Q1	***	***	***	***	***	***	***	***
2019 Q2	1,155	42,539	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***	***	***
2019 Q4	1,140	40,714	***	***	***	***	***	***
2020 Q1	1,066	46,367	***	***	***	***	***	***
2020 Q2	1,021	62,872	***	***	***	***	***	***
2020 Q3	1,010	69,456	***	***	***	***	***	***
2020 Q4	1,021	65,704	***	***	***	***	***	***
2021 Q1	1,086	51,918	***	***	***	***	***	***
2021 Q2	1,137	51,200	***	***	***	***	***	***
2021 Q3	1,139	57,310	***	***	***	***	***	***
2021 Q4	1,250	65,388	***	***	***	***	***	***
2022 Q1	1,810	43,271	***	***	***	***	***	***
2022 Q2	2,007	54,179	***	***	***	***	***	***
2022 Q3	2,109	45,295	***	***	***	***	***	***

Table continued.

Table V-5 Continued
Tin mill products: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 and margins of underselling/(overselling), by source and quarter

Price in dollars per short ton, quantity in short tons, margin in percent.

Period	U.S. price	U.S. quantity	South Korea price	South Korea quantity	South Korea margin	Taiwan price	Taiwan quantity	Taiwan margin
2019 Q1	***	***	***	***	***	--	0	--
2019 Q2	1,155	42,539	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***	***	***
2019 Q4	1,140	40,714	***	***	***	***	***	***
2020 Q1	1,066	46,367	***	***	***	***	***	***
2020 Q2	1,021	62,872	***	***	***	***	***	***
2020 Q3	1,010	69,456	***	***	***	***	***	***
2020 Q4	1,021	65,704	***	***	***	***	***	***
2021 Q1	1,086	51,918	***	***	***	***	***	***
2021 Q2	1,137	51,200	***	***	***	***	***	***
2021 Q3	1,139	57,310	***	***	***	***	***	***
2021 Q4	1,250	65,388	***	***	***	***	***	***
2022 Q1	1,810	43,271	***	***	***	***	***	***
2022 Q2	2,007	54,179	***	***	***	***	***	***
2022 Q3	2,109	45,295	***	***	***	***	***	***

Table continued.

Period	U.S. price	U.S. quantity	Turkey price	Turkey quantity	Turkey margin	UK price	UK quantity	UK margin
2019 Q1	***	***	***	***	***	--	0	--
2019 Q2	1,155	42,539	--	0	--	--	0	--
2019 Q3	***	***	--	0	--	***	***	***
2019 Q4	1,140	40,714	***	***	***	--	0	--
2020 Q1	1,066	46,367	--	0	--	--	0	--
2020 Q2	1,021	62,872	--	0	--	--	0	--
2020 Q3	1,010	69,456	--	0	--	--	0	--
2020 Q4	1,021	65,704	--	0	--	--	0	--
2021 Q1	1,086	51,918	***	***	***	--	0	--
2021 Q2	1,137	51,200	***	***	***	--	0	--
2021 Q3	1,139	57,310	***	***	***	--	0	--
2021 Q4	1,250	65,388	***	***	***	--	0	--
2022 Q1	1,810	43,271	***	***	***	--	0	--
2022 Q2	2,007	54,179	***	***	***	--	0	--
2022 Q3	2,109	45,295	***	***	***	--	0	--

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

Note: Product 1: Single reduced, electrolytic tinplate with base box weights of 75–95 lbs. inclusive, in coils.

Table V-6
Tin mill products: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 and margins of underselling/(overselling), by source and quarter

Price in dollars per short ton, quantity in short tons, margin in percent.

Period	U.S. price	U.S. quantity	Canada price	Canada quantity	Canada margin	China price	China quantity	China margin
2019 Q1	1,238	47,138	***	***	***	***	***	***
2019 Q2	1,307	54,261	***	***	***	***	***	***
2019 Q3	1,297	50,874	***	***	***	***	***	***
2019 Q4	1,290	35,003	***	***	***	***	***	***
2020 Q1	1,189	46,871	***	***	***	***	***	***
2020 Q2	1,181	64,857	***	***	***	--	0	--
2020 Q3	1,170	72,630	***	***	***	***	***	***
2020 Q4	1,155	69,737	***	***	***	--	0	--
2021 Q1	1,237	65,520	***	***	***	--	0	--
2021 Q2	1,288	64,045	***	***	***	--	0	--
2021 Q3	1,296	58,528	***	***	***	--	0	--
2021 Q4	1,341	62,015	***	***	***	***	***	***
2022 Q1	2,170	47,262	***	***	***	***	***	***
2022 Q2	2,337	56,319	***	***	***	--	0	--
2022 Q3	2,284	35,608	***	***	***	--	0	--

Table continued.

Period	U.S. price	U.S. quantity	Germany price	Germany quantity	Germany margin	Nether-lands price	Nether-lands quantity	Nether-lands margin
2019 Q1	1,238	47,138	--	0	--	***	***	***
2019 Q2	1,307	54,261	--	0	--	***	***	***
2019 Q3	1,297	50,874	--	0	--	***	***	***
2019 Q4	1,290	35,003	--	0	--	***	***	***
2020 Q1	1,189	46,871	--	0	--	***	***	***
2020 Q2	1,181	64,857	--	0	--	***	***	***
2020 Q3	1,170	72,630	--	0	--	***	***	***
2020 Q4	1,155	69,737	--	0	--	***	***	***
2021 Q1	1,237	65,520	--	0	--	***	***	***
2021 Q2	1,288	64,045	--	0	--	***	***	***
2021 Q3	1,296	58,528	--	0	--	***	***	***
2021 Q4	1,341	62,015	--	0	--	***	***	***
2022 Q1	2,170	47,262	--	0	--	***	***	***
2022 Q2	2,337	56,319	--	0	--	***	***	***
2022 Q3	2,284	35,608	--	0	--	***	***	***

Table continued.

Table V-6 Continued
Tin mill products: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 and margins of underselling/(overselling), by source and quarter

Price in dollars per short ton, quantity in short tons, margin in percent.

Period	U.S. price	U.S. quantity	South Korea price	South Korea quantity	South Korea margin	Taiwan price	Taiwan quantity	Taiwan margin
2019 Q1	1,238	47,138	--	0	--	--	0	--
2019 Q2	1,307	54,261	***	***	***	--	0	--
2019 Q3	1,297	50,874	--	0	--	--	0	--
2019 Q4	1,290	35,003	--	0	--	--	0	--
2020 Q1	1,189	46,871	--	0	--	--	0	--
2020 Q2	1,181	64,857	--	0	--	--	0	--
2020 Q3	1,170	72,630	--	0	--	--	0	--
2020 Q4	1,155	69,737	--	0	--	--	0	--
2021 Q1	1,237	65,520	--	0	--	--	0	--
2021 Q2	1,288	64,045	***	***	***	--	0	--
2021 Q3	1,296	58,528	--	0	--	***	***	***
2021 Q4	1,341	62,015	--	0	--	***	***	***
2022 Q1	2,170	47,262	--	0	--	--	0	--
2022 Q2	2,337	56,319	--	0	--	***	***	***
2022 Q3	2,284	35,608	--	0	--	--	0	--

Table continued.

Period	U.S. price	U.S. quantity	Turkey price	Turkey quantity	Turkey margin	UK price	UK quantity	UK margin
2019 Q1	1,238	47,138	--	0	--	--	0	--
2019 Q2	1,307	54,261	--	0	--	--	0	--
2019 Q3	1,297	50,874	--	0	--	***	***	***
2019 Q4	1,290	35,003	--	0	--	--	0	--
2020 Q1	1,189	46,871	--	0	--	--	0	--
2020 Q2	1,181	64,857	--	0	--	--	0	--
2020 Q3	1,170	72,630	--	0	--	--	0	--
2020 Q4	1,155	69,737	--	0	--	--	0	--
2021 Q1	1,237	65,520	--	0	--	--	0	--
2021 Q2	1,288	64,045	--	0	--	--	0	--
2021 Q3	1,296	58,528	--	0	--	--	0	--
2021 Q4	1,341	62,015	--	0	--	--	0	--
2022 Q1	2,170	47,262	--	0	--	--	0	--
2022 Q2	2,337	56,319	--	0	--	--	0	--
2022 Q3	2,284	35,608	--	0	--	--	0	--

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

Note: Product 2: Double reduced, electrolytic tinplate with base box weights of 55–65 lbs. inclusive, in coils.

Table V-7
Tin mill products: Weighted-average f.o.b. prices and quantities of domestic and imported product 3 and margins of underselling/(overselling), by source and quarter

Price in dollars per short ton, quantity in short tons, margin in percent.

Period	U.S. price	U.S. quantity	Canada price	Canada quantity	Canada margin	China price	China quantity	China margin
2019 Q1	***	***	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***	***	***
2021 Q2	***	***	***	***	***	***	***	***
2021 Q3	***	***	***	***	***	***	***	***
2021 Q4	***	***	***	***	***	***	***	***
2022 Q1	***	***	***	***	***	***	***	***
2022 Q2	***	***	***	***	***	***	***	***
2022 Q3	***	***	***	***	***	***	***	***

Table continued.

Period	U.S. price	U.S. quantity	Germany price	Germany quantity	Germany margin	Nether-lands price	Nether-lands quantity	Nether-lands margin
2019 Q1	***	***	--	0	--	***	***	***
2019 Q2	***	***	--	0	--	***	***	***
2019 Q3	***	***	--	0	--	***	***	***
2019 Q4	***	***	--	0	--	***	***	***
2020 Q1	***	***	--	0	--	***	***	***
2020 Q2	***	***	--	0	--	***	***	***
2020 Q3	***	***	--	0	--	***	***	***
2020 Q4	***	***	--	0	--	***	***	***
2021 Q1	***	***	--	0	--	***	***	***
2021 Q2	***	***	--	0	--	***	***	***
2021 Q3	***	***	--	0	--	***	***	***
2021 Q4	***	***	--	0	--	--	0	--
2022 Q1	***	***	--	0	--	***	***	***
2022 Q2	***	***	--	0	--	***	***	***
2022 Q3	***	***	--	0	--	***	***	***

Table continued.

Table V-7 Continued
Tin mill products: Weighted-average f.o.b. prices and quantities of domestic and imported product 3 and margins of underselling/(overselling), by source and quarter

Price in dollars per short ton, quantity in short tons, margin in percent.

Period	U.S. price	U.S. quantity	South Korea price	South Korea quantity	South Korea margin	Taiwan price	Taiwan quantity	Taiwan margin
2019 Q1	***	***	--	0	--	--	0	--
2019 Q2	***	***	***	***	***	***	***	***
2019 Q3	***	***	--	0	--	--	0	--
2019 Q4	***	***	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	--	0	--
2020 Q2	***	***	--	0	--	--	0	--
2020 Q3	***	***	***	***	***	--	0	--
2020 Q4	***	***	***	***	***	--	0	--
2021 Q1	***	***	***	***	***	***	***	***
2021 Q2	***	***	***	***	***	***	***	***
2021 Q3	***	***	--	0	--	***	***	***
2021 Q4	***	***	***	***	***	***	***	***
2022 Q1	***	***	***	***	***	***	***	***
2022 Q2	***	***	***	***	***	***	***	***
2022 Q3	***	***	--	0	--	***	***	***

Table continued.

Period	U.S. price	U.S. quantity	Turkey price	Turkey quantity	Turkey margin	UK price	UK quantity	UK margin
2019 Q1	***	***	--	0	--	***	***	***
2019 Q2	***	***	--	0	--	***	***	***
2019 Q3	***	***	--	0	--	***	***	***
2019 Q4	***	***	--	0	--	***	***	***
2020 Q1	***	***	--	0	--	***	***	***
2020 Q2	***	***	--	0	--	***	***	***
2020 Q3	***	***	--	0	--	***	***	***
2020 Q4	***	***	--	0	--	***	***	***
2021 Q1	***	***	--	0	--	***	***	***
2021 Q2	***	***	--	0	--	***	***	***
2021 Q3	***	***	--	0	--	***	***	***
2021 Q4	***	***	--	0	--	***	***	***
2022 Q1	***	***	--	0	--	***	***	***
2022 Q2	***	***	--	0	--	***	***	***
2022 Q3	***	***	--	0	--	***	***	***

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

Note: Product 3: Single reduced, electrolytic chromium-coated steel with base box weights of 65–80 lbs. inclusive, in coils.

Table V-8
Tin mill products: Weighted-average f.o.b. prices and quantities of domestic and imported product 4 and margins of underselling/(overselling), by source and quarter

Price in dollars per short ton, quantity in short tons, margin in percent.

Period	U.S. price	U.S. quantity	Canada price	Canada quantity	Canada margin	China price	China quantity	China margin
2019 Q1	***	***	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	--	0	--
2019 Q3	***	***	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	--	0	--
2020 Q2	***	***	***	***	***	--	0	--
2020 Q3	***	***	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	--	0	--
2021 Q2	***	***	***	***	***	***	***	***
2021 Q3	***	***	***	***	***	***	***	***
2021 Q4	***	***	***	***	***	***	***	***
2022 Q1	***	***	***	***	***	***	***	***
2022 Q2	***	***	***	***	***	***	***	***
2022 Q3	***	***	***	***	***	--	0	--

Table continued.

Period	U.S. price	U.S. quantity	Germany price	Germany quantity	Germany margin	Nether-lands price	Nether-lands quantity	Nether-lands margin
2019 Q1	***	***	--	0	--	--	0	--
2019 Q2	***	***	--	0	--	--	0	--
2019 Q3	***	***	--	0	--	--	0	--
2019 Q4	***	***	--	0	--	--	0	--
2020 Q1	***	***	--	0	--	--	0	--
2020 Q2	***	***	--	0	--	--	0	--
2020 Q3	***	***	--	0	--	--	0	--
2020 Q4	***	***	--	0	--	--	0	--
2021 Q1	***	***	--	0	--	--	0	--
2021 Q2	***	***	--	0	--	--	0	--
2021 Q3	***	***	--	0	--	--	0	--
2021 Q4	***	***	--	0	--	--	0	--
2022 Q1	***	***	--	0	--	--	0	--
2022 Q2	***	***	--	0	--	--	0	--
2022 Q3	***	***	--	0	--	--	0	--

Table continued.

Table V-8 Continued
Tin mill products: Weighted-average f.o.b. prices and quantities of domestic and imported product 4 and margins of underselling/(overselling), by source and quarter

Price in dollars per short ton, quantity in short tons, margin in percent.

Period	U.S. price	U.S. quantity	South Korea price	South Korea quantity	South Korea margin	Taiwan price	Taiwan quantity	Taiwan margin
2019 Q1	***	***	***	***	***	--	0	--
2019 Q2	***	***	***	***	***	--	0	--
2019 Q3	***	***	***	***	***	--	0	--
2019 Q4	***	***	***	***	***	--	0	--
2020 Q1	***	***	***	***	***	--	0	--
2020 Q2	***	***	***	***	***	--	0	--
2020 Q3	***	***	***	***	***	--	0	--
2020 Q4	***	***	***	***	***	--	0	--
2021 Q1	***	***	***	***	***	--	0	--
2021 Q2	***	***	***	***	***	--	0	--
2021 Q3	***	***	***	***	***	--	0	--
2021 Q4	***	***	***	***	***	--	0	--
2022 Q1	***	***	***	***	***	--	0	--
2022 Q2	***	***	***	***	***	--	0	--
2022 Q3	***	***	***	***	***	--	0	--

Table continued.

Period	U.S. price	U.S. quantity	Turkey price	Turkey quantity	Turkey margin	UK price	UK quantity	UK margin
2019 Q1	***	***	--	0	--	--	0	--
2019 Q2	***	***	--	0	--	***	***	***
2019 Q3	***	***	--	0	--	***	***	***
2019 Q4	***	***	--	0	--	--	0	--
2020 Q1	***	***	--	0	--	--	0	--
2020 Q2	***	***	--	0	--	--	0	--
2020 Q3	***	***	--	0	--	***	***	***
2020 Q4	***	***	--	0	--	--	0	--
2021 Q1	***	***	--	0	--	***	***	***
2021 Q2	***	***	--	0	--	***	***	***
2021 Q3	***	***	--	0	--	--	0	--
2021 Q4	***	***	--	0	--	--	0	--
2022 Q1	***	***	--	0	--	--	0	--
2022 Q2	***	***	--	0	--	--	0	--
2022 Q3	***	***	--	0	--	--	0	--

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

Note: Product 4: Double reduced, electrolytic chromium-coated steel with base box weights of 55–65 lbs. inclusive, in coils.

Figure V-2
Tin mill products: Weighted-average f.o.b. prices and quantities of domestic and imported product 1, by source and quarter

Price of product 1

* * * * * * *

Volume of product 1

* * * * * * *

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

Note: Product 1: Single reduced, electrolytic tinplate with base box weights of 75–95 lbs. inclusive, in coils.

Figure V-3
Tin mill products: Weighted-average f.o.b. prices and quantities of domestic and imported product 2, by source and quarter

Price of product 2

* * * * * * *

Volume of product 2

* * * * * * *

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

Note: Product 2: Double reduced, electrolytic tinplate with base box weights of 55–65 lbs. inclusive, in coils.

Figure V-4
Tin mill products: Weighted-average f.o.b. prices and quantities of domestic and imported product 3, by source and quarter

Price of product 3

* * * * * * *

Volume of product 3

* * * * * * *

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

Note: Product 3: Single reduced, electrolytic chromium-coated steel with base box weights of 65–80 lbs. inclusive, in coils.

Figure V-5
Tin mill products: Weighted-average f.o.b. prices and quantities of domestic and imported product 4, by source and quarter

Price of product 4

* * * * * * *

Volume of product 4

* * * * * * *

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

Note: Product 4: Double reduced, electrolytic chromium-coated steel with base box weights of 55–65 lbs. inclusive, in coils.

Price trends

Prices increased during January 2019-September 2022 for all countries and all products. Prices were generally stable or fluctuated slightly in 2019 and 2020. In 2021, there were more quarters of increasing prices than decreasing prices. Prices increased substantially across nearly all products from all sources in the first two quarters of 2022 and mostly remained at those levels. Table V-7 summarizes the price trends, by country and by product. As shown in the table, domestic price increases ranged from *** percent to *** percent during January 2019-September 2022. Import prices also increased from all sources, with increases ranging from *** percent (Product 4, ***) to *** percent (Product 1, ***) during January 2019-September 2022. Across the four pricing products, the largest average price increase was for imports from Canada (*** percent) and Taiwan (*** percent), followed by U.S. product (*** percent).

Table V-9
Tin mill products: Summary of price data, by product and source, January 2019-September 2022

Price in dollars per short ton, quantity in short tons, 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	Canada	***	***	***	***	***	***	***
Product 1	China	***	***	***	***	***	***	***
Product 1	Germany	***	***	***	***	***	***	***
Product 1	Netherlands	***	***	***	***	***	***	***
Product 1	South Korea	***	***	***	***	***	***	***
Product 1	Taiwan	***	***	***	***	***	***	***
Product 1	Turkey	***	***	***	***	***	***	***
Product 1	United Kingdom	***	***	***	***	***	***	***
Product 2	United States	***	***	***	***	***	***	***
Product 2	Canada	***	***	***	***	***	***	***
Product 2	China	***	***	***	***	***	***	***
Product 2	Germany	***	***	***	***	***	***	***
Product 2	Netherlands	***	***	***	***	***	***	***
Product 2	South Korea	***	***	***	***	***	***	***
Product 2	Taiwan	***	***	***	***	***	***	***
Product 2	Turkey	***	***	***	***	***	***	***
Product 2	United Kingdom	***	***	***	***	***	***	***

Table continued.

Table V-9 Continued
Tin mill products: Summary of price data, by product and source, January 2019-September 2022

Price in dollars per short ton, quantity in short tons, change in percent.

Product	Source	Number of quarters	Quantity	Low price	High price	First quarter price	Last quarter price	Change over period
Product 3	United States	***	***	***	***	***	***	***
Product 3	Canada	***	***	***	***	***	***	***
Product 3	China	***	***	***	***	***	***	***
Product 3	Germany	***	***	***	***	***	***	***
Product 3	Netherlands	***	***	***	***	***	***	***
Product 3	South Korea	***	***	***	***	***	***	***
Product 3	Taiwan	***	***	***	***	***	***	***
Product 3	Turkey	***	***	***	***	***	***	***
Product 3	United Kingdom	***	***	***	***	***	***	***
Product 4	United States	***	***	***	***	***	***	***
Product 4	Canada	***	***	***	***	***	***	***
Product 4	China	***	***	***	***	***	***	***
Product 4	Germany	***	***	***	***	***	***	***
Product 4	Netherlands	***	***	***	***	***	***	***
Product 4	South Korea	***	***	***	***	***	***	***
Product 4	Taiwan	***	***	***	***	***	***	***
Product 4	Turkey	***	***	***	***	***	***	***
Product 4	United Kingdom	***	***	***	***	***	***	***

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

Note: Percent change column is percentage change from the first quarter for which there is data in 2019 to the last quarter for which data are available in 2022.

Price comparisons

As shown in tables V-10 to V-12, prices for product imported from subject countries oversold U.S.-produced product in 196 of 264 quarters (74.2 percent of the time); these quarters accounted for 65.9 percent of subject imported volume of the pricing products (1.2 million short tons). Subject product undersold domestic product in the remaining 68 quarters and accounted for 601,468 short tons. Margins of overselling ranged from 0.2 to 86.7 percent, averaging 15.2 percent, while margins of underselling ranged from 0.2 to 49.2 percent and averaged 10.7 percent. Underselling occurred most frequently in 2022, when sales contracts had been based on the high-priced 2021 steel sheet prices. During 2022, there were more quarters of underselling (29) than overselling (25) and much higher volumes undersold than oversold (***, respectively). The majority of this undersold volume in 2022 is attributable to imported product from *** (table V-11). As seen in table V-12, *** accounted for more than two-thirds of underselling volumes during January 2019-September 2022, with ***. Nevertheless, all countries had at least one quarter of underselling during the period.

Table V-10
Tin mill products: Instances of underselling and overselling and the range and average of margins, by product

Quantity in short tons; margin in percent

Products	Type	Number of quarters	Quantity	Average margin	Minimum margin	Maximum margin
Product 1	Underselling	23	***	***	***	***
Product 2	Underselling	16	***	***	***	***
Product 3	Underselling	24	***	***	***	***
Product 4	Underselling	5	***	***	***	***
All products	Underselling	68	601,468	10.7	0.2	49.2
Product 1	Overselling	74	***	***	***	***
Product 2	Overselling	28	***	***	***	***
Product 3	Overselling	54	***	***	***	***
Product 4	Overselling	40	***	***	***	***
All products	Overselling	196	1,160,300	(15.3)	(0.2)	(86.7)

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

Table V-11
Tin mill products: Instances of underselling and overselling, by period and country

Quantity in short tons

Period	Country	Number of quarters of underselling	Quantity undersold	Number of quarters of overselling	Quantity oversold
2019	Canada	***	***	***	***
2020	Canada	***	***	***	***
2021	Canada	***	***	***	***
2022	Canada	***	***	***	***
All years	Canada	13	***	47	***
2019	China	***	***	***	***
2020	China	***	***	***	***
2021	China	***	***	***	***
2022	China	***	***	***	***
All years	China	11	***	35	***
2019	Germany	***	***	***	***
2020	Germany	***	***	***	***
2021	Germany	***	***	***	***
2022	Germany	***	***	***	***
All years	Germany	6	***	9	***
2019	Netherlands	***	***	***	***
2020	Netherlands	***	***	***	***
2021	Netherlands	***	***	***	***
2022	Netherlands	***	***	***	***
All years	Netherlands	10	***	34	***
2019	South Korea	***	***	***	***
2020	South Korea	***	***	***	***
2021	South Korea	***	***	***	***
2022	South Korea	***	***	***	***
All years	South Korea	12	***	30	***
2019	Taiwan	***	***	***	***
2020	Taiwan	***	***	***	***
2021	Taiwan	***	***	***	***
2022	Taiwan	***	***	***	***
All years	Taiwan	12	***	14	***
2019	Turkey	***	***	***	***
2020	Turkey	***	***	***	***
2021	Turkey	***	***	***	***
2022	Turkey	***	***	***	***
All years	Turkey	1	***	8	***

Table continued.

Table V-11 Continued
Tin mill products: Instances of underselling and overselling, by period and country

Quantity in short tons

Period	Country	Number of quarters of underselling	Quantity undersold	Number of quarters of overselling	Quantity oversold
2019	United Kingdom	***	***	***	***
2020	United Kingdom	***	***	***	***
2021	United Kingdom	***	***	***	***
2022	United Kingdom	***	***	***	***
All years	United Kingdom	3	***	19	***
2019	Subject sources	***	***	***	***
2020	Subject sources	***	***	***	***
2021	Subject sources	***	***	***	***
2022	Subject sources	***	***	***	***
All years	Subject sources	68	601,468	196	1,160,300

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

Table V-12
Tin mill products: Instances of underselling and overselling and the range and average of margins, by country

Quantity in short tons; margin in percent

Country	Type	Number of quarters	Quantity	Average margin	Minimum margin	Maximum margin
Canada	Underselling	13	***	***	***	***
China	Underselling	11	***	***	***	***
Germany	Underselling	6	***	***	***	***
Netherlands	Underselling	10	***	***	***	***
South Korea	Underselling	12	***	***	***	***
Taiwan	Underselling	12	***	***	***	***
Turkey	Underselling	1	***	***	***	***
United Kingdom	Underselling	3	***	***	***	***
All subject sources	Underselling	68	601,468	10.7	0.2	49.2
Canada	Overselling	47	***	***	***	***
China	Overselling	35	***	***	***	***
Germany	Overselling	9	***	***	***	***
Netherlands	Overselling	34	***	***	***	***
South Korea	Overselling	30	***	***	***	***
Taiwan	Overselling	14	***	***	***	***
Turkey	Overselling	8	***	***	***	***
United Kingdom	Overselling	19	***	***	***	***
All subject sources	Overselling	196	1,160,300	(15.2)	(0.2)	(86.7)

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

Lost sales and lost revenue

The Commission requested that U.S. producers of tin mill products report purchasers with which they experienced instances of lost sales or revenue due to competition from imports of Tin mill products from subject countries during January 2019-September 2022. All three responding U.S. producers reported that they had lost sales, lost revenue, and rolled back announced price increases. One U.S. producer (***) submitted lost sales allegations and identified seven firms at which it lost sales (at six purchasers) or lost revenues (at three purchasers), though it did not quantify the total amounts of either.

Staff contacted 12 purchasers and received responses from all 12 purchaser. Responding purchasers reported purchasing or importing *** short tons of tin mill products during January 2019-September 2022 (table V-13).

Table V-13
Tin mill products: Purchasers' reported purchases and imports, by firm and source

Quantity in short tons, share in percent

Firm	Domestic quantity	Subject quantity	All other quantity	Change in domestic share	Change in subject share
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All firms	***	***	***	***	***

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

Note: All other includes all other sources and unknown sources. Change is the percentage point change in the share of the firm's total purchases of domestic and/or subject country imports between first and last years.

Note: ***.

Most purchasers reported that their purchases from various sources had fluctuated over the period, as presented in table V-14. A majority of purchaser indicated that their purchases from domestic sources had fluctuated. A greater number of purchasers indicated that their purchases from various subject sources either fluctuated but ended higher or increased steadily than those which noted that their purchases from subject sources had fluctuated but ended lower or decreased steadily. Purchasing trends, however, depended on the country, as pluralities of purchasers noted constant purchase patterns of tin mill products imported from South Korea, the United Kingdom, and nonsubject sources. Most U.S. purchasers described their reasons for changing their purchase quantities from domestic producers. These reasons, along with how their purchases changed, are presented in table V-15.

Table V-14
Tin mill products: Purchasers' reported change in purchase patterns from U.S., subject, and nonsubject sources, January 2019-September 2022

Source	Increase steadily	Fluctuate, ending higher	Constant	Fluctuate, ending lower	Decrease steadily	Did not purchase
United States	0	2	4	7	0	0
Canada	0	5	1	4	0	2
China	0	2	1	0	3	6
Germany	4	2	0	1	0	4
Netherlands	2	0	0	1	2	6
South Korea	0	3	4	3	1	1
Taiwan	5	3	1	0	1	2
Turkey	1	4	0	0	0	7
United Kingdom	0	1	2	1	0	7
Subject sources	12	20	9	10	7	35
All other sources	0	1	6	0	0	4
Sources unknown	0	0	0	0	0	10

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

Table V-15
Tin mill products: Purchasers' responses describing why their purchases of domestic product changed since January 2019, by firm

Purchaser	Change in purchase pattern	Reason(s) for changes in purchases from domestic sources
***	Fluctuate lower	***
***	Constant	***
***	Fluctuate higher	***
***	Fluctuate lower	***
***	Fluctuate lower	***
***	Constant	***
***	Fluctuate lower	***
***	Fluctuate lower	***
***	Fluctuate higher and constant	***
***	Fluctuate lower	***
***	Constant	***
***	Fluctuate lower	***

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

Of the 12 responding purchasers, 8 reported that they had purchased imported tin mill products from any of the eight subject countries instead of U.S.-produced tin mill products since 2019 (table V-16). Of the eight purchasers that had responded that they had bought tin mill products from at least one subject country, five reported that imports from at least one subject country were priced lower than the domestic product. Specifically, one (***) indicated that some imports from South Korea were priced lower and others were priced higher, two purchasers indicated that imports from two countries were priced lower (China and South Korea for ***, and Germany and Taiwan for ***), one purchaser (***) indicated imports from China, South Korea, and Taiwan were priced lower, and one purchaser (***) indicated that imports from all six countries from which it purchased were priced lower (all but China and the United Kingdom). Equal numbers of responding purchasers indicated that imports from China, Germany, the Netherlands, South Korea, and Taiwan were priced lower and not priced lower than domestic product, whereas a majority of responding purchasers indicated that tin mill products imported from Canada, Turkey, and the United Kingdom were not priced lower than domestic product. Of the five purchasers which reported that imports from at least one subject country were priced lower than domestic product, three reported that price was a primary reason for the decision to purchase imported product rather than U.S.-produced product. These three firms estimated the quantity of tin mill products purchased instead of domestic product; quantities ranged from *** short tons to *** short tons. Table V-17 presents purchasers' responses by subject country.

Only 1 of 10 responding purchasers indicated that domestic producers had lowered their prices in order to compete with prices of tin mill products imported from any of the 8 subject countries.[18] This purchaser, ***, stated that "***."[19] Between four and nine purchasers indicated that domestic producers had not lowered their prices to compete with each of the subject sources of tin mill products (table V-18).

[18] Two purchasers indicated that they did not know for any subject country.

[19] The sources noted by this purchaser ***.

Table V-16
Tin mill products: Purchasers' responses to purchasing subject imports instead of domestic product, by firm

Quantity in short tons

Firm	Purchased subject imports instead of domestic	Imports priced lower	Choice based on price	Quantity	Reason(s) for purchasing imports
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***

Table continued.

Table V-16 Continued
Tin mill products: Purchasers' responses to purchasing subject imports instead of domestic product, by firm

Quantity in short tons

Firm	Purchased subject imports instead of domestic	Imports priced lower	Choice based on price	Quantity	Reason(s) for purchasing imports
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***

Table continued.

Table V-16 Continued
Tin mill products: Purchasers' responses to purchasing subject imports instead of domestic product, by firm

Quantity in short tons

Firm	Purchased subject imports instead of domestic	Imports priced lower	Choice based on price	Quantity	Reason(s) for purchasing imports
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All firms	Yes--8; No--4	Yes--5; No--3	Yes--3; No--6	***	NA

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

Table V-17
Tin mill products: Purchasers' responses to purchasing subject imports instead of domestic product, by source

Quantity in short tons

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
Canada	6	1	1	***
China	4	2	2	***
Germany	4	2	1	***
Netherlands	2	1	0	***
South Korea	7	4	3	***
Taiwan	6	3	2	***
Turkey	3	1	1	***
United Kingdom	1	0	0	***
Any subject source	8	5	3	***

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

Table V-18
Tin mill products: Purchasers' responses to U.S. producer price reductions, by source

Source	Count of purchasers reporting U.S. producers reduced prices due to competition with subject imports	Count of purchasers reporting U.S. producers did not reduce prices due to competition with subject imports
Canada	0	8
China	0	7
Germany	1	8
Netherlands	0	7
South Korea	1	9
Taiwan	1	7
Turkey	1	4
United Kingdom	0	6
Any subject source	1	9

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

In responding to the lost sales lost revenue survey, 10 of 12 purchasers provided additional comments on various market dynamics. These responses included issues such as available domestic capacity, delivery performance, global supply issues, domestic preference, market demand during the COVID-19 pandemic, quality, supplier qualification, and supplier preference among others. Their full responses are provided in table V-19.

Table V-19
Tin mill products: Purchasers' additional comments on the industry, by firm

Purchaser	Purchaser type	Additional comment(s)
***	Service center	***
***	Can producer	***
***	Can producer	***
***	Can producer	***
***	Can producer	***

Table continued.

Table V-19 Continued
Tin mill products: Purchasers' additional comments on the industry, by firm

Purchaser	Purchaser type	Reason(s) for changes in purchases from domestic sources
***	Service center	***
***	Can producer	***
***	Can producer	***

Table continued.

Table V-19 Continued
Tin mill products: Purchasers' additional comments on the industry, by firm

Purchaser	Purchaser type	Reason(s) for changes in purchases from domestic sources
***	Can producer	***
***	Can producer	***

Table continued.

Table V-19 Continued
Tin mill products: Purchasers' additional comments on the industry, by firm

Purchaser	Purchaser type	Reason(s) for changes in purchases from domestic sources
*** (continued)	Can producer	***

Table continued.

Table V-19 Continued
Tin mill products: Purchasers' additional comments on the industry, by firm

Purchaser	Purchaser type	Reason(s) for changes in purchases from domestic sources
*** (continued)	Can producer	***

Table continued.

Table V-19 Continued
Tin mill products: Purchasers' additional comments on the industry, by firm

Purchaser	Purchaser type	Reason(s) for changes in purchases from domestic sources
*** (continued)	Can producer	***
***	Can producer	***
***	Can producer	***

Table continued.

Table V-19 Continued
Tin mill products: Purchasers' additional comments on the industry, by firm

Purchaser	Purchaser type	Reason(s) for changes in purchases from domestic sources
*** (continued)	Can producer	***

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

Part VI: Financial experience of the U.S. producers

Background[1]

Three U.S. producers, Cleveland-Cliffs, Ohio Coatings, and U.S. Steel reported financial results and related information on their U.S. tin mill products operations. The reported financial results are based on information from accounting systems designed to generate/report overall financial results on a U.S. GAAP basis and were reported for calendar-year periods.[2]

With respect to their overall operations, publicly traded Cleveland-Cliffs and U.S. Steel are both vertically integrated, to varying degrees, while Ohio Coatings, a privately held company, is not.[3] In addition to the level of integration, U.S. producers differ to some extent in terms of product mix and services.[4] [5]

As described in Part III of this report, Cleveland-Cliffs and U.S. Steel both engaged in acquisition-related activity involving tin mill products operations: Cleveland-Cliffs purchasing the assets of ArcelorMittal USA (December 2020), inclusive of the Weirton facility, and U.S.

[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"), 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] *** U.S. producer questionnaire responses, section III-2.

[3] ***. Email with attachment from ***, February 13, 2023.

[4] ***. Email with attachment from ***, February 6, 2023.

[5] ***. Email with attachment from ***, February 13, 2023.

Steel acquiring the remaining equity interest in USS-UPI (March 2020).[6] U.S. Steel also idled various operations related to its tin mill products operations during the period and plans to close the USS-UPI facility.[7] Ohio Coatings reported *** changes to its operations during the period.[8]

Figure VI-1 presents firm-specific shares of total 2021 net sales quantity.

Figure VI-1
Tin mill products: Share of net sales quantity of U.S. producers in 2021, by firm

* * * * * * *

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

[6] ***. Email with attachment from ***, February 13, 2023. ***. Email with attachment from ***, February 13, 2023.

[7] Conference transcript, pp. 26-28 (Houseman). ***. Email with attachment from ***, February 13, 2023.

[8] *** U.S. producer questionnaires response, section II-2a.

Operations on Tin mill products

Table VI-1 and table VI-2 present income-and-loss data for the U.S. producers' tin mill products operations and corresponding changes in AUVs, respectively. Table VI-3 presents a variance analysis of the financial results.[9] Appendix D presents selected company-specific financial information.

Table VI-1
Tin mill products: Results of operations of U.S. producers, by item and period

Quantity in short tons; Value in 1,000 dollars

Item	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Total net sales	Quantity	***	***	***	***	***
Total net sales	Value	***	***	***	***	***
COGS: Raw materials	Value	***	***	***	***	***
COGS: Direct labor	Value	***	***	***	***	***
COGS: Other factory costs	Value	***	***	***	***	***
COGS: Total	Value	***	***	***	***	***
Gross profit or (loss)	Value	***	***	***	***	***
SG&A expenses	Value	***	***	***	***	***
Operating income or (loss)	Value	***	***	***	***	***
Interest expense	Value	***	***	***	***	***
All other expenses	Value	***	***	***	***	***
All other income	Value	***	***	***	***	***
Net income or (loss)	Value	***	***	***	***	***
Depreciation/amortization	Value	***	***	***	***	***
Estimated cash flow from operations	Value	***	***	***	***	***

Table continued.

[9] The Commission's variance analysis is calculated in three parts: sales variance, COGS variance, and SG&A expenses variance. Each part consists of a price variance (in the case of the sales variance) or a cost or expense variance (in the case of the COGS and SG&A expenses variance), and a volume variance. The sales or cost/expense variance is calculated as the change in unit price or per-unit cost/expense times the new volume, while the volume variance is calculated as the change in volume times the old unit price or per-unit cost/expense. As summarized at the bottom of the variance analysis, 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 expenses variances. The Commission's variance analysis is more meaningful when product mix remains the same throughout the period. In general, U.S. producers indicated that changes in product mix were not an important factor in terms of explaining the pattern of average sales value during the period.

Table VI-1 Continued
Tin mill products: Results of operations of the U.S. producers, by item and period

Ratios in percent; Shares in percent; Unit values in dollars per short ton; Count in number of firms reporting

Item	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
COGS: Raw materials	Ratio to NS	***	***	***	***	***
COGS: Direct labor	Ratio to NS	***	***	***	***	***
COGS: Other factory costs	Ratio to NS	***	***	***	***	***
COGS: Total	Ratio to NS	***	***	***	***	***
Gross profit or (loss)	Ratio to NS	***	***	***	***	***
SG&A expenses	Ratio to NS	***	***	***	***	***
Operating income or (loss)	Ratio to NS	***	***	***	***	***
Net income or (loss)	Ratio to NS	***	***	***	***	***
COGS: Raw materials	Share	***	***	***	***	***
COGS: Direct labor	Share	***	***	***	***	***
COGS: Other factory costs	Share	***	***	***	***	***
COGS: Total	Share	***	***	***	***	***
Total net sales	Unit value	***	***	***	***	***
COGS: Raw materials	Unit value	***	***	***	***	***
COGS: Direct labor	Unit value	***	***	***	***	***
COGS: Other factory costs	Unit value	***	***	***	***	***
COGS: Total	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	3	3	3	3	3

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

Note: Ratios represent the ratio to net sales value and shares represent the share of COGS.

Table VI-2
Tin mill products: Changes in U.S. producers' AUVs between comparison periods

Changes in percent

Item	2019-21	2019-20	2020-21	Jan-Sep 2021-22
Total net sales	***	***	***	***
COGS: Raw materials	***	***	***	***
COGS: Direct labor	***	***	***	***
COGS: Other factory costs	***	***	***	***
COGS: Total	***	***	***	***

Table continued.

Table VI-2 Continued
Tin mill products: Changes in U.S. producers' AUVs between comparison periods

Changes in dollars per short ton

Item	2019-21	2019-20	2020-21	Jan-Sep 2021-22
Total net sales	***	***	***	***
COGS: Raw materials	***	***	***	***
COGS: Direct labor	***	***	***	***
COGS: Other factory costs	***	***	***	***
COGS: Total	***	***	***	***
Gross profit or (loss)	***	***	***	***
SG&A expenses	***	***	***	***
Operating income or (loss)	***	***	***	***
Net income or (loss)	***	***	***	***

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 VI-3
Tin mill products: Variance analysis of the financial results of the U.S. producers between comparison periods

Value in 1,000 dollars

Item	2019-21	2019-20	2020-21	Jan-Sep 2021-22
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.

Net sales

Commercial sales, primarily reflecting U.S. commercial shipments, was the *** category of tin mill products sales reported. Given the ***, a single line item for sales is presented in the relevant tables above.[10]

Quantity

On a company-specific basis, U.S. producers reported the same directional pattern of increasing sales quantity in 2020, generally attributed to increased demand related to the COVID-19 pandemic, followed by declining sales quantity in 2021 (see table VI-1).[11] In January-September 2022 compared to January-September 2021, directional patterns diverged with

[10] A relatively small quantity of commercial export sales was reported by ***. *** U.S. producer questionnaire, section II-8. Tolling activity was limited to ***, which reported that *** percent of its 2021 commercial sales quantity reflected tolling. *** U.S. producer questionnaire, section II-6.

[11] While directionally the same, the magnitude of company-specific changes in sales quantity varied: In 2020, *** reported the largest company-specific increase in sales quantity, accounting for the majority of the overall increase in sales quantity. In contrast, in 2021 *** reported the smallest company-specific decline in sales quantity with *** accounting for the majority of the overall decline.

*** reporting modestly higher sales quantity,[12] while *** reported lower sales quantities.[13]

Value

Tin mill products sales generally reflect fixed prices agreed to in annual sales contracts negotiated during the fall of the preceding year.[14] While average sales value and raw material cost were directionally the same throughout the period, U.S. producers confirmed that tin mill products sales value does not include a direct or formulaic pass through of primary raw material costs.[15]

Total sales value increased throughout the full-year period and was higher in January-September 2022 compared to January-September 2021. On an overall basis, the sales section of the variance analysis (table VI-3) shows that the effect of price and volume variances alternated in terms of their relative importance: higher total sales value in 2020 reflects a positive sales volume variance that more than offset the smaller negative price variance; higher total sales value in 2021 reflects a positive price variance that more than offset the smaller negative sales volume variance; and higher total sales value in January-September 2022 compared to January-September 2021 reflects a positive price variance that more than offset the negative sales volume variance.

[12] ***. Email with attachment from ***, February 13, 2023.

[13] Of the *** U.S. producers reporting lower sales quantity in January-September 2022 compared to January-September 2021, *** decline (*** percent) was more notable on a percentage basis than *** (*** percent). With regard to the pattern of its sales quantity during the period, ***. Email with attachment from ***, February 6, 2023.

[14] Conference transcript, p. 30 (Jarvis).

[15] Email with attachment from ***, February 13, 2023. Email with attachment from ***, February 6, 2023. Email with attachment from ***, February 13, 2023.

*** reported the highest average sales for most of the period, the exception being January-September 2022 when *** reported the highest average sales value. *** reported the lowest company-specific average sales value throughout the period (see table D-1). The absolute difference between the highest and lowest company-specific average sales value ranged from *** per short ton (2021) to *** per short ton (January-September 2022). Directionally and without exception, U.S. producers reported the same pattern of declines in average sales value in 2020, increases in 2021, and higher average sales value in January-September 2022 compared to January-September 2021. In general, U.S. producers attributed the pattern of average sales value during the period to changes in input costs and demand, as opposed to changes in product mix.[16]

Cost of goods sold and gross profit or loss

Raw materials

In addition to the tin and chromium coating materials reported by all U.S. producers, total raw material costs reported in table VI-1 reflect a combination of primary steel-making inputs, as well as purchased black plate. For the industry as a whole, total raw material costs accounted for *** percent of total COGS (2021) to *** percent (January-September 2022). While *** was the *** U.S. producer to report input purchases from related

[16] ***. Email with attachment from ***, February 13, 2023. ***. Email with attachment from ***, February 6, 2023. ***. Email with attachment from ***, February 13, 2023.

suppliers,[17] the *** facilities producing tin mill products consume *** supplied by related upstream operations.[18] [19]

On an overall basis average per short ton raw material cost declined to its lowest level in 2020, increased somewhat in 2021, and reached its highest level of the period in January-September 2022. Like average sales value, changes in average raw material cost were generally attributed to underlying input prices, as opposed to changes in product mix.

With regard to the steel component specifically, non-integrated producer Ohio Coatings reported that it *** consumed ***, accounting for *** percent of its total 2021 raw material cost;[20] integrated producers Cleveland-Cliffs and U.S. Steel reported ***. ***.[21] As shown in table D-1, for most of the period

[17] ***. *** U.S. Producer questionnaire response, sections III-5-III-7b. ***. Email with attachment from ***, February 13, 2023.

[18] *** U.S. producer questionnaire response, section III-9c.

[19] ***. Email from ***, February 13, 2023.

[20] *** U.S. producer questionnaire responses, section III-9c.

[21] Email with attachment from ***, February 13, 2023. Email with attachment from ***, February 13, 2023. ***. Email from ***, February 21, 2023.

*** reported the lowest average raw material costs, the exception being 2020 when *** reported the lowest average raw material cost. ***, whose average raw material cost reflects ***, reported the highest average raw material cost throughout the period.

Tin mill products sales, as noted previously, do not include a direct or formulaic passthrough of raw material costs and/or other inputs.[22] In general and as it relates to tin mill products, Cleveland-Cliffs' formal hedging of input costs includes natural gas and other inputs.[23] ***.[24] With respect to inputs related to tin mill products in general, U.S. Steel's public financial statements report a combination of fixed-price forward purchase contracts for natural gas and tin, as well as commodity purchase swaps for purchases of natural gas, tin, electricity, and iron ore pellets.[25]

Direct labor cost and other factory costs

The U.S. industry's direct labor cost, the smallest primary component of total COGS, declined as a share of total COGS irregularly throughout the period, ranging from *** percent of total COGS (2019) to *** percent (January-September 2022). Other factory costs, the second largest primary component of COGS, increased as a share of total COGS during the full-year period and then was somewhat lower in January-September 2022 compared to January-September 2021, ranging from *** percent (2019) to *** percent (2021). As noted in footnote 21, the direct labor and other factory costs reported by *** reflect ***.

On a company-specific basis average direct labor cost and other factory costs reflect relatively wide ranges: ***, for the most part, reporting the lowest and highest average direct labor cost and average other factory costs, respectively; ***, for the most part, in the middle of the range (see table D-1).[26]

[22] From the perspective of a vertically integrated producer that owns/controls most of the primary raw materials, a direct or formulaic passthrough of raw material cost in sales value is reportedly unnecessary. Conference transcript, pp. 58-59 (Goncalves).

[23] Ibid. Cleveland-Cliffs began hedging programs for electricity and tin during 2022. Cleveland-Cliffs 2022 10-K, pp. 52-53.

[24] Email from ***, February 13, 2023.

[25] U.S. Steel 2022 10-K, pp. 90-91.

[26] ***

(*continued*...)

Given the capital intensive nature of manufacturing tin mill products, the level of capacity utilization and corresponding fixed cost absorption are important determinants of average COGS.[27] *** attributed the variations in its average direct labor cost and other factory costs to capacity utilization and corresponding fixed cost absorption.[28] Similarly, *** reported that reduced capacity utilization at the end of the period generally explains its higher average direct labor cost and other factory costs.[29] *** noted that the pattern of its average direct labor costs and other factory costs reflects items such as ***.[30] With respect to the impact of large-

---

***.

[27] Petitioner's postconference brief, p. 24. ***. Petitioner's postconference brief, Exhibit 15, p. 5. With the exception of January-September 2022, when *** reported the lowest company-specific capacity utilization rate, *** reported the lowest company-specific capacity utilization rates throughout most of the period (see table III-6). *** reported the highest company-specific capacity utilization rates in 2019, 2020, and January-September 2021. *** reported the highest company-specific utilization rates in full-year 2021 and January-September 2022.

[28] ***. Email with attachment from ***, February 6, 2023.

[29] ***. Email with attachment from ***, February 13, 2023.

[30] ***

(*continued*...)

scale capital expenditure projects during the period (see *Capital expenditures and R&D expenses* section), Cleveland-Cliffs noted ***.[31]

*** and *** reported the lowest and highest average COGS throughout the period, respectively. As noted previously and since *** reported the lowest company-specific average raw material cost for most of the period, higher conversion costs (the sum of direct labor and other factory costs) generally explain why its average COGS exceeded those of ***.[32]

Gross profit or loss

The U.S. industry reported total gross losses in 2019 and 2020, transitioned to a gross profit in 2021, and reported its highest total gross profit in January-September 2022.

U.S. producers were not uniform in terms of their financial results at the gross level: *** of varying magnitude throughout the period; *** throughout the period, also of varying magnitudes (see table D-1).

***. Email with attachment from ***, February 13, 2023. ***. Email from ***, February 21, 2023. ***. Email from ***, February 21, 2023. USITC auditor preliminary-phase notes.

[31] Petitioner's postconference brief, Exhibit 1, pp. 10-12; Exhibit 15, pp. 1-3.

[32] ***. *** U.S. producer questionnaire, sections III-10a-III-11.

***.[33] ***, while declining somewhat during the full-year period, remained within a relatively narrow range. *** increased during the full-year period and was notably higher in January-September 2022 compared to January-September 2021. To the extent that *** U.S. producers reported their highest average COGS in January-September 2022, higher *** (***) and lower *** (***) generally reflect higher average sales value.

SG&A expenses and operating income or loss

The U.S. industry's total SG&A expenses increased during the full-year period and were higher in January-September 2022 compared to January-September 2021.[34] Company-specific SG&A expense ratios (total SG&A expenses divided by total sales value) varied and generally occupied distinct ranges: *** SG&A expense ratio exhibiting the least amount of variability; *** increasing during the full-year period; *** declining irregularly (see table D-1).

On a company-specific basis, U.S. producers reported a mixed directional pattern of operating results between 2019 and 2020 (***

[33] As noted previously, fixed prices for tin mill products are negotiated with customers in the fall of each year and subsequently recognized in the following year's sales values. During Cleveland-Cliffs' third quarter 2021 earnings call, Cleveland-Cliffs CEO stated "Our tinplate business, for example, which we have already renegotiated with all the clients, they are increasing between 2021, 2022 price-wise, 100%. In other words, we are doubling the price of our tinplate. So because the costs are not increased, not even marginally close, it's a fraction of that, so we're going to have a meaningful bigger contribution from tinplate." Transcript of Cleveland-Cliffs Q3 2021 earnings call, p. 17.

[34] The increase in total 2021 SG&A expenses, partially offset by a decline in *** SG&A expenses, was attributable to ***, whose SG&A expenses increased from *** million in 2020 to *** million in 2021 (see table D-1). ***. Email with attachment from ***, February 13, 2023. ***. Email with attachment from ***, February 13, 2023.

) but were directionally the same between 2020 and 2021 (U.S. producers reporting declines in their operating results) and the interim periods (*** U.S. producers reporting relative improvements in their operating results). While *** reported operating losses during the full-year period, the absolute amounts of operating losses reported by *** were higher. *** reported improvements in their operating results in January-September 2022: the level of *** operating loss declining substantially compared to January-September 2021; *** transitioning to operating income.[35] *** was the *** U.S. producer that reported operating income throughout the period.

Interest expense, other expenses and income, and net income or loss

Interest expense explains most of the absolute differences between the U.S. industry's operating and net results (see table VI-1), other expenses and other income having only a modest impact. Directionally, overall operating and net results were the same for most of the period (both declining between 2019 and 2020 and improving between the interim periods). The divergence between 2020 and 2021 (operating losses increasing while net losses declined) reflects declines in interest expense and other expenses, primarily attributable to ***, and, to a lesser extent, an increase in other income attributable to ***.[36]

As noted previously, *** was the *** U.S. producer to identify non-recurring items in its financial results, all of which impacted *** (see footnote 32). While not reported as such, *** other income (see footnote 36) can be considered a non-

[35] With regard to the impact of COVID 19 on operations and financial results in general, ***. *** U.S. producer questionnaire responses, section III-18. ***. *** U.S. producer questionnaire, section III-18.

[36] While interest expense was reported by *** U.S. producers, *** accounted for the majority. *** was also the *** U.S. producer that reported other income and other expenses throughout the period. In 2020, *** reported a ***. Email with attachment from ***, February 6, 2023. *** reported *** other income or other expenses.

recurring item. *** reported that non-recurring items are reflected at a higher reporting level and therefore not included in its tin mill products financial results.[37]

Capital expenditures and R&D expenses

Table VI-4 and table VI-6 present U.S. producers' capital expenditures and R&D expenses related to their tin mill products operations, respectively, by firm. Table VI-5 and table VI-7 present corresponding narrative descriptions.

For the period as a whole *** accounted for the largest share of the U.S. industry's total capital expenditures (*** percent), followed by *** (*** percent), and *** (*** percent). As shown in table VI-4, the directional pattern of capital expenditures varied by company: *** capital expenditures were at their highest level in 2019 and subsequently declined; *** capital expenditures declined to their lowest level in 2020 and then increased, reaching their highest level in January-September 2022; *** capital expenditures were relatively low in 2019 and 2020 and increased to their highest level in 2021.

The capital expenditure projects undertaken by Cleveland-Cliffs, initiated in the fall of 2020 and largely completed by the end of 2022, reportedly impacted the Weirton facility's ongoing operations to some extent.[38] [39] In 2017, prior to the period of investigation, U.S. Steel initiated large capital investments related to its *** tin mill operations.[40]

---

[37] *** U.S. producer questionnaire, sections III-10a-III-11. ***. Ibid.

[38] Conference transcript, pp. 63-64, 76, 130 (Jarvis). ***. Email from ***, February 21, 2023. USITC auditor preliminary-phase notes.

[39] As described by Cleveland-Cliffs CEO at the Commission's staff conference, ". . . Weirton had been subject to systematic disinvestment by ArcelorMittal for years. In the three years leading up to our acquisition, ArcelorMittal had invested an average of only $6 million of annual CAPEX in Weirton. For a facility producing tin mill products to serve the discerning and specification-sensitive packaging market, that level of capital investment is insufficient. In sharp contrast to the way that ArcelorMittal had been operating Weirton, Cleveland-Cliffs immediately began an aggressive capital investment campaign to optimize Weirton's production and quality capabilities, investing more than $50 million over the course of 2021 and 2022." Conference transcript, pp. 18-19 (Goncalves).

[40] Information provided by U.S .Steel in its postconference brief detailed specific aspects of each facility that was upgraded, indicating that discrete upgrades took place between ***. U.S. Steel postconference brief (Attachment 1). ***

(*continued*...)

Table VI-4
Tin mill products: U.S. producers' capital expenditures, by firm and period

Value in 1,000 dollars

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Cleveland-Cliffs	***	***	***	***	***
Ohio Coatings	***	***	***	***	***
U.S. Steel	***	***	***	***	***
All firms	***	***	***	***	***

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

Table VI-5
Tin mill products: Narrative descriptions of U.S. producers' capital expenditures, by firm

Firm	Narrative
Cleveland-Cliffs	***
Ohio Coatings	***

Table continued

***.

Table VI-5 Continued
Tin mill products: Narrative descriptions of U.S. producers' capital expenditures, by firm

Firm	Narrative
U.S. Steel	***

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

Table VI-6
Tin mill products: U.S. producers' R&D expenses, by firm and period

Value in 1,000 dollars

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Cleveland-Cliffs	***	***	***	***	***
Ohio Coatings	***	***	***	***	***
U.S. Steel	***	***	***	***	***
All firms	***	***	***	***	***

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

Table VI-7
Tin mill products: Narrative descriptions of U.S. producers' R&D expenses, by firm

Firm	Narrative
Cleveland-Cliffs	***
Ohio Coatings	***
U.S. Steel	***

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

Assets and ROA

Table VI-8 presents data on the U.S. producers' total assets and table VI-9 presents corresponding ROA.[41] [42] Table VI-10 presents U.S. producers' narrative information regarding aspects of reported asset information.

Table VI-8
Tin mill products: U.S. producers' total net assets, by firm and period

Value in 1,000 dollars

Firm	2019	2020	2021
Cleveland-Cliffs	***	***	***
Ohio Coatings	***	***	***
U.S. Steel	***	***	***
All firms	***	***	***

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

Table VI-9
Tin mill products: U.S. producers' ROA, by firm and period

Ratios in percent

Firm	2019	2020	2021
Cleveland-Cliffs	***	***	***
Ohio Coatings	***	***	***
U.S. Steel	***	***	***
All firms	***	***	***

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

[41] As shown in table VI-8, U.S. producers' total net assets increased during the full-year period with the highest total amount reported in 2021. ***. Email with attachment from ***, February 13, 2023. Email with attachment from ***, February 13, 2023.

[42] ROA is calculated here as operating results divided by total assets. With regard to a company's overall operations, staff notes that a total asset value (i.e., the bottom line value on the asset side of a company's balance sheet) reflects an aggregation of a number of current and non-current assets, which, in many instances, are not product specific. The ability of U.S. producers to assign total asset values to discrete product lines affects the meaningfulness of calculated operating return on net assets.

Table VI-10
Tin mill products: Narrative description of U.S. producers' total net assets, by firm

Firm	Narrative
Cleveland-Cliffs	***
Ohio Coatings	***
U.S. Steel	***

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

Capital and investment

The Commission requested the U.S. producers to describe any actual or potential negative effects of imports of tin mill products from Canada, China, Germany, the Netherlands, South Korea, Taiwan, Turkey, and the United Kingdom on their growth, investment, ability to raise capital, development and production efforts, or the scale of capital investments. Table VI-11 presents the effects reported and table VI-12 provides the U.S. producers' narrative descriptions.

Table VI-11
Tin mill products: Count indicating actual and anticipated negative effects of imports from subject sources on investment, growth, and development since January 1, 2019, by effect

Number of firms reporting

Effect	Category	Count
Cancellation, postponement, or rejection of expansion projects	Investment	***
Denial or rejection of investment proposal	Investment	***
Reduction in the size of capital investments	Investment	***
Return on specific investments negatively impacted	Investment	***
Other investment effects	Investment	***
Any negative effects on investment	Investment	***
Rejection of bank loans	Growth	***
Lowering of credit rating	Growth	***
Problem related to the issue of stocks or bonds	Growth	***
Ability to service debt	Growth	***
Other growth and development effects	Growth	***
Any negative effects on growth and development	Growth	***
Anticipated negative effects of imports	Future	***

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

Table VI-12
Tin mill products: Narratives relating to actual and anticipated negative effects of imports on investment, growth, and development, since January 1, 2019

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	***
Return on specific investments negatively impacted	***
Other (effects of imports on investment)	***
Other (effects of imports on investment)	***

Table continued.

Table VI-12 Continued
Tin mill products: Narratives relating to actual and anticipated negative effects of imports on investment, growth, and development, since January 1, 2019

Item	Firm name and accompanying narrative response
Other (effects of imports on investment)	***
Other (effects of imports on growth and development)	***
Other (effects of imports on growth and development)	***
Other (effects of imports on growth and development)	***

Table continued.

Table VI-12 Continued
Tin mill products: Narratives relating to actual and anticipated negative effects of imports on investment, growth, and development, since January 1, 2019

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

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

(VI) the potential for product-shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products,

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

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

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

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

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

The industry in Canada

The Commission issued a foreign producers' or exporters' questionnaire to one firm believed to produce and/or export tin mill products from Canada.[3] The Commission received one response from ArcelorMittal Dofasco G.P ("ArcelorMittal"). ArcelorMittal estimates that it accounted for *** percent of tin mill products production in Canada in 2021. It also estimates that its exports to the United States accounted for *** percent of total exports of subject merchandise from Canada to the United States in 2021. Table VII-1a presents summary data for responding producers and exporters in Canada during 2021.

Table VII-1a
Tin mill products: Summary data for Canada producer ArcelorMittal, 2021

Quantity in short tons; share in percent

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)
ArcelorMittal	***	***	***	***	***	***
All firms	***	***	***	***	***	***

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

[3] This firm was identified through a review of information submitted in the petitions and presented in third-party sources.

Table VII-1b presents events in Canada's tin mill products industry since January 1, 2019.

Table VII-1b
Tin mill products: Important industry events in Canada since 2019

Item	Firm	Event
Capital investment	ArcelorMittal Dofasco	ArcelorMittal Dofasco is Canada's largest manufacturer of flat rolled steel. ArcelorMittal Dofasco's steel-making plant in Hamilton, Ontario uses both integrated and EAF-based steelmaking processes. Its products include hot-rolled, cold-rolled, galvanized and subject tinplate. In 2021, Dofasco announced plans for a CA$1.8 billion (US$1.34 billion) investment in decarbonization technologies at its steel mill. According to the company, the investments will reduce annual carbon dioxide ("CO_2") emissions by approximately 60 percent by 2030. The Hamilton plant will transition its existing blast furnace-basic oxygen furnace steelmaking production route to a directly reduced iron ("DRI")–electric arc furnace ("EAF") production route, which is expected to lower its CO_2 emissions. The new EAF will have capacity to produce 2.4 million metric tons (2.6 million short tons) of steel per year.

Source: ArcelorMittal news release, "Game-changing announcement at ArcelorMittal Dofasco," September 14, 2021, at https://northamerica.arcelormittal.com/media/news-articles/game-changing-announcement-at-arcelormittal-dofasco. ArcelorMittal website, "ArcelorMittal Dofasco is Canada's leading flat steel producer and a hallmark of advanced manufacturing in North America," at https://northamerica.arcelormittal.com/our-operations/arcelormittal-dofasco, retrieved February 16, 2023.

Changes in operations

ArcelorMittal was asked to report any change in the character of its operations or organization relating to the production of tin mill products since 2019. ArcelorMittal reported ***. The firm ***.

Operations on tin mill products

Table VII-1c presents ArcelorMittal's installed and practical overall capacity and production on the same equipment used to produce tin mill products.

Table VII-1c
Tin mill products: ArcelorMittal's installed and practical capacity and production on the same equipment as subject production, by period

Capacity and production in short tons; utilization in percent

Item	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Installed overall	Capacity	***	***	***	***	***
Installed overall	Production	***	***	***	***	***
Installed overall	Utilization	***	***	***	***	***
Practical overall	Capacity	***	***	***	***	***
Practical overall	Production	***	***	***	***	***
Practical overall	Utilization	***	***	***	***	***
Practical tin mill products	Capacity	***	***	***	***	***
Practical tin mill products	Production	***	***	***	***	***
Practical tin mill products	Utilization	***	***	***	***	***

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

Note: Installed overall production capacity is the level of production that a firm's establishment(s) could have attained, assuming the firm's optimal product mix, and based solely on existing capital investments, i.e., machinery and equipment that is in place and ready to operate. This capacity measure does not account for other constraints to production such as existing workforce constraints, availability of raw materials, or downtime for maintenance, repair, and clean-up. This capacity measure is sometimes referred to as "nameplate" or "theoretical" capacity in some industries.

Note: Practical overall production capacity is the level of production that a firm's establishment(s) could reasonably have expected to attain, accounting for the firm's actual product mix over the period for which data were collected. This capacity measure is based on not only existing capital investments, i.e., machinery and equipment that is in place and ready to operate but also non-capital investment constraints, such as (1) normal operating conditions, including normal downtime for maintenance, repair, and cleanup; (2) the firm's existing in-place and readily available labor force; (3) availability of material inputs; and (4) any other constraints that may have limited the firm's ability to produce the reported products. Importantly, this capacity measure is the maximum "practical" production a firm could have achieved without hiring new personnel or expanding the number of shifts operated in the period.

Table VII-1d presents information on ArcelorMittal's tin mill products operations. ArcelorMittal's capacity, production, and its capacity utilization, decreased from 2019 to 2021; however, all three measures were projected to be higher in 2023 compared with 2021. Similarly, end-of-period inventories decreased during 2019-21, but were projected to be higher in 2023 as compared to 2021. ArcelorMittal's exports to the United States as a share of its total shipments increased from *** percent in 2019 to *** percent in 2021; the share is projected to be *** percent in 2023.

Table VII-1d
Tin mill products: Data on ArcelorMittal, by period

Quantity in short tons

Item	2019	2020	2021
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-1d Continued
Tin mill products: Data on ArcelorMittal, by period

Quantity in short tons

Item	Jan-Sep 2021	Jan-Sep 2022	Projection 2022	Projection 2023
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-1d Continued
Tin mill products: Data on ArcelorMittal, by period

Share and ratio in percent

Item	2019	2020	2021
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	***	***	***

Table continued.

Table VII-1d Continued
Tin mill products: Data on ArcelorMittal, by period

Share and ratio in percent

Item	Jan-Sep 2021	Jan-Sep 2022	Projection 2022	Projection 2023
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. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table VII-1e presents ArcelorMittal's reported narrative regarding practical production constraints.

Table VII-1e
Tin mill products: ArcelorMittal's reported production constraints

Item	Firm name and accompanying narrative response on production constraints
Other constraints	***

Source: Compiled from data submitted in response Commission questionnaires.

Alternative products

As shown in table VII-1f, ArcelorMittal *** on the same equipment and machinery used to produce tin mill products. ArcelorMittal reported that ***.[4]

Table VII-1f
Tin mill products: ArcelorMittal's overall production on the same equipment as subject production, by period

Quantity in short tons; share in percent

Production type	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Tin mill products	Quantity	***	***	***	***	***
Excluded tin mill products	Quantity	***	***	***	***	***
Other products	Quantity	***	***	***	***	***
All out-of-scope products	Quantity	***	***	***	***	***
All products	Quantity	***	***	***	***	***
Tin mill products	Share	***	***	***	***	***
Excluded tin mill products	Share	***	***	***	***	***
Other products	Share	***	***	***	***	***
All out-of-scope products	Share	***	***	***	***	***
All products	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. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

[4] Commerce's scope ***. See "Commerce's scope" section of Part I of this report.

Exports

According to the Global Trade Atlas ("GTA"), the leading export markets for tin- and chromium-coated steel sheet, which includes tin mill products, from Canada are India, Pakistan, and the United States, (table VII-1g). During 2021, the United States was the top export market for tin- and chromium-coated steel sheet from Canada, accounting for 96.2 percent, followed by India (1.0 percent) and Pakistan (0.9 percent).

Table VII-1g
Tin- and chromium-coated steel sheet: Exports from Canada, by destination market and period

Quantity in short tons; value in 1,000 dollars

Destination market	Measure	2019	2020	2021
United States	Quantity	228,653	269,373	245,863
India	Quantity	3,792	3,722	2,450
Pakistan	Quantity	5,988	6,763	2,202
Italy	Quantity	1,871	2,293	1,801
Mexico	Quantity	292	185	1,078
Bangladesh	Quantity	2,342	2,034	849
Egypt	Quantity	---	---	274
Spain	Quantity	152	135	231
Philippines	Quantity	471	662	212
All other destination markets	Quantity	587	670	689
All destination markets	Quantity	244,150	285,838	255,649
United States	Value	246,387	282,680	283,216
India	Value	1,773	1,441	1,442
Pakistan	Value	3,110	3,435	1,376
Italy	Value	1,036	1,186	1,222
Mexico	Value	151	87	652
Bangladesh	Value	1,026	809	450
Egypt	Value	---	---	142
Spain	Value	89	61	119
Philippines	Value	271	304	145
All other destination markets	Value	317	321	543
All destination markets	Value	254,160	290,323	289,309

Table continued.

Table VII-1g Continued
Tin- and chromium-coated steel sheet: Exports from Canada, by destination market and period

Unit value in dollars per short ton; share in percent

Destination market	Measure	2019	2020	2021
United States	Unit value	1,078	1,049	1,152
India	Unit value	467	387	589
Pakistan	Unit value	519	508	625
Italy	Unit value	554	517	679
Mexico	Unit value	516	472	605
Bangladesh	Unit value	438	398	530
Egypt	Unit value	---	---	517
Spain	Unit value	585	451	516
Philippines	Unit value	574	459	684
All other destination markets	Unit value	541	479	789
All destination markets	Unit value	1,041	1,016	1,132
United States	Share of quantity	93.7	94.2	96.2
India	Share of quantity	1.6	1.3	1.0
Pakistan	Share of quantity	2.5	2.4	0.9
Italy	Share of quantity	0.8	0.8	0.7
Mexico	Share of quantity	0.1	0.1	0.4
Bangladesh	Share of quantity	1.0	0.7	0.3
Egypt	Share of quantity	---	---	0.1
Spain	Share of quantity	0.1	0.0	0.1
Philippines	Share of quantity	0.2	0.2	0.1
All other destination markets	Share of quantity	0.2	0.2	0.3
All destination markets	Share of quantity	100.0	100.0	100.0

Source: Official exports statistics under HS subheadings 7210.11, 7210.12, 7210.50, and 7212.10 as reported by Statistics Canada in the Global Trade Atlas database, accessed February 8, 2023.

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 “---“. United States is shown at the top, all remaining top export destinations shown in descending order of 2021 data

.

The industry in China

The Commission issued foreign producers' or exporters' questionnaires to 12 firms believed to produce and/or export tin mill products from China.[5] Usable responses to the Commission's questionnaire were received from six firms: Baoshan Iron & Steel Co., Ltd. ("Baoshan"); Handan Jintai Packing Material Co., Ltd. ("Jintai Packing"); Shanghai Meishan Iron & Steel Co., Ltd. ("Meishan");[6] Shougang Casey Steel Co., Ltd. ("Shougang Casey"); Shougang Jingtang United Iron & Steel Co., Ltd. ("Shougang Jingtang"); and Wisco-Nippon Steel Tinplate Co., Ltd. ("Wisco-Nippon").[7] These firms estimate that they accounted for *** percent of tin mill products production in China in 2021. These firms also estimate that their exports to the United States accounted for *** percent of total exports of subject merchandise from China to the United States in 2021. Table VII-2a presents summary data for responding producers and exporters in China during 2021.

Table VII-2a
Tin mill products: Summary data for producers in China, 2021

Quantity in short tons; share in percent

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)
Baoshan	***	***	***	***	***	***
Jintai Packing	***	***	***	***	***	***
Meishan	***	***	***	***	***	***
Shougang Casey	***	***	***	***	***	***
Shougang Jingtang	***	***	***	***	***	***
Wisco-Nippon	***	***	***	***	***	***
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. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

[5] These firms were identified through a review of information submitted in the petitions and presented in third-party sources.

[6] Meisha reported *** during the period of investigation.

[7] The Commission also received a questionnaire response from JFE Steel Corp (Guangzhou)/JFE Consulting (Guangzhou) Co., Ltd ("JFE"). JFE certified that it did not produce or export tin mill products from China during the period of investigation.

Table VII-2b presents events in China's tin mill products industry since January 1, 2019.

Table VII-2b
Tin mill products: Important industry events in China since 2019

Item	Firm	Event
Value added tax rebate (cancellation)	Ministry of Finance and Tariff Commission	On August 2, 2021, China's Ministry of Finance and Tariff Commission canceled a value added tax ("VAT") rebate of around 13 percent on exports of most major steel products, including tin mill products. The majority of steel mill products are subject to this export VAT. According to industry sources, changes to the VAT rebate have historically been used by China to manage exports of steel, to encourage exports of high value-added products, and to control those of low value-added and/or resource-intensive commodities.
Industry conference	SMM News	In an article published by a Chinese steel industry group from the "10th Tin Industry Chain Trading Summit" in 2020, it was reported that, in 2020, the Chinese tinplate industry had a total production capacity of 9.1 million metric tons (10.0 million short tons) and demand for tinplate in China was 3.77 million metric tons (4.16 million short tons). The article stated that, in recent years, the Chinese tinplate industry had operated at a capacity utilization rates between 55 to 60 percent.

Source: Steel Orbis, "China cancels export tax rebate for CRC and HDG, duty on HRC discussed, July 29, 2012, at https://www.steelorbis.com/steel-news/latest-news/china-cancels-export-tax-rebate-for-crc-and-hdg-duty-on-hrc-discussed-1209568.htm; CRU Group, "China removes VAT rebate on steel exports," September 30, 2021, at https://www.crugroup.com/knowledge-and-insights/insights/2021/china-removes-vat-rebate-on-steel-exports/#:~:text=Historically%2C%20China%20has%20provided%20a,cost%20of%20exporting%20steel%20products. SMM News, "2020 (10th) Tin Industry chain Trading Summit invites you to explore the future trend of tin market!," October 29, 2020, at https://news.metal.com/newscontent/101228540/2020-10th-tin-industry-chain-trading-summit-invites-you-to-explore-the-future-trend-of-tin-market.

Changes in operations

Producers in China were asked to report any change in the character of their operations or organization relating to the production of tin mill products since 2019. One of the six producers reported it had experienced such changes. Table VII-2c presents the changes identified by this producer.

In addition, Shougang Casey reported that the COVID-19 pandemic ***. Baoshan, Jintai Packing, and Wisco-Nippon further reported *** following the COVID-19 outbreak. They noted that "***."

Table VII-2c
Tin mill products: Reported changes in operations in China since January 1, 2019, by firm

Item	Firm name and accompanying narrative response
Expansions	***

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

Operations on tin mill products

Table VII-2d presents foreign producers' installed and practical overall capacity and production on the same equipment used to produce tin mill products. Responding foreign producers reported ***.

Table VII-2d
Tin mill products: Producers in China installed and practical capacity and production on the same equipment as subject production, by period

Capacity and production in short tons; utilization in percent

Item	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Installed overall	Capacity	***	***	***	***	***
Installed overall	Production	***	***	***	***	***
Installed overall	Utilization	***	***	***	***	***
Practical overall	Capacity	***	***	***	***	***
Practical overall	Production	***	***	***	***	***
Practical overall	Utilization	***	***	***	***	***
Practical tin mill products	Capacity	***	***	***	***	***
Practical tin mill products	Production	***	***	***	***	***
Practical tin mill products	Utilization	***	***	***	***	***

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

Note: Installed overall production capacity is the level of production that a firm's establishment(s) could have attained, assuming the firm's optimal product mix, and based solely on existing capital investments, i.e., machinery and equipment that is in place and ready to operate. This capacity measure does not account for other constraints to production such as existing workforce constraints, availability of raw materials, or downtime for maintenance, repair, and clean-up. This capacity measure is sometimes referred to as "nameplate" or "theoretical" capacity in some industries.

Note: Practical overall production capacity is the level of production that a firm's establishment(s) could reasonably have expected to attain, accounting for the firm's actual product mix over the period for which data were collected. This capacity measure is based on not only existing capital investments, i.e., machinery and equipment that is in place and ready to operate but also non-capital investment constraints, such as (1) normal operating conditions, including normal downtime for maintenance, repair, and cleanup; (2) the firm's existing in-place and readily available labor force; (3) availability of material inputs; and (4) any other constraints that may have limited the firm's ability to produce the reported products. Importantly, this capacity measure is the maximum "practical" production a firm could have achieved without hiring new personnel or expanding the number of shifts operated in the period.

Table VII-2e presents information on the tin mill products operations of the responding producers and exporters in China. Capacity, production, and capacity utilization increased during 2019-21. Capacity and production are projected to be higher in 2023 as compared to 2021; the utilization ratio, however, is projected to be lower in 2023 as compared to 2021. End-of-period inventories increased *** percent during 2019-21 and they are projected to be higher in 2023 as compared to 2021. These firms' exports to the United States as a share of their total shipments ranged between *** percent in 2019 and *** percent in 2021. Exports to the United States increased *** percent during 2019-21. However, they are projected to be lower in 2023 as compared to 2021.

Table VII-2e
Tin mill products: Data on industry in China, by period

Quantity in short tons

Item	2019	2020	2021
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-2e Continued
Tin mill products: Data on industry in China, by period

Quantity in short tons

Item	Jan-Sep 2021	Jan-Sep 2022	Projection 2022	Projection 2023
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-2e Continued
Tin mill products: Data on industry in China, by period

Share and ratio in percent

Item	2019	2020	2021
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	***	***	***

Table continued.

Table VII-2e Continued
Tin mill products: Data on industry in China, by period

Share and ratio in percent

Item	Jan-Sep 2021	Jan-Sep 2022	Projection 2022	Projection 2023
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.

Table VII-2f presents foreign producers reported narrative regarding practical production constraints.

Table VII-2f
Tin mill products: Producers in China reported production constraints, by firm

Item	Firm name and accompanying narrative response on production constraints
Production bottlenecks	***
Storage capacity	***
Logistics/transportation	***
Other constraints	***
Other constraints	***

Source: Compiled from data submitted in response Commission questionnaires.

Exports

According to GTA, the leading export markets for tin- and chromium-coated steel sheet, which includes tin mill products, from China are Italy, Mexico, and Thailand (table VII-2g). During 2021, the United States was the fourth-largest export market destination for tin- and chromium-coated steel sheet from China, accounting for 7.2 percent.

Table VII-2g
Tin- and chromium-coated steel sheet: Exports from China, by destination market and period

Quantity in short tons; value in 1,000 dollars

Destination market	Measure	2019	2020	2021
United States	Quantity	93,786	93,528	134,421
Italy	Quantity	188,004	214,865	202,968
Mexico	Quantity	20,922	55,104	146,252
Thailand	Quantity	198,804	152,198	141,640
South Africa	Quantity	67,958	69,279	128,608
United Arab Emirates	Quantity	51,896	27,893	91,550
Spain	Quantity	57,030	79,147	84,986
Philippines	Quantity	59,100	60,827	67,149
Malaysia	Quantity	72,631	61,720	50,200
All other destination markets	Quantity	730,181	753,205	817,934
All destination markets	Quantity	1,540,313	1,567,765	1,865,708
United States	Value	70,511	62,976	141,181
Italy	Value	140,098	149,062	219,239
Mexico	Value	16,256	38,500	178,333
Thailand	Value	153,556	104,826	153,274
South Africa	Value	52,761	47,711	141,116
United Arab Emirates	Value	38,346	19,311	93,217
Spain	Value	44,236	54,938	85,293
Philippines	Value	46,757	45,463	72,774
Malaysia	Value	59,923	44,936	54,893
All other destination markets	Value	577,622	551,247	905,204
All destination markets	Value	1,200,067	1,118,970	2,044,524

Table continued.

Table VII-2g Continued
Tin- and chromium-coated steel sheet: Exports from China, by destination market and period

Unit value in dollars per short ton; share in percent

Destination market	Measure	2019	2020	2021
United States	Unit value	752	673	1,050
Italy	Unit value	745	694	1,080
Mexico	Unit value	777	699	1,219
Thailand	Unit value	772	689	1,082
South Africa	Unit value	776	689	1,097
United Arab Emirates	Unit value	739	692	1,018
Spain	Unit value	776	694	1,004
Philippines	Unit value	791	747	1,084
Malaysia	Unit value	825	728	1,093
All other destination markets	Unit value	791	732	1,107
All destination markets	Unit value	779	714	1,096
United States	Share of quantity	6.1	6.0	7.2
Italy	Share of quantity	12.2	13.7	10.9
Mexico	Share of quantity	1.4	3.5	7.8
Thailand	Share of quantity	12.9	9.7	7.6
South Africa	Share of quantity	4.4	4.4	6.9
United Arab Emirates	Share of quantity	3.4	1.8	4.9
Spain	Share of quantity	3.7	5.0	4.6
Philippines	Share of quantity	3.8	3.9	3.6
Malaysia	Share of quantity	4.7	3.9	2.7
All other destination markets	Share of quantity	47.4	48.0	43.8
All destination markets	Share of quantity	100.0	100.0	100.0

Source: Official exports statistics under HS subheadings 7210.11, 7210.12, 7210.50, and 7212.10 as reported by China Customs in the Global Trade Atlas database, accessed February 8, 2023.

Note: United States is shown at the top, all remaining top export destinations shown in descending order of 2021 data.

The industry in Germany

The Commission issued a foreign producers' or exporters' questionnaires to one firm believed to produce and/or export tin mill products from Germany.[8] The Commission received one response from thyssenkrupp Rasselstein GmbH ("thyssenkrupp"). Thyssenkrupp estimates that it accounted for *** percent of tin mill products production in Germany in 2021. It also estimates that its exports to the United States accounted for *** percent of total exports of subject merchandise from Germany to the United States in 2021. Table VII-3a presents summary data for responding producers and exporters in Germany during 2021.

Table VII-3a
Tin mill products: Summary data for German producer thyssenkrupp, 2021

Quantity in short tons; share in percent

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)
thyssenkrupp	***	***	***	***	***	***
All firms	***	***	***	***	***	***

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

[8] This firm was identified through a review of information submitted in the petitions and presented in third-party sources.

Table VII-3b presents events in Germany's tin mill products industry since January 1, 2019.

Table VII-3b
Tin mill products: Important industry events in Germany since 2019

Item	Firm	Event
Capital investment	thyssenkrupp Rasselstein GmbH	Thyssenkrupp Rasselstein GmbH currently has production capacity to produce 1.5 million metric tons (1.7 million short tons) of tin mill products per year at its steel mill in Andernach. On September 20, 2022, thyssenkrupp announced that it completed construction of a new coating line after three years of work. The company invested approximately €120 million ($128 million) in the project, which will allow it to produce thinner and wider chrome-plated sheet steel products.

Source: Thyssenkrupp Rasselstein GmbH, "The world's most advanced coating technology for packaging steel: Coating line 13 is to start operation at thyssenkrupp Rasselstein GmbH in Andernach on 17 September 2022," September 17, 2022, at The world's most advanced coating technology for packaging steel: Coating line 13 is to start operation at thyssenkrupp Rasselstein GmbH in Andernach on 17 September 2022 (thyssenkrupp-steel.com); Thyssenkrupp Rasselstein GmbH, "100 years Rasselstein in Andernach," at https://www.thyssenkrupp-steel.com/en/newsroom/highlights/100-jahre-rasselstein-in-andernach.html, retrieved February 17, 2023.

Changes in operations

Thyssenkrupp was asked to report any change in the character of its operations or organization relating to the production of tin mill products since 2019. Thyssenkrupp indicated in its questionnaires that it had experienced such changes. Table VII-3c presents the changes identified by the firm. Thyssenkrupp further reported that it ***. In terms of the COVID-19 pandemic, thyssenkrupp reported that it ***.

Table VII-3c
Tin mill products: thyssenkrupp's reported changes in operations since January 1, 2019

Item	Firm name and accompanying narrative response
Weather related or force majeure events	***

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

Operations on tin mill products

Table VII-3d presents thyssenkrupp's installed and practical overall capacity and production on the same equipment used to produce tin mill products.

Table VII-3d
Tin mill products: thyssenkrupp's installed and practical capacity and production on the same equipment as subject production, by period

Capacity and production in short tons; utilization in percent

Item	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Installed overall	Capacity	***	***	***	***	***
Installed overall	Production	***	***	***	***	***
Installed overall	Utilization	***	***	***	***	***
Practical overall	Capacity	***	***	***	***	***
Practical overall	Production	***	***	***	***	***
Practical overall	Utilization	***	***	***	***	***
Practical tin mill products	Capacity	***	***	***	***	***
Practical tin mill products	Production	***	***	***	***	***
Practical tin mill products	Utilization	***	***	***	***	***

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

Note: Installed overall production capacity is the level of production that a firm's establishment(s) could have attained, assuming the firm's optimal product mix, and based solely on existing capital investments, i.e., machinery and equipment that is in place and ready to operate. This capacity measure does not account for other constraints to production such as existing workforce constraints, availability of raw materials, or downtime for maintenance, repair, and clean-up. This capacity measure is sometimes referred to as "nameplate" or "theoretical" capacity in some industries.

Note: Practical overall production capacity is the level of production that a firm's establishment(s) could reasonably have expected to attain, accounting for the firm's actual product mix over the period for which data were collected. This capacity measure is based on not only existing capital investments, i.e., machinery and equipment that is in place and ready to operate but also non-capital investment constraints, such as (1) normal operating conditions, including normal downtime for maintenance, repair, and cleanup; (2) the firm's existing in-place and readily available labor force; (3) availability of material inputs; and (4) any other constraints that may have limited the firm's ability to produce the reported products. Importantly, this capacity measure is the maximum "practical" production a firm could have achieved without hiring new personnel or expanding the number of shifts operated in the period.

Table VII-3e presents information on thyssenkrupp's tin mill products operations. The firm's capacity, production, and capacity utilization ratio remained steady during 2019-21. All three metrics are projected, however, to be higher in 2023 as compared to 2021. End-of-period inventories decreased *** percent during 2019-21 and are projected to be lower in 2023 as compared to 2021. The firm's exports to the United States as a share of its total shipments ranged between *** percent in 2019 and *** percent in 2021. Exports to the United States increased *** percent during 2019-21 and are projected to be higher in 2023 as compared to 2021.

Table VII-3e
Tin mill products: Data on thyssenkrupp, by period

Quantity in short tons

Item	2019	2020	2021
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-3e Continued
Tin mill products: Data on thyssenkrupp, by period

Quantity in short tons

Item	Jan-Sep 2021	Jan-Sep 2022	Projection 2022	Projection 2023
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-3e Continued
Tin mill products: Data on thyssenkrupp, by period

Share and ratio in percent

Item	2019	2020	2021
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	***	***	***

Table continued.

Table VII-3e Continued
Tin mill products: Data on thyssenkrupp, by period

Share and ratio in percent

Item	Jan-Sep 2021	Jan-Sep 2022	Projection 2022	Projection 2023
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. Zeroes, null values, and undefined calculations are suppressed and shown as “---“.

Alternative products

As shown in table VII-3f, thyssenkrupp reported that *** on the same equipment and machinery used to produce tin mill products.

Table VII-3f
Tin mill products: thyssenkrupp's overall capacity and production on the same equipment as subject production, by period

Quantity in short tons; shares in percent

Production type	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Tin mill products	Quantity	***	***	***	***	***
Excluded tin mill products	Quantity	***	***	***	***	***
Other products	Quantity	***	***	***	***	***
All out-of-scope products	Quantity	***	***	***	***	***
All products	Quantity	***	***	***	***	***
Tin mill products	Share	***	***	***	***	***
Excluded tin mill products	Share	***	***	***	***	***
Other products	Share	***	***	***	***	***
All out-of-scope products	Share	***	***	***	***	***
All products	Share	***	***	***	***	***

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

Exports

According to GTA, the leading export markets for tin- and chromium-coated steel sheet, which includes tin mill products, from Germany are Italy, Russia, and the United States (table VII-3g). During 2021, the United States was the top export market destination for tin- and chromium-coated steel sheet from Germany, accounting for 25.1 percent, followed by the Russia (4.6 percent) and Italy (4.4 percent).

Table VII-3g
Tin- and chromium-coated steel sheet: Exports from Germany, by destination market and period

Quantity in short tons; value in 1,000 dollars

Destination market	Measure	2019	2020	2021
United States	Quantity	166,801	208,309	245,729
Russia	Quantity	50,325	44,476	45,337
Italy	Quantity	30,306	28,180	42,733
Turkey	Quantity	37,949	45,790	41,999
France	Quantity	94,404	69,757	41,490
Czech Republic	Quantity	44,431	44,766	41,310
Poland	Quantity	31,802	38,055	37,276
Spain	Quantity	35,372	38,036	37,003
Netherlands	Quantity	31,836	36,562	29,575
All other destination markets	Quantity	465,215	434,567	417,570
All destination markets	Quantity	988,442	988,498	980,023
United States	Value	156,029	171,582	220,671
Russia	Value	45,187	38,657	44,029
Italy	Value	29,511	25,554	43,600
Turkey	Value	29,788	33,251	39,647
France	Value	78,928	60,639	41,920
Czech Republic	Value	42,953	40,030	40,359
Poland	Value	32,558	38,171	38,141
Spain	Value	34,324	35,468	38,658
Netherlands	Value	32,273	35,147	30,680
All other destination markets	Value	411,365	361,672	406,337
All destination markets	Value	892,915	840,171	944,041

Table continued.

Table VII-3g Continued
Tin- and chromium-coated steel sheet: Exports from Germany, by destination market and period

Unit value in dollars per short ton; share in percent

Destination market	Measure	2019	2020	2021
United States	Unit value	935	824	898
Russia	Unit value	898	869	971
Italy	Unit value	974	907	1,020
Turkey	Unit value	785	726	944
France	Unit value	836	869	1,010
Czech Republic	Unit value	967	894	977
Poland	Unit value	1,024	1,003	1,023
Spain	Unit value	970	932	1,045
Netherlands	Unit value	1,014	961	1,037
All other destination markets	Unit value	884	832	973
All destination markets	Unit value	903	850	963
United States	Share of quantity	16.9	21.1	25.1
Russia	Share of quantity	5.1	4.5	4.6
Italy	Share of quantity	3.1	2.9	4.4
Turkey	Share of quantity	3.8	4.6	4.3
France	Share of quantity	9.6	7.1	4.2
Czech Republic	Share of quantity	4.5	4.5	4.2
Poland	Share of quantity	3.2	3.8	3.8
Spain	Share of quantity	3.6	3.8	3.8
Netherlands	Share of quantity	3.2	3.7	3.0
All other destination markets	Share of quantity	47.1	44.0	42.6
All destination markets	Share of quantity	100.0	100.0	100.0

Source: Official exports statistics under HS subheadings 7210.11, 7210.12, 7210.50, and 7212.10 as reported by Eurostat in the Global Trade Atlas database, accessed February 8, 2023.

Note: United States is shown at the top, all remaining top export destinations shown in descending order of 2021 data.

The industry in the Netherlands

The Commission issued a foreign producers' or exporters' questionnaire to one firm believed to produce and/or export tin mill products from the Netherlands.[9] The Commission received one response from Tata Steel IJmuiden Bv ("TSIJ"). TSIJ estimates that it accounted for *** percent of tin mill products production in the Netherlands in 2021. It also estimates that its exports to the United States accounted for *** percent of total exports of subject merchandise from the Netherlands to the United States in 2021. Table VII-4a presents summary data for responding producers and exporters in the Netherlands during 2021.

Table VII-4a
Tin mill products: Summary data for the Netherlands producer TSIJ, 2021

Quantity in short tons; share in percent

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)
TSIJ	***	***	***	***	***	***
All firms	***	***	***	***	***	***

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

[9] This firm was identified through a review of information submitted in the petitions and presented in third-party sources.

Table VII-4b presents events in the Netherlands' tin mill products industry since January 1, 2019.

Table VII-4b
Tin mill products: Important industry events in the Netherlands since 2019

Item	Firm	Event
Capital investment	TSIJ	In October 2021, Tata Steel started a new (third) continuous slab caster at its Ijmuiden steel mill. Tata Steel has the capacity to produce 6.5 million metric tons (7.2 million short tons) of crude steel and 7.5 million metric tons (8.3 million short tons) of flat-rolled steel products per year at the mill. It was unclear how much capacity, if any, the new caster would add. The mill produces downstream hot-dipped galvanized coil on three lines as well as coated flat-rolled steel products and subject tin mill products.

Source: Petition, p.44; Agmetalminer, "Tata Steel Europe starts up new equipment at UK, Netherlands sites," November 3, 2021, at https://agmetalminer.com/2021/11/03/tata-steel-europe-starts-up-new-equipment-at-uk-netherlands-sites/#:~:text=Tata%20Steel%20Europe%20starts%20up%20new%20equipment%20at%20UK%2C%20Netherlands%20sites,-Christopher%20Rivituso%20%7C%20Posted&text=Tata%20Steel%20Europe%20is%20hot,per%20year%2C%20the%20company%20said.

Changes in operations

TSIJ was asked to report any change in the character of its operations or organization relating to the production of tin mill products since 2019. It indicated in its questionnaire that ***. TSIJ further reported that ***.

Operations on tin mill products

Table VII-4c presents TSIJ's installed and practical overall capacity and production on the same equipment used to produce tin mill products. TSIJ reported ***.

Table VII-4c
Tin mill products: TSIJ's installed and practical capacity and production on the same equipment as subject production, by period

Capacity and production in short tons; utilization in percent

Item	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Installed overall	Capacity	***	***	***	***	***
Installed overall	Production	***	***	***	***	***
Installed overall	Utilization	***	***	***	***	***
Practical overall	Capacity	***	***	***	***	***
Practical overall	Production	***	***	***	***	***
Practical overall	Utilization	***	***	***	***	***
Practical tin mill products	Capacity	***	***	***	***	***
Practical tin mill products	Production	***	***	***	***	***
Practical tin mill products	Utilization	***	***	***	***	***

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

Note: Installed overall production capacity is the level of production that a firm's establishment(s) could have attained, assuming the firm's optimal product mix, and based solely on existing capital investments, i.e., machinery and equipment that is in place and ready to operate. This capacity measure does not account for other constraints to production such as existing workforce constraints, availability of raw materials, or downtime for maintenance, repair, and clean-up. This capacity measure is sometimes referred to as "nameplate" or "theoretical" capacity in some industries.

Note: Practical overall production capacity is the level of production that a firm's establishment(s) could reasonably have expected to attain, accounting for the firm's actual product mix over the period for which data were collected. This capacity measure is based on not only existing capital investments, i.e., machinery and equipment that is in place and ready to operate but also non-capital investment constraints, such as (1) normal operating conditions, including normal downtime for maintenance, repair, and cleanup; (2) the firm's existing in-place and readily available labor force; (3) availability of material inputs; and (4) any other constraints that may have limited the firm's ability to produce the reported products. Importantly, this capacity measure is the maximum "practical" production a firm could have achieved without hiring new personnel or expanding the number of shifts operated in the period.

Table VII-4d presents information on TSIJ's tin mill products operations. During 2019-21, TSIJ's capacity decreased (*** percent), while its production and capacity utilization ratio increased *** percent and *** percentage points, respectively. Inversely, capacity is projected to be higher in 2023 as compared to 2021, while production and the utilization ratio are projected to be lower in 2023 as compared to 2021. End-of-period inventories increased *** percent during 2019-21 and are projected to be higher in 2023 as compared to 2021. The firm's exports to the United States as a share of its total shipments ranged between *** and *** percent during 2019-21. Exports to the United States decreased *** percent during 2019-21 and are projected to be lower in 2023 as compared to 2021.

Table VII-4d
Tin mill products: Data on TSIJ, by period

Quantity in short tons

Item	2019	2020	2021
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-4d Continued
Tin mill products: Data on TSIJ, by period

Quantity in short tons

Item	Jan-Sep 2021	Jan-Sep 2022	Projection 2022	Projection 2023
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-4d Continued
Tin mill products: Data on TSIJ, by period

Share and ratio in percent

Item	2019	2020	2021
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	***	***	***

Table continued.

Table VII-4d Continued
Tin mill products: Data on TSIJ, by period

Share and ratio in percent

Item	Jan-Sep 2021	Jan-Sep 2022	Projection 2022	Projection 2023
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. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table VII-4e presents TSIJ's reported narrative regarding practical production constraints.

Table VII-4e
Tin mill products: TSIJ's reported production constraints

Item	Firm name and accompanying narrative response on production constraints
Other constraints	***

Source: Compiled from data submitted in response Commission questionnaires.

Exports

According to GTA, the leading export markets for tin- and chromium-coated steel sheet, which includes tin mill products, from the Netherlands are Germany, Italy, and the United States (table VII-4f). During 2021, the United States was the top export market destination for tin- and chromium-coated steel sheet from the Netherlands, accounting for 37.2 percent, followed by Italy (6.9 percent) and Germany (6.7 precent).

Table VII-4f
Tin- and chromium-coated steel sheet: Exports from the Netherlands, by destination market and period

Quantity in short tons; value in 1,000 dollars

Destination market	Measure	2019	2020	2021
United States	Quantity	304,952	240,758	265,624
Italy	Quantity	82,538	76,700	49,478
Germany	Quantity	20,901	33,457	47,532
Spain	Quantity	41,727	56,793	44,727
Belgium	Quantity	50,981	44,417	32,429
Brazil	Quantity	25,767	22,221	26,988
France	Quantity	46,933	43,612	26,133
Mexico	Quantity	9,201	16,397	22,212
India	Quantity	8,283	9,543	19,003
All other destination markets	Quantity	170,512	158,637	180,058
All destination markets	Quantity	761,794	702,535	714,184
United States	Value	299,677	268,256	318,038
Italy	Value	75,503	65,621	48,665
Germany	Value	19,795	29,054	45,621
Spain	Value	42,233	51,854	47,475
Belgium	Value	25,044	20,285	23,235
Brazil	Value	22,009	18,012	23,535
France	Value	43,744	37,263	25,941
Mexico	Value	7,841	13,854	22,807
India	Value	3,783	4,038	11,388
All other destination markets	Value	161,967	144,801	192,954
All destination markets	Value	701,593	653,037	759,660

Table continued.

Table VII-4f Continued
Tin- and chromium-coated steel sheet: Exports from the Netherlands, by destination market and period

Unit value in dollars per short ton; share in percent

Destination market	Measure	2019	2020	2021
United States	Unit value	983	1,114	1,197
Italy	Unit value	915	856	984
Germany	Unit value	947	868	960
Spain	Unit value	1,012	913	1,061
Belgium	Unit value	491	457	716
Brazil	Unit value	854	811	872
France	Unit value	932	854	993
Mexico	Unit value	852	845	1,027
India	Unit value	457	423	599
All other destination markets	Unit value	950	913	1,072
All destination markets	Unit value	921	930	1,064
United States	Share of quantity	40.0	34.3	37.2
Italy	Share of quantity	10.8	10.9	6.9
Germany	Share of quantity	2.7	4.8	6.7
Spain	Share of quantity	5.5	8.1	6.3
Belgium	Share of quantity	6.7	6.3	4.5
Brazil	Share of quantity	3.4	3.2	3.8
France	Share of quantity	6.2	6.2	3.7
Mexico	Share of quantity	1.2	2.3	3.1
India	Share of quantity	1.1	1.4	2.7
All other destination markets	Share of quantity	22.4	22.6	25.2
All destination markets	Share of quantity	100.0	100.0	100.0

Source: Official exports statistics under HS subheadings 7210.11, 7210.12, 7210.50, and 7212.10 as reported by Eurostat in the Global Trade Atlas database, accessed February 8, 2023.

Note: United States is shown at the top, all remaining top export destinations shown in descending order of 2021 data.

The industry in South Korea

The Commission issued foreign producers' or exporters' questionnaires to two firms believed to produce and/or export tin mill products from South Korea.[10] Usable responses to the Commission's questionnaire were received from two firms: TCC Steel ("TCC") and KG Dongbu Steel Co., Ltd. ("KG Steel"). These firms estimate that they accounted for *** percent of tin mill products production in South Korea in 2021. These firms also estimate that their exports to the United States accounted for *** percent of total exports of subject merchandise from South Korea to the United States in 2021. Table VII-5a presents summary data for responding producers and exporters in South Korea during 2021.

Table VII-5a
Tin mill products: Summary data for producers in South Korea, 2021

Quantity in short tons; share in percent

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)
TCC Steel	***	***	***	***	***	***
KG Steel	***	***	***	***	***	***
All firms	***	***	***	***	***	***

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

[10] These firms were identified through a review of information submitted in the petitions and presented in third-party sources.

Table VII-5b presents events in the South Korea tin mill products industry since January 1, 2019.

Table VII-5b
Tin mill products: Important industry events in South Korea since 2019

Item	Firm	Event
Corporate reorganization	KG Steel	July 2019— KG Steel received a $340 million capital infusion as the former Dongbu Steel Co. Ltd. emerged from joint creditors management under new corporate owner KG Group. Parastatal Korea Development Bank ("KDB"), the largest shareholder, and other creditor banks signed a final corporate equity exchange agreement with KG Group and PEF Cactus Private Equity ("Cactus"). Under the agreement, Dongbu Steel will issue 7.2 million new equity shares, with 4.0 million shares for KG Steel and 3.2 million shares for Cactus through a debt-for-equity swap.
New facility announcement	KG Steel	November 2020— After deciding to shutter its steelmaking operations in Jiangsu Province, China, KG Steel announced reaching agreement with South Chungcheong Province for its three-year plan to construct (starting in 2021) a new steel processing facility in Dangjin, South Korea. This facility will produce cold-rolled and plated steel products, although there is no indication of whether this includes tin mill products.

Source: Kang Gye-man and Lee Ha-yeon, "Dongbu Steel Bolsters Capital Under New Owner and Debt Relief," Pulse by Maeil Business News Korea, July 14, 2019, https://pulsenews.co.kr/view.php?year=2019&no=418525;
Nam Hyun-woo, "KG Group to Acquire Dongbu Steel," Korea Times, April 4, 2019, https://www.koreatimes.co.kr/www/tech/2022/10/419_266618.html;
Lim Chang-won, "KG Dongbu Steel Relocates Plant in China to Home Base in S. Korea," Aju Business Daily, November 30, 2020, https://www.ajudaily.com/view/20201103094832399.

Changes in operations

Producers in South Korea were asked to report any change in the character of their operations or organization relating to the production of tin mill products since 2019. One of the two responding producers reported it had experienced such changes. Table VII-5c presents the changes identified by the producer.

Table VII-5c
Tin mill products: Reported changes in operations in South Korea since January 1, 2019, by firm

Item	Firm name and accompanying narrative response
Other	***

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

Operations on tin mill products

Table VII-5d presents foreign producers' installed and practical overall capacity and production on the same equipment used to produce tin mill products.

Table VII-5d
Tin mill products: Producers in South Korea installed and practical capacity and production on the same equipment as subject production, by period

Capacity and production in short tons; utilization in percent

Item	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Installed overall	Capacity	***	***	***	***	***
Installed overall	Production	***	***	***	***	***
Installed overall	Utilization	***	***	***	***	***
Practical overall	Capacity	***	***	***	***	***
Practical overall	Production	***	***	***	***	***
Practical overall	Utilization	***	***	***	***	***
Practical tin mill products	Capacity	***	***	***	***	***
Practical tin mill products	Production	***	***	***	***	***
Practical tin mill products	Utilization	***	***	***	***	***

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

Note: Installed overall production capacity is the level of production that a firm's establishment(s) could have attained, assuming the firm's optimal product mix, and based solely on existing capital investments, i.e., machinery and equipment that is in place and ready to operate. This capacity measure does not account for other constraints to production such as existing workforce constraints, availability of raw materials, or downtime for maintenance, repair, and clean-up. This capacity measure is sometimes referred to as "nameplate" or "theoretical" capacity in some industries.

Note: Practical overall production capacity is the level of production that a firm's establishment(s) could reasonably have expected to attain, accounting for the firm's actual product mix over the period for which data were collected. This capacity measure is based on not only existing capital investments, i.e., machinery and equipment that is in place and ready to operate but also non-capital investment constraints, such as (1) normal operating conditions, including normal downtime for maintenance, repair, and cleanup; (2) the firm's existing in-place and readily available labor force; (3) availability of material inputs; and (4) any other constraints that may have limited the firm's ability to produce the reported products. Importantly, this capacity measure is the maximum "practical" production a firm could have achieved without hiring new personnel or expanding the number of shifts operated in the period.

Table VII-5e presents information on the tin mill products operations of the responding producers and exporters in South Korea. These firms' capacity, production, and capacity utilization decreased irregularly during 2019-21. Their capacity is projected to higher in 2023 as compared to 2021, while both their production and utilization are projected to be lower in 2023 as compared to 2021. End-of-period inventories decreased *** percent during 2019-21; however, they are projected to be higher in 2023 as compared to 2021. These firm's exports to the United States decreased *** percent during 2019-21 and their exports to the United States are projected to be lower in 2023 as compared to 2021. During the period of investigation, these firms' exports to the United States as a share of their total shipments ranged between *** percent (2020) and *** percent (January-September 2022).

Table VII-5e
Tin mill products: Data on industry in South Korea, by period

Quantity in short tons

Item	2019	2020	2021
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-5e Continued
Tin mill products: Data on industry in South Korea, by period

Quantity in short tons

Item	Jan-Sep 2021	Jan-Sep 2022	Projection 2022	Projection 2023
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-5e Continued
Tin mill products: Data on industry in South Korea, by period

Share and ratio in percent

Item	2019	2020	2021
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	***	***	***

Table continued.

Table VII-5e Continued
Tin mill products: Data on industry in South Korea, by period

Share and ratio in percent

Item	Jan-Sep 2021	Jan-Sep 2022	Projection 2022	Projection 2023
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. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table VII-5f presents foreign producers reported narrative regarding practical production constraints.

Table VII-5f
Tin mill products: Producers in South Korea reported production constraints, by firm

Item	Firm name and accompanying narrative response on production constraints
Other constraints	***

Source: Compiled from data submitted in response Commission questionnaires.

Alternative products

As shown in table VII-5g, responding firms in South Korea reported *** on the same equipment and machinery used to produce tin mill products. ***.

Table VII-5g
Tin mill products: Producers in South Korea overall production on the same equipment as subject production, by period

Quantity in short tons; share in percent

Production type	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Tin mill products	Quantity	***	***	***	***	***
Excluded tin mill products	Quantity	***	***	***	***	***
Other products	Quantity	***	***	***	***	***
All out-of-scope products	Quantity	***	***	***	***	***
All products	Quantity	***	***	***	***	***
Tin mill products	Share	***	***	***	***	***
Excluded tin mill products	Share	***	***	***	***	***
Other products	Share	***	***	***	***	***
All out-of-scope products	Share	***	***	***	***	***
All products	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. Zeroes, null values, and undefined calculations are suppressed and shown as “---“.

Exports

According to GTA, the leading export markets for tin- and chromium-coated steel sheet, which includes tin mill products, from South Korea are Indonesia, Thailand, and the United States (table VII-5h). During 2021, the United States was the second-largest export market for tin- and chromium-coated steel sheet from South Korea, accounting for 16.8 percent, followed by Indonesia, accounting for 13.9 percent.

Table VII-5h
Tin- and chromium-coated steel sheet: Exports from South Korea, by destination market and period

Quantity in short tons; value in 1,000 dollars

Destination market	Measure	2019	2020	2021
United States	Quantity	87,819	83,349	78,615
Thailand	Quantity	142,380	128,770	83,753
Indonesia	Quantity	61,696	63,531	64,968
Philippines	Quantity	30,707	39,188	36,843
Saudi Arabia	Quantity	17,412	22,224	31,112
Italy	Quantity	28,509	29,988	21,913
Japan	Quantity	23,725	19,607	21,210
Taiwan	Quantity	28,928	28,010	19,581
Mexico	Quantity	7,510	28,531	19,406
All other destination markets	Quantity	118,024	125,354	90,566
All destination markets	Quantity	546,709	568,551	467,967
United States	Value	94,582	81,126	95,866
Thailand	Value	119,928	93,999	92,763
Indonesia	Value	56,255	51,005	75,141
Philippines	Value	26,487	30,843	41,922
Saudi Arabia	Value	12,717	14,332	32,347
Italy	Value	22,819	22,585	22,682
Japan	Value	18,356	15,594	29,444
Taiwan	Value	21,802	19,191	16,979
Mexico	Value	6,807	19,843	25,208
All other destination markets	Value	98,687	94,285	105,810
All destination markets	Value	478,439	442,804	538,161

Table continued.

Table VII-5h Continued
Tin- and chromium-coated steel sheet: Exports from South Korea, by destination market and period

Unit value in dollars per short ton; share in percent

Destination market	Measure	2019	2020	2021
United States	Unit value	1,077	973	1,219
Thailand	Unit value	842	730	1,108
Indonesia	Unit value	912	803	1,157
Philippines	Unit value	863	787	1,138
Saudi Arabia	Unit value	730	645	1,040
Italy	Unit value	800	753	1,035
Japan	Unit value	774	795	1,388
Taiwan	Unit value	754	685	867
Mexico	Unit value	906	696	1,299
All other destination markets	Unit value	836	752	1,168
All destination markets	Unit value	875	779	1,150
United States	Share of quantity	16.1	14.7	16.8
Thailand	Share of quantity	26.0	22.6	17.9
Indonesia	Share of quantity	11.3	11.2	13.9
Philippines	Share of quantity	5.6	6.9	7.9
Saudi Arabia	Share of quantity	3.2	3.9	6.6
Italy	Share of quantity	5.2	5.3	4.7
Japan	Share of quantity	4.3	3.4	4.5
Taiwan	Share of quantity	5.3	4.9	4.2
Mexico	Share of quantity	1.4	5.0	4.1
All other destination markets	Share of quantity	21.6	22.0	19.4
All destination markets	Share of quantity	100.0	100.0	100.0

Source: Official exports statistics under HS subheadings 7210.11, 7210.12, 7210.50, and 7212.10 as reported by the Korea Trade Statistics Promotion Institute (KTSPI) in the Global Trade Atlas database, accessed February 8, 2023.

Note: United States is shown at the top, all remaining top export destinations shown in descending order of 2021 data.

The industry in Taiwan

The Commission issued a foreign producers' or exporters' questionnaire to one firm believed to produce and/or export tin mill products from Taiwan.[11] The Commission received one response from Ton Yi Industrial Corp. ("Ton Yi"). Ton Yi estimates that it accounted for *** percent of tin mill products production in Taiwan in 2021. It also estimates that its exports to the United States accounted for *** percent of total exports of subject merchandise from Taiwan to the United States in 2021. Table VII-6a presents summary data for responding producers and exporters in Taiwan during 2021.

Table VII-6a
Tin mill products: Summary data for Taiwan producer Ton Yi, 2021

Quantity in short tons; share in percent

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)
Ton Yi	***	***	***	***	***	***
All firms	***	***	***	***	***	***

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

Changes in operations

Ton Yi was asked to report any change in the character of its operations or organization relating to the production of tin mill products since 2019. It indicated in its questionnaire that it had experienced such changes. Table VII-6b presents the changes identified by Ton Yi.

Table VII-6b
Tin mill products: Ton Yi's reported changes in operations since January 1, 2019, by firm

Item	Firm name and accompanying narrative response
Acquisitions	***

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

[11] This firm was identified through a review of information submitted in the petitions and presented in third-party sources.

Operations on tin mill products

Table VII-6c presents Ton Yi's installed and practical overall capacity and production on the same equipment used to produce tin mill products.

Table VII-6c
Tin mill products: Ton Yi's installed and practical capacity and production on the same equipment as subject production, by period

Capacity and production in short tons; utilization in percent

Item	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Installed overall	Capacity	***	***	***	***	***
Installed overall	Production	***	***	***	***	***
Installed overall	Utilization	***	***	***	***	***
Practical overall	Capacity	***	***	***	***	***
Practical overall	Production	***	***	***	***	***
Practical overall	Utilization	***	***	***	***	***
Practical tin mill products	Capacity	***	***	***	***	***
Practical tin mill products	Production	***	***	***	***	***
Practical tin mill products	Utilization	***	***	***	***	***

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

Note: Installed overall production capacity is the level of production that a firm's establishment(s) could have attained, assuming the firm's optimal product mix, and based solely on existing capital investments, i.e., machinery and equipment that is in place and ready to operate. This capacity measure does not account for other constraints to production such as existing workforce constraints, availability of raw materials, or downtime for maintenance, repair, and clean-up. This capacity measure is sometimes referred to as "nameplate" or "theoretical" capacity in some industries.

Note: Practical overall production capacity is the level of production that a firm's establishment(s) could reasonably have expected to attain, accounting for the firm's actual product mix over the period for which data were collected. This capacity measure is based on not only existing capital investments, i.e., machinery and equipment that is in place and ready to operate but also non-capital investment constraints, such as (1) normal operating conditions, including normal downtime for maintenance, repair, and cleanup; (2) the firm's existing in-place and readily available labor force; (3) availability of material inputs; and (4) any other constraints that may have limited the firm's ability to produce the reported products. Importantly, this capacity measure is the maximum "practical" production a firm could have achieved without hiring new personnel or expanding the number of shifts operated in the period.

Table VII-6d presents information on Ton Yi's tin mill products operations. Ton Yi's capacity was constant, at *** short tons, during 2019-21. Its production and capacity utilization, by comparison, increased irregularly during the same period. Capacity is projected to be the same in 2023 as in 2021; production and utilization are projected to be higher in 2023 as compared to 2021. End-of-period inventories increased *** percent during 2019-21 and are projected be higher in 2023 as compared to 2021. Ton Yi's exports to the United States increased *** percent during 2019-21; however, they are expected to be lower in 2023 as compared with 2021. During the period of investigation, the firm's exports to the United States as a share of its total shipments ranged between *** percent (2019) and *** percent (January-September 2022).

Table VII-6d
Tin mill products: Data on Ton Yi, by period

Quantity in short tons

Item	2019	2020	2021
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-6d Continued
Tin mill products: Data on Ton Yi, by period

Quantity in short tons

Item	Jan-Sep 2021	Jan-Sep 2022	Projection 2022	Projection 2023
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-6d Continued
Tin mill products: Data on Ton Yi, by period

Share and ratio in percent

Item	2019	2020	2021
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	***	***	***

Table continued.

Table VII-6d Continued
Tin mill products: Data on Ton Yi, by period

Share and ratio in percent

Item	Jan-Sep 2021	Jan-Sep 2022	Projection 2022	Projection 2023
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.

Table VII-6e presents Ton Yi's reported narrative regarding practical production constraints.

Table VII-6e
Tin mill products: Ton Yi's reported production constraints

Item	Firm name and accompanying narrative response on production constraints
Other constraints	***

Source: Compiled from data submitted in response Commission questionnaires.

Alternative products

As shown in table VII-6f, Ton Yi reported *** on the same equipment and machinery used to produce tin mill products. The firm reported "***."

Table VII-6f
Tin mill products: Ton Yi's overall production on the same equipment as subject production, by period

Quantity in short tons; share in percent

Production type	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Tin mill products	Quantity	***	***	***	***	***
Excluded tin mill products	Quantity	***	***	***	***	***
Other products	Quantity	***	***	***	***	***
All out-of-scope products	Quantity	***	***	***	***	***
All products	Quantity	***	***	***	***	***
Tin mill products	Share	***	***	***	***	***
Excluded tin mill products	Share	***	***	***	***	***
Other products	Share	***	***	***	***	***
All out-of-scope products	Share	***	***	***	***	***
All products	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. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Exports

According to GTA, the leading export markets for tin- and chromium-coated steel sheet, which includes tin mill products, from Taiwan are Indonesia, Mexico, and the United States (table VII-6g). During 2021, the United States was the top export market for tin- and chromium-coated steel sheet from Taiwan, accounting for 44.9 percent, followed by Indonesia (10.8 percent) and Mexico (10.4 percent).

Table VII-6g
Tin- and chromium-coated steel sheet: Exports from Taiwan, by destination market and period

Quantity in short tons; value in 1,000 dollars

Destination market	Measure	2019	2020	2021
United States	Quantity	15,721	52,462	88,493
Indonesia	Quantity	20,199	16,748	21,313
Mexico	Quantity	3,728	1,312	20,593
Thailand	Quantity	36,111	12,582	14,846
Australia	Quantity	7,899	11,751	9,688
Philippines	Quantity	14,677	19,190	6,723
Japan	Quantity	10,589	8,924	5,192
Vietnam	Quantity	3,678	2,546	4,666
United Kingdom	Quantity	6,813	6,036	3,859
All other destination markets	Quantity	64,838	69,831	21,788
All destination markets	Quantity	184,253	201,383	197,162
United States	Value	13,074	38,921	95,002
Indonesia	Value	17,697	13,016	27,127
Mexico	Value	2,970	977	24,943
Thailand	Value	30,756	13,442	19,330
Australia	Value	7,725	9,845	10,981
Philippines	Value	11,620	13,746	7,188
Japan	Value	9,429	8,203	5,160
Vietnam	Value	4,324	2,910	4,907
United Kingdom	Value	5,705	4,463	3,942
All other destination markets	Value	52,729	50,580	21,978
All destination markets	Value	156,029	156,103	220,558

Table continued.

Table VII-6g Continued
Tin- and chromium-coated steel sheet: Exports from Taiwan, by destination market and period

Unit value in dollars per short ton; share in percent

Destination market	Measure	2019	2020	2021
United States	Unit value	832	742	1,074
Indonesia	Unit value	876	777	1,273
Mexico	Unit value	797	745	1,211
Thailand	Unit value	852	1,068	1,302
Australia	Unit value	978	838	1,133
Philippines	Unit value	792	716	1,069
Japan	Unit value	890	919	994
Vietnam	Unit value	1,176	1,143	1,052
United Kingdom	Unit value	837	739	1,022
All other destination markets	Unit value	813	724	1,009
All destination markets	Unit value	847	775	1,119
United States	Share of quantity	8.5	26.1	44.9
Indonesia	Share of quantity	11.0	8.3	10.8
Mexico	Share of quantity	2.0	0.7	10.4
Thailand	Share of quantity	19.6	6.2	7.5
Australia	Share of quantity	4.3	5.8	4.9
Philippines	Share of quantity	8.0	9.5	3.4
Japan	Share of quantity	5.7	4.4	2.6
Vietnam	Share of quantity	2.0	1.3	2.4
United Kingdom	Share of quantity	3.7	3.0	2.0
All other destination markets	Share of quantity	35.2	34.7	11.1
All destination markets	Share of quantity	100.0	100.0	100.0

Source: Official exports statistics under HS subheadings 7210.11, 7210.12, 7210.50, and 7212.10 as reported by the Taiwan Directorate General of Customs in the Global Trade Atlas database, accessed February 8, 2023.

Note: United States is shown at the top, all remaining top export destinations shown in descending order of 2021 data.

The industry in Turkey

The Commission issued foreign producers' or exporters' questionnaires to two firms believed to produce and/or export tin mill products from Turkey.[12] Usable responses to the Commission's questionnaire were received from one firm: Tosyali Toyo Çelik A.Ş ("Tosyali Toyo").[13] Tosyali Toyo estimates that it accounted for *** percent of tin mill products production in Turkey in 2021. It also estimates that its exports to the United States accounted for *** percent of total exports of subject merchandise from Turkey to the United States in 2021. Table VII-7a presents summary data for responding producers and exporters in Turkey during 2021.

Table VII-7a
Tin mill products: Summary data for Turkey producer Tosyali Toyo, 2021

Quantity in short tons; share in percent

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)
Tosyali Toyo	***	***	***	***	***	***
All firms	***	***	***	***	***	***

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

[12] These firms were identified through a review of information submitted in the petitions and presented in third-party sources.

[13] The Commission also received a questionnaire from Ereğli Demir ve Çelik Fabrikaları T.A.Ş. ("ERDEMIR"), which reported ***. ERDEMIR's questionnaire, however, was not included the dataset ***.

Table VII-7b presents events in Turkey's tin mill products industry since January 1, 2019.

Table VII-7b
Tin mill products: Important industry events in Turkey since 2019

Item	Firm	Event
New processing equipment	Erdemir	March 2019— Ereğli Demir ve Çelik Fabrikalari T.A.Ş. ("Erdemir") ordered a more precise slab grinding plant for its facility in Zonguldak that produces tin mill products. The new equipment provides for more precise surface and edge grinding capabilities and control, and automatic detection of defects,
Planned capacity expansions	Erdemir	February 2021— Erdemir announced capital investment plans (without specifying the timeframe beyond "in future years") to expand molten iron output by constructing a new blast furnace at its Eregli facility in Zonguldak that produces hot-rolled, cold-rolled and galvanized coils, plate and tinplate.
Planned capacity expansions	Tosyali Toyo	September 2022— Tosyali Toyo Çelik A.Ş., ("Tosyali Toyo") a joint venture between Tosyali Holding LLC (Turkey) and Toyo Kohan Co. Ltd. (Japan), announced a series of capital investments totaling $200 million to double the production capacity (including for tin-free coated steels) of the tin mill at its Osmaniye facility, from the current 325,000 metric tons (358,000 short tons) to 650,000 metric tons (716,000 short tons), with completion and commissioning scheduled for the end of 2023.
Planned capacity expansions	Tosyali Toyo	November 2022— Turkey's Ministry of Environment and Urbanization announced that environmental impact approval is not necessary for Tosyali Toyo to proceed with its planned capital investments to expand the cold-rolling steel capacity at its Osmanive facility from 1.5 million metric tons (1.6 million short tons) to 2.1 million metric tons (2.3 million short tons). This facility cold-rolls and further processes hot-rolled coil into various pickled or coated cold-rolled steel sheet products, including tin coated steel sheet.
Planned capacity expansions	Erdemir	November 2022— Erdemir announced capital investment of $550 million to construct a new iron-ore pellets plant with annual production capacity of 3 million metric tons (3.3 million short tons) from its Bingel-Avnyk iron mine site.

Item	Firm	Event
Production disruptions	Tosyali Toyo	February 2023— Tosyali Toyo's initial assessments did not encounter any serious structural damage from the earthquakes (initially on February 6, with an epicenter at Kahramanmaras in eastern Turkey) to its Osmaniye facility's production equipment or to the electricity and natural-gas supply lines. Over the next couple of weeks, initial trial production runs are planned if further inspections do not encounter any further damage. Due to the extensive damage to the container-handling equipment at the Port of Iskenderun and the extensive repairs necessary to restore roads and railways, alternative logistical arrangements are being considered for rerouting input hot-rolled steel coils and its tin mill products. The facility's trucks and forklifts are being diverted away facility production to assisting with earthquake relief efforts at least over the next couple of months. Moreover, employees remaining in the area are not readily available to resume work. According to Serkan Ersoy, the Export Manager for Tinplate sales, Tosyali Toyo cannot say when full commercial production will be resumed, but not likely until at least the middle of the second quarter of this year. Moreover, the facility's output will be directed to meet the tinplate needs of domestic canned food producers.

Source: Danelli USA, "Erdemir Relies on Danieli Technology for New Slab Inspection and Grinding Plant," March 15, 2019, https://www.danieli-usa.com/en/news/erdemir-relies-danieli-technology-new-slab-inspection-and-grinding-plant_13_402.htm;
Global Energy Monitor ("GEM"), "Erdemir Eregli Steel Plant," April 6, 2022, https://www.gem.wiki/Erdemir_Eregli_steel_plant;
Cenk Can, "Erdemir's 2020 Sales Rise to 8.5 Million MT Despite COVID-19 Pandemic," February 15, 2021, https://eurometal.net/erdemirs-2020-sales-rise-to-8-5-million-mt-despite-covid-19-pandemic/;
Petition, exh. I-37: Steel Orbis, "Tosyalı-Toyo to Double Tin Production Capacity," September 2, 2022;
Petition, exh. VIII-2: Steel Orbis, "Tosyalı-Toyo to Increase CR mill Capacity," November 18, 2022.
Vadim Kolisnichenko, "Turkish Erdemir to Build a Plant for the Production of Pellets for $550 Million," GMK Center, November 4, 2022, https://gmk.center/en/news/turkish-erdemir-to-build-a-plant-for-the-production-of-pellets-for-550-million/;
Tosyalı Toyo posthearing brief, February 13, 2023, exh. 1: "Statement of Serkan Ersoy," February 10, 2023;
Tosyalı Toyo's postconference brief, February 13, 2023, exh. 11: EastFruit, "Turkish Port 'Iskenderun' Severely Damaged Due to the Earthquake," International Logistics, February 9, 2023;
Tosyalı Toyo's postconference brief, February 13, 2023, exh. 12: Can Sezar and Ali Kucukgocman, "Iskenderun Port Resumes Operations After Massive Fire," Reuters, February 10, 2023;
Tosyalı Toyo's postconference brief, February 13, 2023, exh. 15: RailTech, "Railway Services Suspended Following Earthquake in Turkey and Syria," February 7, 2023;
Petitioners' postconference brief, exh. 37: Vadim Kolisnichenko, "Iskenderun Steelmakers Did Not Suffer Significant Damage as a Result of the Earthquake; Steel Plants in the Region Have Temporarily Suspended to Assess Damage and Logistical Capabilities," GMK Center, February 8, 2023.

Changes in operations

Tosyali Toyo was asked to report any change in the character of its operations or organization relating to the production of tin mill products since 2019. Tosyali reported ***. Tosyali Toyo ***.

Operations on tin mill products

Table VII-7c presents Tosyali Toyo's installed and practical overall capacity and production on the same equipment used to produce tin mill products. Tosyali Toyo reported ***.

Table VII-7c
Tin mill products: Tosyali Toyo's installed and practical capacity and production on the same equipment as subject production, by period

Capacity and production in short tons; utilization in percent

Item	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Installed overall	Capacity	***	***	***	***	***
Installed overall	Production	***	***	***	***	***
Installed overall	Utilization	***	***	***	***	***
Practical overall	Capacity	***	***	***	***	***
Practical overall	Production	***	***	***	***	***
Practical overall	Utilization	***	***	***	***	***
Practical tin mill products	Capacity	***	***	***	***	***
Practical tin mill products	Production	***	***	***	***	***
Practical tin mill products	Utilization	***	***	***	***	***

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

Note: Installed overall production capacity is the level of production that a firm's establishment(s) could have attained, assuming the firm's optimal product mix, and based solely on existing capital investments, i.e., machinery and equipment that is in place and ready to operate. This capacity measure does not account for other constraints to production such as existing workforce constraints, availability of raw materials, or downtime for maintenance, repair, and clean-up. This capacity measure is sometimes referred to as "nameplate" or "theoretical" capacity in some industries.

Note: Practical overall production capacity is the level of production that a firm's establishment(s) could reasonably have expected to attain, accounting for the firm's actual product mix over the period for which data were collected. This capacity measure is based on not only existing capital investments, i.e., machinery and equipment that is in place and ready to operate but also non-capital investment constraints, such as (1) normal operating conditions, including normal downtime for maintenance, repair, and cleanup; (2) the firm's existing in-place and readily available labor force; (3) availability of material inputs; and (4) any other constraints that may have limited the firm's ability to produce the reported products. Importantly, this capacity measure is the maximum "practical" production a firm could have achieved without hiring new personnel or expanding the number of shifts operated in the period.

Table VII-7d presents information on Tosyali Toyo's tin mill products operations. Tosyali Toyo's capacity was constant, at *** short tons, during 2019-21. Its production and capacity utilization, by comparison, increased during the same period. Capacity is projected to be the same in 2023 as in 2021; production and capacity utilization are projected to be higher in 2023 as compared with 2021. End-of-period inventories decreased *** percent during 2019-21; however, they are projected to be higher in 2023 than 2021. Tosyali Toyo's exports to the United States increased *** percent during 2019-21 and its exports to the United States are projected to be higher in 2023 than 2021. During the period of investigation, the firm's exports to the United States as a share of its total shipments ranged between *** percent (2019) and *** percent (January-September 2022).

Table VII-7d
Tin mill products: Data on Tosyali Toyo, by period

Quantity in short tons

Item	2019	2020	2021
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-7d Continued
Tin mill products: Data on Tosyali Toyo, by period

Quantity in short tons

Item	Jan-Sep 2021	Jan-Sep 2022	Projection 2022	Projection 2023
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-7d Continued
Tin mill products: Data on Tosyali Toyo, by period

Share and ratio in percent

Item	2019	2020	2021
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	***	***	***

Table continued.

Table VII-7d Continued
Tin mill products: Data on Tosyali Toyo, by period

Share and ratio in percent

Item	Jan-Sep 2021	Jan-Sep 2022	Projection 2022	Projection 2023
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. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table VII-7e presents Tosyali Toyo's reported narrative regarding practical production constraints.

Table VII-7e
Tin mill products: Tosyali Toyo's reported production constraints

Item	Firm name and accompanying narrative response on production constraints
Supply of material inputs	***

Source: Compiled from data submitted in response Commission questionnaires.

Exports

According to GTA, the leading export markets for tin- and chromium-coated steel sheet, which includes tin mill products, from Turkey are Egypt, Iran, Italy, Tunisia, and the United States (table VII-7f). During 2021, the United States was the third-largest export market for tin- and chromium-coated steel sheet from Turkey, accounting for 11.4 percent, followed by Tunisia (10.8 percent) and Iran (10.3 percent).

Table VII-7f
Tin- and chromium-coated steel sheet: Exports from Turkey, by destination market and period

Quantity in short tons; value in 1,000 dollars

Destination market	Measure	2019	2020	2021
United States	Quantity	170	239	20,650
Italy	Quantity	49,690	61,306	38,761
Egypt	Quantity	16,622	26,207	24,275
Tunisia	Quantity	3,653	10,546	19,598
Iran	Quantity	24,790	27,940	18,601
Algeria	Quantity	2,514	10,336	11,005
Bulgaria	Quantity	2,512	328	8,276
Israel	Quantity	616	220	7,435
Greece	Quantity	11,287	5,777	6,642
All other destination markets	Quantity	29,856	32,138	25,452
All destination markets	Quantity	141,712	175,038	180,695
United States	Value	123	168	26,494
Italy	Value	40,750	42,560	49,555
Egypt	Value	13,210	18,873	28,656
Tunisia	Value	3,034	7,702	25,016
Iran	Value	24,267	26,482	21,108
Algeria	Value	2,252	8,559	14,342
Bulgaria	Value	2,114	302	10,567
Israel	Value	558	177	9,576
Greece	Value	8,673	4,114	7,968
All other destination markets	Value	24,681	25,005	29,822
All destination markets	Value	119,660	133,942	223,103

Table continued.

Table VII-7f Continued
Tin- and chromium-coated steel sheet: Exports from Turkey, by destination market and period

Unit value in dollars per short ton; share in percent

Destination market	Measure	2019	2020	2021
United States	Unit value	721	701	1,283
Italy	Unit value	820	694	1,278
Egypt	Unit value	795	720	1,180
Tunisia	Unit value	830	730	1,276
Iran	Unit value	979	948	1,135
Algeria	Unit value	896	828	1,303
Bulgaria	Unit value	841	918	1,277
Israel	Unit value	905	805	1,288
Greece	Unit value	768	712	1,200
All other destination markets	Unit value	827	778	1,172
All destination markets	Unit value	844	765	1,235
United States	Share of quantity	0.1	0.1	11.4
Italy	Share of quantity	35.1	35.0	21.5
Egypt	Share of quantity	11.7	15.0	13.4
Tunisia	Share of quantity	2.6	6.0	10.8
Iran	Share of quantity	17.5	16.0	10.3
Algeria	Share of quantity	1.8	5.9	6.1
Bulgaria	Share of quantity	1.8	0.2	4.6
Israel	Share of quantity	0.4	0.1	4.1
Greece	Share of quantity	8.0	3.3	3.7
All other destination markets	Share of quantity	21.1	18.4	14.1
All destination markets	Share of quantity	100.0	100.0	100.0

Source: Official exports statistics under HS subheadings 7210.11, 7210.12, 7210.50, and 7212.10 as reported by State Institute of Statistics (Turkey) in the Global Trade Atlas database, accessed February 8, 2023.

Note: United States is shown at the top, all remaining top export destinations shown in descending order of 2021 data.

The industry in the United Kingdom

The Commission issued a foreign producers' or exporters' questionnaire to one firm believed to produce and/or export tin mill products from the United Kingdom.[14] The Commission received one questionnaire from Tata Steel UK Ltd. ("TSUK"). TSUK estimates that it accounted for *** percent of tin mill products production in the United Kingdom in 2021. It also estimates that its exports to the United States accounted for *** percent of total exports of subject merchandise from the United Kingdom to the United States in 2021. Table VII-8a presents summary data for responding producers and exporters in the United Kingdom during 2021. Table VII-8b presents summary data for resellers in the United Kingdom during 2021.

Table VII-8a
Tin mill products: Summary data for producers in the United Kingdom, 2021

Quantity in short tons; share in percent

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)
TSUK	***	***	***	***	***	***
All firms	***	***	***	***	***	***

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

Table VII-8b
Tin mill products: Summary data for resellers in the United Kingdom, 2021

Firm	Resales exported to the U.S. (short tons)	Share of resales exported to the U.S. (percent)
TSIJ	***	***
All firms	***	***

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

Note: TSIJ ***.

[14] This firm was identified through a review of information submitted in the petitions and presented in third-party sources.

Table VII-8c presents events in the United Kingdom tin mill products industry since January 1, 2019.

Table VII-8c
Tin mill products: Important industry events in the United Kingdom since 2019

Item	Firm	Event
Upgraded processing equipment	TSUK	July 2022— Tata Steel UK announced capital investments of £6 million to upgrade the continuous annealing process line at its Trostre facility in Llanelli, Wales. The new drive system is anticipated to enhance the performance of the annealing line by allowing it to be run faster and longer.
Negotiations to achieve less-carbon-intensive steelmaking	TSUK	January 2023— The British Government offered grants to both British Steel and Tata Steel UK, totaling £300 million for each, to switch away from coke-fired blast furnaces in exchange for providing the additional capital investments necessary to achieve less-carbon intensive production, preserving jobs, and producing at least through 2030. Tata Steel UK is seeking further support amounting to £1.5 billion, as it estimates the cost at £3 billion to convert its 5-million metric tons (5.5-million short tons) per year steelmaking facility in Port Talbot, that employs more than 8,000 workers, to electric-arc furnace steelmaking that will consume locally generated ferrous scrap.
Negotiations to achieve less-carbon-intensive steelmaking	TSUK	February 2023— The British Government provided a counteroffer, which was less than Tata Steel UK's proposed transition plan into more sustainable steel production. According to T.V. Narendran, the Chief Executive Officer of parent-company Tata Steel Ltd., "…we can't create a future in the U.K. without some government support. Now that the government has come back with a proposal... let's see if based on their offer we do something which can work."

Source: Steel Orbis, "Tata Steel UK Upgrades Continuous Annealing Line at Trostre Plant," July 29, 2022, https://www.steelorbis.com/steel-news/latest-news/tata-steel-uk-upgrades-continuous-annealing-line-at-trostre-plant-1254189.htm;
Justin Rowlatt, "Government to Offer £600m for Green Steel Switch," BBC News Service, https://www.bbc.com/news/uk-64366998;
Mithun Dasgupta, "UK Offer to Tata Steel Unit to Decarbonise Operations Falls Far Short of Its Demand," January 25, 2023, https://www.financialexpress.com/industry/uk-offer-to-tata-steel-unit-to-decarbonise-operations-falls-far-short-of-its-demand/2959326/;
Reuters, "U.K. Govt. Offers Counter-package to Tata Steel for Port Talbot Plant," The Hindu, February 8, 2023, https://www.thehindu.com/business/uk-govt-offers-counter-package-to-tata-steel-for-port-talbot-plant/article66486028.ece.

Changes in operations

Producers in the United Kingdom were asked to report any change in the character of their operations or organization relating to the production of tin mill products since 2019. TSUK reported it had experienced such changes. Table VII-8d presents the changes identified by the firm.

Table VII-8d
Tin mill products: Reported changes in operations by the United Kingdom producer TSUK since January 1, 2019

Item	Firm name and accompanying narrative response
Prolonged shutdowns or curtailments	***
Other	***

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

Operations on tin mill products

Table VII-8e presents foreign producers' installed and practical overall capacity and production on the same equipment used to produce tin mill products. TSUK reported ***.

Table VII-8e
Tin mill products: TSUK's installed and practical capacity and production on the same equipment as subject production, by period

Capacity and production in short tons; utilization in percent

Item	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Installed overall	Capacity	***	***	***	***	***
Installed overall	Production	***	***	***	***	***
Installed overall	Utilization	***	***	***	***	***
Practical overall	Capacity	***	***	***	***	***
Practical overall	Production	***	***	***	***	***
Practical overall	Utilization	***	***	***	***	***
Practical tin mill products	Capacity	***	***	***	***	***
Practical tin mill products	Production	***	***	***	***	***
Practical tin mill products	Utilization	***	***	***	***	***

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

Note: Installed overall production capacity is the level of production that a firm's establishment(s) could have attained, assuming the firm's optimal product mix, and based solely on existing capital investments, i.e., machinery and equipment that is in place and ready to operate. This capacity measure does not account for other constraints to production such as existing workforce constraints, availability of raw materials, or downtime for maintenance, repair, and clean-up. This capacity measure is sometimes referred to as "nameplate" or "theoretical" capacity in some industries.

Note: Practical overall production capacity is the level of production that a firm's establishment(s) could reasonably have expected to attain, accounting for the firm's actual product mix over the period for which data were collected. This capacity measure is based on not only existing capital investments, i.e., machinery and equipment that is in place and ready to operate but also non-capital investment constraints, such as (1) normal operating conditions, including normal downtime for maintenance, repair, and cleanup; (2) the firm's existing in-place and readily available labor force; (3) availability of material inputs; and (4) any other constraints that may have limited the firm's ability to produce the reported products. Importantly, this capacity measure is the maximum "practical" production a firm could have achieved without hiring new personnel or expanding the number of shifts operated in the period.

Table VII-8f presents information on the tin mill products operations of the responding producers and exporters in the United Kingdom. Capacity, production, and capacity utilization increased during 2019-21. Capacity for 2023 is projected to be the same as in 2021; however, production and utilization are projected to be higher in 2023 as compared to 2021. End-of-period inventories decreased *** percent during 2019-21; however, they are projected to be higher in 2023 as compared to 2021. Exports to the United States increased *** percent during 2019-21; however, these exports to the United States are projected to be lower in 2023 as compared to 2021. During the period of investigation, the firms' exports to the United States as a share of its total shipments ranged between *** percent (2019) and *** percent (January-September 2021).

Table VII-8f
Tin mill products: Data on industry in the United Kingdom, by period

Quantity in short tons

Item	2019	2020	2021
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	***	***	***
Total exports to the United States	***	***	***

Table continued.

Table VII-8f Continued
Tin mill products: Data on industry in the United Kingdom, by period

Quantity in short tons

Item	Jan-Sep 2021	Jan-Sep 2022	Projection 2022	Projection 2023
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	***	***	***	***
Total exports to the United States	***	***	***	***

Table continued.

Table VII-8f Continued
Tin mill products: Data on industry in the United Kingdom, by period

Share and ratio in percent

Item	2019	2020	2021
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	***	***	***
Share of total exports to the United States exported by producers	***	***	***
Share of total exports to the United States exported by resellers	***	***	***
Adjusted share of total shipments exported to the United States	***	***	***

Table continued.

Table VII-8f Continued
Tin mill products: Data on industry in the United Kingdom, by period

Share and ratio in percent

Item	Jan-Sep 2021	Jan-Sep 2022	Projection 2022	Projection 2023
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	***	***	***	***
Share of total exports to the United States exported by producers	***	***	***	***
Share of total exports to the United States exported by resellers	***	***	***	***
Adjusted share of total shipments exported to the United States	***	***	***	***

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 "---". TSIJ ***.

Table VII-8g presents foreign producers reported narrative regarding practical production constraints.

Table VII-8g
Tin mill products: TSUK's reported production constraints

Item	Firm name and accompanying narrative response on production constraints
Production bottlenecks	***
Supply of material inputs	***

Source: Compiled from data submitted in response Commission questionnaires.

Exports

According to GTA, the leading export markets for tin- and chromium-coated steel sheet, which includes tin mill products, from the United Kingdom are France, the Netherlands, and the United States (table VII-8h). During 2021, the United States was the top export market for tin- and chromium-coated steel sheet from the United Kingdom, accounting for 33.0 percent, followed by the Netherlands (18.6 percent) and France (10.1 percent).

Table VII-8h
Tin- and chromium-coated steel sheet: Exports from the United Kingdom, by destination market and period

Quantity in short tons; value in 1,000 dollars

Destination market	Measure	2019	2020	2021
United States	Quantity	7,821	20,321	34,818
Netherlands	Quantity	22,805	20,181	19,633
France	Quantity	7,595	11,104	10,633
Belgium	Quantity	59,068	56,183	6,941
Italy	Quantity	8,030	8,184	4,967
Bangladesh	Quantity	6,740	5,560	3,230
Australia	Quantity	0	109	2,867
Pakistan	Quantity	3,234	3,572	2,615
Czech Republic	Quantity	6,481	9,287	2,484
All other destination markets	Quantity	34,825	38,659	17,427
All destination markets	Quantity	156,600	173,161	105,615
United States	Value	8,562	23,729	61,675
Netherlands	Value	18,926	16,912	18,631
France	Value	7,868	10,774	10,998
Belgium	Value	48,583	45,198	7,286
Italy	Value	6,170	6,263	5,235
Bangladesh	Value	3,607	3,047	1,913
Australia	Value	7	207	5,555
Pakistan	Value	1,632	2,088	1,621
Czech Republic	Value	7,301	9,084	2,727
All other destination markets	Value	29,969	33,676	18,919
All destination markets	Value	132,625	150,978	134,560

Table continued.

Table VII-8h Continued
Tin- and chromium-coated steel sheet: Exports from the United Kingdom, by destination market and period

Unit value in dollars per short ton; share in percent

Destination market	Measure	2019	2020	2021
United States	Unit value	1,095	1,168	1,771
Netherlands	Unit value	830	838	949
France	Unit value	1,036	970	1,034
Belgium	Unit value	822	804	1,050
Italy	Unit value	768	765	1,054
Bangladesh	Unit value	535	548	592
Australia	Unit value	15,878	1,908	1,938
Pakistan	Unit value	505	585	620
Czech Republic	Unit value	1,127	978	1,098
All other destination markets	Unit value	861	871	1,086
All destination markets	Unit value	847	872	1,274
United States	Share of quantity	5.0	11.7	33.0
Netherlands	Share of quantity	14.6	11.7	18.6
France	Share of quantity	4.9	6.4	10.1
Belgium	Share of quantity	37.7	32.4	6.6
Italy	Share of quantity	5.1	4.7	4.7
Bangladesh	Share of quantity	4.3	3.2	3.1
Australia	Share of quantity	0.0	0.1	2.7
Pakistan	Share of quantity	2.1	2.1	2.5
Czech Republic	Share of quantity	4.1	5.4	2.4
All other destination markets	Share of quantity	22.2	22.3	16.5
All destination markets	Share of quantity	100.0	100.0	100.0

Source: Official exports statistics under HS subheadings 7210.11, 7210.12, 7210.50, and 7212.10 as reported by Her Majesty's Customs & Excise in the Global Trade Atlas database, accessed February 8, 2023.

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 United Kingdom reported an export quantity of 0.450 short tons to Australia for 2019. United States is shown at the top, all remaining top export destinations shown in descending order of 2021 data.

Subject countries combined

Table VII-9 presents summary data on the tin mill products operations of the reporting subject producers in the subject countries. Subject producers' capacity and production increased 1.0 and 6.3 percent, respectively, during 2019-21. Their capacity and production are both projected to be higher in 2023 as compared to 2021. Capacity utilization increased 4.7 percentage points from 90.3 percent in 2019 to 95.0 percent in 2021; it is projected to be 94.5 percent in 2023. End-of-period inventories decreased 6.6 percent during 2019-21; however, they are projected to be higher in 2023 as compared to 2021.

Subject producers' exports to the United States increased 27.0 percent during 2019-21; however, their exports to the United States are projected to be lower in 2023 as compared to 2021. During the period of investigation, subject producers' exports to the United States as a share of their total shipments ranged between 14.2 percent (2019) and 19.3 percent (January-September 2022).

Accounting for resellers, subject producers' exports to the United States increased *** percent during 2019-21; however, they are projected to be lower in 2023 as compared to 2021. During the period of investigation, subject producers' and resellers' exports to the United States as a share of their total shipments ranged between *** percent (2019) and *** percent (January-September 2022).

Table VII-9
Tin mill products: Data on industry in aggregated subject countries, by period

Quantity in short tons

Item	2019	2020	2021
Capacity	6,991,217	7,094,944	7,060,289
Production	6,312,428	6,615,674	6,710,374
End-of-period inventories	390,932	330,193	365,151
Internal consumption	17,889	14,289	14,779
Commercial home market shipments	2,613,538	2,730,157	2,750,346
Home market shipments	2,631,427	2,744,446	2,765,125
Exports to the United States	894,468	1,025,725	1,136,028
Exports to all other markets	2,776,593	2,899,084	2,771,175
Export shipments	3,671,061	3,924,809	3,907,203
Total shipments	6,302,488	6,669,255	6,672,328
Resales exported to the United States	***	***	***
Total exports to the United States	***	***	***

Table continued.

Table VII-9 Continued
Tin mill products: Data on industry in aggregated subject countries, by period

Quantity in short tons

Item	Jan-Sep 2021	Jan-Sep 2022	Projection 2022	Projection 2023
Capacity	5,336,945	5,370,443	7,183,794	7,218,028
Production	5,122,214	5,072,090	6,665,815	6,823,467
End-of-period inventories	444,586	501,615	480,124	491,507
Internal consumption	10,908	9,769	13,170	12,585
Commercial home market shipments	2,118,150	1,834,342	2,485,185	2,763,361
Home market shipments	2,129,058	1,844,111	2,498,355	2,775,946
Exports to the United States	823,386	953,534	1,101,965	1,069,736
Exports to all other markets	2,053,244	2,134,520	2,946,226	2,963,345
Export shipments	2,876,630	3,088,054	4,048,191	4,033,081
Total shipments	5,005,688	4,932,165	6,546,546	6,809,027
Resales exported to the United States	***	***	***	***
Total exports to the United States	***	***	***	***

Table continued.

Table VII-9 Continued
Tin mill products: Data on industry in aggregated subject countries, by period

Share and ratio in percent

Item	2019	2020	2021
Capacity utilization ratio	90.3	93.2	95.0
Inventory ratio to production	6.2	5.0	5.4
Inventory ratio to total shipments	6.2	5.0	5.5
Internal consumption share	0.3	0.2	0.2
Commercial home market shipments share	41.5	40.9	41.2
Home market shipments share	41.8	41.2	41.4
Exports to the United States share	14.2	15.4	17.0
Exports to all other markets share	44.1	43.5	41.5
Export shipments share	58.2	58.8	58.6
Total shipments share	100.0	100.0	100.0
Share of total exports to the United States exported by producers	***	***	***
Share of total exports to the United States exported by resellers	***	***	***
Adjusted share of total shipments exported to the United States	***	***	***

Table continued.

Table VII-9 Continued
Tin mill products: Data on industry in aggregated subject countries, by period

Share and ratio in percent

Item	Jan-Sep 2021	Jan-Sep 2022	Projection 2022	Projection 2023
Capacity utilization ratio	96.0	94.4	92.8	94.5
Inventory ratio to production	6.5	7.4	7.2	7.2
Inventory ratio to total shipments	6.7	7.6	7.3	7.2
Internal consumption share	0.2	0.2	0.2	0.2
Commercial home market shipments share	42.3	37.2	38.0	40.6
Home market shipments share	42.5	37.4	38.2	40.8
Exports to the United States share	16.4	19.3	16.8	15.7
Exports to all other markets share	41.0	43.3	45.0	43.5
Export shipments share	57.5	62.6	61.8	59.2
Total shipments share	100.0	100.0	100.0	100.0
Share of total exports to the United States exported by producers	***	***	***	***
Share of total exports to the United States exported by resellers	***	***	***	***
Adjusted share of total shipments exported to the United States	***	***	***	***

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

U.S. inventories of imported merchandise

Table VII-10 presents data on U.S. importers' reported inventories of tin mill products. Inventories of subject imports increased 31.9 percent from 81,839 short tons in 2019 to 107,986 short tons in 2021. During the period of investigation, they were the highest at 177,136 short tons during January-September 2022. Although inventories of nonsubject imports decreased during the period of investigation, inventories of all imports rose during the same time. Inventories of all imports increased *** percent during 2019-21, and were at their height during January-September 2022.

During the period of investigation, the ratios of nonsubject inventories to imports, U.S. shipments of imports, and total shipments of imports all decreased. Conversely, the ratios of inventories of subject imports and inventories of all imports to U.S. imports, U.S. shipments of imports, and total shipments of imports all increased.

Table VII-10
Tin mill products: U.S. importers' inventories and their ratio to select items, by source and period

Quantity in short tons; ratios in percent

Measure	Source	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Inventories quantity	Canada	***	***	***	***	***
Ratio to imports	Canada	***	***	***	***	***
Ratio to U.S. shipments of imports	Canada	***	***	***	***	***
Ratio to total shipments of imports	Canada	***	***	***	***	***
Inventories quantity	China	***	***	***	***	***
Ratio to imports	China	***	***	***	***	***
Ratio to U.S. shipments of imports	China	***	***	***	***	***
Ratio to total shipments of imports	China	***	***	***	***	***
Inventories quantity	Germany	***	***	***	***	***
Ratio to imports	Germany	***	***	***	***	***
Ratio to U.S. shipments of imports	Germany	***	***	***	***	***
Ratio to total shipments of imports	Germany	***	***	***	***	***

Table continued.

Table VII-10 Continued
Tin mill products: U.S. importers' inventories and their ratio to select items, by source and period

Quantity in short tons; ratios in percent

Measure	Source	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Inventories quantity	Netherlands	***	***	***	***	***
Ratio to imports	Netherlands	***	***	***	***	***
Ratio to U.S. shipments of imports	Netherlands	***	***	***	***	***
Ratio to total shipments of imports	Netherlands	***	***	***	***	***
Inventories quantity	South Korea	***	***	***	***	***
Ratio to imports	South Korea	***	***	***	***	***
Ratio to U.S. shipments of imports	South Korea	***	***	***	***	***
Ratio to total shipments of imports	South Korea	***	***	***	***	***
Inventories quantity	Taiwan	***	***	***	***	***
Ratio to imports	Taiwan	***	***	***	***	***
Ratio to U.S. shipments of imports	Taiwan	***	***	***	***	***
Ratio to total shipments of imports	Taiwan	***	***	***	***	***
Inventories quantity	Turkey	***	***	***	***	***
Ratio to imports	Turkey	***	***	***	***	***
Ratio to U.S. shipments of imports	Turkey	***	***	***	***	***
Ratio to total shipments of imports	Turkey	***	***	***	***	***
Inventories quantity	United Kingdom	***	***	***	***	***
Ratio to imports	United Kingdom	***	***	***	***	***
Ratio to U.S. shipments of imports	United Kingdom	***	***	***	***	***
Ratio to total shipments of imports	United Kingdom	***	***	***	***	***

Table continued.

Table VII-10 Continued
Tin mill products: U.S. importers' inventories and their ratio to select items, by source and period

Quantity in short tons; ratios in percent

Measure	Source	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Inventories quantity	Subject	***	***	***	***	***
Ratio to imports	Subject	***	***	***	***	***
Ratio to U.S. shipments of imports	Subject	***	***	***	***	***
Ratio to total shipments of imports	Subject	***	***	***	***	***
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.

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. importers' outstanding orders

The Commission requested importers to indicate whether they imported or arranged for the importation of tin mill products from subject countries and nonsubject sources after September 30, 2022. Their reported data is presented in table VII-11. Arranged imports from subject sources are projected to decrease 64.1 percent from 245,178 shorts tons during October-December 2022 to 88,055 short tons during July-September 2023. Arranged imports from nonsubject sources are also projected to decrease during the same time. Consequently, arranged imports from all sources are projected to decrease *** percent from *** short tons during October-December 2022 to *** short tons during July-September 2023.

Table VII-11
Tin mill products: Arranged imports, by source and by period

Quantity in short tons

Source	Oct-Dec 2022	Jan-Mar 2023	Apr-Jun 2023	Jul-Sept 2023	Total
Canada	***	***	***	***	***
China	***	***	***	***	***
Germany	***	***	***	***	***
Netherlands	***	***	***	***	***
South Korea	***	***	***	***	***
Taiwan	***	***	***	***	***
Turkey	***	***	***	***	***
United Kingdom	***	***	***	***	***
Subject sources	245,178	278,888	134,569	88,055	746,690
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***

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 "---".

Third-country trade actions

Based on available information, tin mill products from subject countries have not been subject to countervailing duties in other countries. The following countries have imposed antidumping duties and/or safeguard measures on imports of tin mill products from subject countries.

European Union

On February 2, 2019, the EU imposed safeguard measures on steel products, including subject tin mill products, from all countries, as specified, for an initial period of three years, until June 30, 2021. Products were subject, as specified, to a tariff rate quota ("TRQ") based on historical import levels for each of 26 product categories. Imports above the TRQ levels are subject to an additional duty of 25 percent. On June 10, 2021, the European Commission announced the extension of the safeguard measures on imports of steel products until June 30, 2024.[15]

On November 16, 2022, the European Union imposed antidumping duties on imports of electrolytic chromium coated steel (ECCS) products originating in China. The duties range from €239 ($255) per metric ton to €607 ($647) per metric ton of ECCS imported.[16]

Indonesia

On January 15, 2014, Indonesia imposed antidumping duties on imports of tinplate coil/sheet originating in China, Taiwan, and South Korea. On February 15, 2019, Indonesia extended the antidumping duties for a period of five years, effective December 31, 2018. The antidumping duty rates ranged from 4.4 percent to 7.9 percent ad valorem, depending on country of origin and company.[17]

---

[15] Global Trade Alert, "EU: Extension of definitive safeguard measure on imports of steel products," https://www.globaltradealert.org/intervention/61213/safeguard/eu-extension-of-definitive-safeguard-measure-on-imports-of-steel-products. Official Journal of the European Union, Case No. Safe009: Commission Implementing Regulation (EU) 2019/159 of January 31, 2019. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R0159&from=EN. Official Journal of the European Union, June 25, 2021, Commission Implementing Regulation 2021/1029: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32021R1029&from=EN.

[16] European Commission news release, "EU takes action on dumped imports of electrolytic chromium coated steel from China and Brazil," November 16, 2022. https://policy.trade.ec.europa.eu/news/eu-takes-action-dumped-imports-electrolytic-chromium-coated-steel-china-and-brazil-2022-11-16_en#:~:text=Today%2C%20the%20European%20Commission%20has,injurious%20to%20the%20EU%20industry. Assessed February 15, 2023.

[17] World Trade Organization, Semi-Annual Report under Article 16.4 of the Agreement: Indonesia, G/ADP/N/364/IDN, March 17, 2022. The subject products are tinplate coil/sheet. Global Trade Alert, "*Indonesia: Extension of definitive antidumping duty on imports of tinplate coil/sheet from China, Chinese Taipei and the Republic of Korea*," https://www.globaltradealert.org/intervention/16568/anti-dumping/indonesia-extension-of-definitive-antidumping-duty-on-imports-of-tinplate-coil-sheet-from-china-chinese-taipei-and-the-republic-of-korea. Accessed February 15, 2023.

Pakistan

In August 2018, the Pakistani National Tariff Commission initiated an antidumping investigation on imports of tinplate from China, the European Union (including subject countries Germany and the Netherlands),[18] South Africa, and the United States. In January 2019, provisional antidumping duties were imposed and in May 2019, definitive duties ranging from 6.87 percent to 14.75 percent were imposed. In January 2022, all of the aforementioned antidumping duties were terminated.[19]

Thailand

On November 12, 2021, Thailand imposed definitive antidumping duties on imports of tinplate and tin-free steel from China, South Korea, and the European Union (including subject countries Germany and the Netherlands) and tinplate from Taiwan. The antidumping duties range from 3.95 percent to 24.73 percent, depending on country of origin.[20]

Information on nonsubject countries

According to GTA, the leading global exporters of tin- and chromium-coated steel sheet, including tin mill products, by quantity, were subject countries China (24.5 percent), Germany (12.8 percent), and the Netherlands (9.4 percent), along with nonsubject Japan (10.0 percent), in 2021 (table VII-12). These three leading subject countries together accounted for 74.7 percent of all exports of tin- and chromium-coated steel sheet reported by the eight subject trade partners, which together accounted for 62.5 percent of all such global exports reported for that year.

[18] The United Kingdom was a member of the European Union until January 31, 2020.

[19] World Trade Organization, Semi-Annual Report under Article 16.4 of the Agreement: Pakistan, G/ADP/N/328/PAK, October 21, 2019. The subject products are tinplate. Global Trade Alert, "Pakistan: Termination of definitive antidumping duty on imports of tinplate from China, the European Union, South Africa and the United States of America," Intervention 63185: Pakistan: Termination of definitive antidumping duty on imports of tinplate from China, the European Union, South Africa and the United States of America (globaltradealert.org). Accessed February 15, 2023. Government of Pakistan, National Tariff Commission, Notice of Initiation, Notice ADC No. 53/2019/NTC/Tinplate/IE of 20 October 2021: https://www.ntc.gov.pk/wp-content/uploads/2021/10/ADC-53-Notices-of-Impending-Expiry-of-Tinplate.pdf.

[20] World Trade Organization, Semi-Annual Report under Article 16.4 of the Agreement: Thailand, G/ADP/N/364/THA, February 24, 2022. The subject products are tinplate and tin free steel.

Table VII-12
Tin- and chromium-coated steel sheet: Global exports by exporter and period

Quantity in short tons; value in 1,000 dollars

Exporting trade partner	Measure	2019	2020	2021
United States	Quantity	121,662	114,416	102,584
Canada	Quantity	244,150	285,838	255,649
China	Quantity	1,540,313	1,567,765	1,865,708
Germany	Quantity	988,442	988,498	980,023
Netherlands	Quantity	761,794	702,535	714,184
South Korea	Quantity	546,709	568,551	467,967
Taiwan	Quantity	184,253	201,383	197,162
Turkey	Quantity	141,712	175,038	180,695
United Kingdom	Quantity	156,600	173,161	105,615
Subject exporters	Quantity	4,563,972	4,662,770	4,767,002
Japan	Quantity	839,784	940,481	765,692
Slovakia	Quantity	472,496	435,648	459,758
France	Quantity	377,534	349,532	387,816
Spain	Quantity	244,821	293,442	263,355
All other exporters	Quantity	1,038,000	949,937	882,508
All reporting exporters	Quantity	7,658,269	7,746,225	7,628,714
United States	Value	86,089	76,931	92,032
Canada	Value	254,160	290,323	289,309
China	Value	1,200,067	1,118,970	2,044,524
Germany	Value	892,915	840,171	944,041
Netherlands	Value	701,593	653,037	759,660
South Korea	Value	478,439	442,804	538,161
Taiwan	Value	156,029	156,103	220,558
Turkey	Value	119,660	133,942	223,103
United Kingdom	Value	132,625	150,978	134,560
Subject exporters	Value	3,935,489	3,786,328	5,153,916
Japan	Value	695,896	690,163	771,966
Slovakia	Value	431,287	387,518	482,891
France	Value	329,592	297,229	391,020
Spain	Value	203,314	241,916	261,898
All other exporters	Value	904,543	764,970	944,519
All reporting exporters	Value	6,586,210	6,245,055	8,098,241

Table continued.

Table VII-12 Continued
Tin- and chromium-coated steel sheet: Global exports by exporter and period

Unit value in dollars per short ton; share in percent

Exporting trade partner	Measure	2019	2020	2021
United States	Unit value	708	672	897
Canada	Unit value	1,041	1,016	1,132
China	Unit value	779	714	1,096
Germany	Unit value	903	850	963
Netherlands	Unit value	921	930	1,064
South Korea	Unit value	875	779	1,150
Taiwan	Unit value	847	775	1,119
Turkey	Unit value	844	765	1,235
United Kingdom	Unit value	847	872	1,274
Subject exporters	Unit value	862	812	1,081
Japan	Unit value	829	734	1,008
Slovakia	Unit value	913	890	1,050
France	Unit value	873	850	1,008
Spain	Unit value	830	824	994
All other exporters	Unit value	871	805	1,070
All reporting exporters	Unit value	860	806	1,062
United States	Share of quantity	1.6	1.5	1.3
Canada	Share of quantity	3.2	3.7	3.4
China	Share of quantity	20.1	20.2	24.5
Germany	Share of quantity	12.9	12.8	12.8
Netherlands	Share of quantity	9.9	9.1	9.4
South Korea	Share of quantity	7.1	7.3	6.1
Taiwan	Share of quantity	2.4	2.6	2.6
Turkey	Share of quantity	1.9	2.3	2.4
United Kingdom	Share of quantity	2.0	2.2	1.4
Subject exporters	Share of quantity	59.6	60.2	62.5
Japan	Share of quantity	11.0	12.1	10.0
Slovakia	Share of quantity	6.2	5.6	6.0
France	Share of quantity	4.9	4.5	5.1
Spain	Share of quantity	3.2	3.8	3.5
All other exporters	Share of quantity	13.6	12.3	11.6
All reporting exporters	Share of quantity	100.0	100.0	100.0

Source: Official export statistics under HS subheading 7210.11, 7210.12, 7210.50, and 7212.10, as reported by national customs authorities in the Global Trade Atlas database, accessed February 8, 2023.

Note: Subject trade partners are shown at the top, nonsubject trade partners are shown in descending order of 2021 data.

Japan

On July 11, 2018, Commerce continued, after a third review, the antidumping duty order on tin- and chromium-coated steel sheet, including tin mill products, from Japan (table I-2). Japan's exports accounted for 27.6 percent of exports of tin- and chromium-coated steel sheet from all nonsubject countries (table VII-12). Mexico and the Philippines together accounted for 41.7 percent of Japan's global destination markets in 2021 (table VII-13).

Table VII-13
Tin- and chromium-coated steel sheet: Exports from Japan, by destination market and period

Quantity in short tons; Value in 1,000 dollars

Destination market	Measure	2019	2020	2021
United States	Quantity	1,943	1,900	3,222
Mexico	Quantity	160,973	190,484	188,121
Philippines	Quantity	137,861	151,621	131,189
Peru	Quantity	56,782	39,812	51,321
Brazil	Quantity	36,417	44,613	37,981
Indonesia	Quantity	24,219	27,255	32,912
Thailand	Quantity	37,175	31,590	31,128
Saudi Arabia	Quantity	49,044	54,937	29,381
Taiwan	Quantity	25,730	28,837	26,432
All other destination markets	Quantity	309,640	369,432	234,006
All destination markets	Quantity	839,784	940,481	765,692
United States	Value	2,331	2,140	5,051
Mexico	Value	127,474	130,570	177,703
Philippines	Value	125,116	130,394	149,577
Peru	Value	49,061	30,071	48,911
Brazil	Value	31,912	33,132	34,770
Indonesia	Value	21,163	20,950	35,824
Thailand	Value	31,197	23,030	28,815
Saudi Arabia	Value	39,012	37,890	29,683
Taiwan	Value	20,390	20,095	24,180
All other destination markets	Value	248,240	261,891	237,453
All destination markets	Value	695,896	690,163	771,966

Table continued.

Table VII-13 Continued
Tin- and chromium-coated steel sheet: Exports from Japan, by destination market and period

Unit value in dollars per short ton; share in percent

Destination market	Measure	2019	2020	2021
United States	Unit value	1,200	1,126	1,567
Mexico	Unit value	792	685	945
Philippines	Unit value	908	860	1,140
Peru	Unit value	864	755	953
Brazil	Unit value	876	743	915
Indonesia	Unit value	874	769	1,088
Thailand	Unit value	839	729	926
Saudi Arabia	Unit value	795	690	1,010
Taiwan	Unit value	792	697	915
All other destination markets	Unit value	802	709	1,015
All destination markets	Unit value	829	734	1,008
United States	Share of quantity	0.2	0.2	0.4
Mexico	Share of quantity	19.2	20.3	24.6
Philippines	Share of quantity	16.4	16.1	17.1
Peru	Share of quantity	6.8	4.2	6.7
Brazil	Share of quantity	4.3	4.7	5.0
Indonesia	Share of quantity	2.9	2.9	4.3
Thailand	Share of quantity	4.4	3.4	4.1
Saudi Arabia	Share of quantity	5.8	5.8	3.8
Taiwan	Share of quantity	3.1	3.1	3.5
All other destination markets	Share of quantity	36.9	39.3	30.6
All destination markets	Share of quantity	100.0	100.0	100.0

Source: Official exports statistics under HS subheadings 7210.11, 7210.12, 7210.50, and 7212.10 as reported by the Japan Ministry of Finance in the Global Trade Atlas database, accessed February 8, 2023.

Note: United States is shown at the top, all remaining top export destinations shown in descending order of 2021 data.

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
88 FR 4206, January 24, 2023	*Tin Mill Products From Canada, China, Germany, Netherlands, South Korea, Taiwan, Turkey, and United Kingdom; Institution of Anti-Dumping and Countervailing Duty Investigations and Scheduling of Preliminary Phase Investigations*	https://www.govinfo.gov/content/pkg/FR-2023-01-24/pdf/2023-01325.pdf
88 FR 9476, February 14, 2023	*Tin Mill Products From the People's Republic of China: Initiation of Countervailing Duty Investigation*	https://www.govinfo.gov/content/pkg/FR-2023-02-14/pdf/2023-03086.pdf
88 FR 9481, February 14, 2023	*Tin Mill Products From Canada, the People's Republic of China, Germany, the Netherlands, the Republic of Korea, Taiwan, the Republic of Turkey, and the United Kingdom: Initiation of Less-Than-Fair-Value Investigations*	https://www.govinfo.gov/content/pkg/FR-2023-02-14/pdf/2023-03085.pdf

APPENDIX B

LIST OF STAFF CONFERENCE WITNESSES

CALENDAR OF PUBLIC PRELIMINARY CONFERENCE

Those listed below appeared in the United States International Trade Commission's Preliminary Conference:

Subject: Tin Mill Products from Canada, China, Germany, Netherlands, South Korea, Taiwan, Turkey, and United Kingdom

Inv. Nos.: 701-TA-685 and 731-TA-1599-1606 (Preliminary)

Date and Time: February 8, 2023 - 9:45 a.m.

OPENING REMARKS:

In Support of Imposition (**Stephen P. Vaughn**, King & Spalding LLP)
In Opposition to Imposition (**Shara L. Aranoff**, Covington & Burling LLP)

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

King & Spalding LLP
Washington, DC
on behalf of

Cleveland-Cliffs Inc. ("Cleveland-Cliffs")
United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union ("USW")

Lourenco Goncalves, Chairman, President, and Chief Executive Officer, Cleveland-Cliffs

Gordon O'Neill, Director of Product Control, Cleveland-Cliffs

Ira Jarvis, Director of Tin Mill Products Sales, Cleveland-Cliffs

Roy Houseman, Legislative Director, United Steelworkers

Stephen P. Vaughn)
Neal Reynolds) – OF COUNSEL
Barbara Medrado)

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

Covington & Burling LLP
Washington, DC
on behalf of

Can Manufacturers Institute ("CMI")

Robert Budway, President, CMI

Robert Gatz, General Manager,
Can Corporation of America, Inc.

Thomas Hughes, Director Metals Sourcing,
CROWN Cork & Seal USA, Inc.

Claudine Schelp, SVP Global Procurement,
CROWN Cork & Seal USA, Inc.

Richard (Rick) Huether, President and Chief Executive Officer,
Independent Can Company

David Luettgen, VP Supply Chain, Independent Can Company

Ernest Haynes, President, Sonoco Metal Packaging Division,
Sonoco Metal Packaging, LLC

Jens Irion, President Americas and Global Aerosol & Beverage,
Trivium Packaging

Daniel Dietrich, VP Procurement, Supply Chain and Projects,
Trivium Packaging

James M. Smith)
) – OF COUNSEL
Shara L. Aranoff)

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

Morris, Manning & Martin, LLP
Washington, DC
on behalf of

KG Dongbu Steel Co., Ltd.
KG Steel USA Inc.
(collectively, "KG Dongbu")

Woo Taek Kim, President, KG Steel USA

Dae Young Kim, Chief Financial Officer, KG Steel USA

Emma K. Peterson, Director of International Trade Analytics,
Morris, Manning & Martin, LLP

R. Will Planert) – OF COUNSEL

White & Case LLP
Washington, DC
on behalf of

thyssenkrupp Rasselstein GmbH
thyssenkrupp Steel North America, Inc.

Dr. Peter Biele, Chief Executive Officer, thyssenkrupp Rasselstein GmbH

Chad C. Eberly, President, thyssenkrupp Steel North America, Inc.

Jay C. Campbell)
Ron Kendler) – OF COUNSEL
Cristina Cornejo)

Law Offices of David L. Simon, PLLC
Washington, DC
on behalf of

Tosyali Toyo Çelik A.Ş. ("Tosyali Toyo")

Mark B. Lehnardt) – OF COUNSEL

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

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

Baoshan Iron & Steel Co., Ltd., Shanghai Meishan Iron & Steel Co., Ltd.
WISCO – Nippon Steel Tinplate Co., Ltd., Baosteel America Inc.
Shougang Jingtang United Iron & Steel Co., Ltd.,
China Shougang International Trade & Engineering Corporation,
Shougang Holding Trade (Hong Kong) Limited, Handan Jintai Packing Material Co., Ltd.
and China Iron and Steel Association Tin Mill Flat-rolled Products Subcommittee

Andrew B. Schroth) – OF COUNSEL

Hogan Lovells US LLP
Washington, DC
on behalf of

ArcelorMittal Dofasco G.P.

(remote) Craig A. Lewis)
) – OF COUNSEL
(remote) Michael G. Jacobson)

ArentFox Schiff LLP
Washington, DC
on behalf of

Duferco Steel, LLC

David J. Klacik, Director of Sales, Duferco Steel, LLC

Diana Dimitriuc Quaia) – OF COUNSEL

Curtis, Mallet-Prevost, Colt & Mosle LLP
Washington, DC
on behalf of

Silgan Containers Manufacturing Corporation ("Silgan")

Katherine R. Afzal) – OF COUNSEL

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

Steptoe & Johnson LLP
Washington, DC
on behalf of

Tata Steel UK Ltd.
Tata Steel Netherlands BV

Rich Brolly, Executive Vice President, DS Containers

Chris Richards, Head of Accounting & Transactions Centre of Excellence, Tata Steel UK Ltd.

Sarah Passmore, Global Accounts Manager, Tata Steel UK Ltd.

Chris LaGette, Global Account Manager, Tata Steel Netherlands BV

Thomas J. Trendl)
) – OF COUNSEL
St. Lutheran Tillman)

NON-PARTY IN OPPOSITION

Consumer Brands Association
Arlington, VA

Thomas Madrecki, Vice President, Supply Chain

REBUTTAL/CLOSING REMARKS:

In Support of Imposition (**Stephen P. Vaughn**, King & Spalding LLP)
In Opposition to Imposition (**James M. Smith**, Covington & Burling LLP)

APPENDIX C

SUMMARY DATA

Table C-1
Tin mill products: Summary data concerning the U.S. market, by item and period
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-Sep		Comparison years			Jan-Sep
Item	2019	2020	2021	2021	2022	2019-21	2019-20	2020-21	2021-22
U.S. consumption quantity:									
Amount	***	***	***	***	***	▲***	▲***	▲***	▲***
Producers' share (fn1)	***	***	***	***	***	▼***	▲***	▼***	▼***
Importers' share (fn1):									
Canada	***	***	***	***	***	▼***	▲***	▼***	▼***
China	***	***	***	***	***	▼***	▼***	▲***	▲***
Germany	***	***	***	***	***	▲***	▼***	▲***	▲***
Netherlands	***	***	***	***	***	▼***	▼***	▲***	▼***
South Korea	***	***	***	***	***	▼***	▲***	▼***	▲***
Taiwan	***	***	***	***	***	▲***	▲***	▲***	▲***
Turkey	***	***	***	***	***	▲***	▼***	▲***	▲***
United Kingdom	***	***	***	***	***	▲***	▲***	▲***	▼***
Subject sources	***	***	***	***	***	▲***	▼***	▲***	▲***
Nonsubject sources	***	***	***	***	***	▲***	▲***	▲***	▲***
All import sources	***	***	***	***	***	▲***	▼***	▲***	▲***
U.S. consumption value:									
Amount	***	***	***	***	***	▲***	▲***	▲***	▲***
Producers' share (fn1)	***	***	***	***	***	▼***	▲***	▼***	▼***
Importers' share (fn1):									
Canada	***	***	***	***	***	▼***	▲***	▼***	▲***
China	***	***	***	***	***	▼***	▼***	▲***	▲***
Germany	***	***	***	***	***	▲***	▼***	▲***	▼***
Netherlands	***	***	***	***	***	▼***	▼***	▲***	▼***
South Korea	***	***	***	***	***	▼***	▲***	▼***	▲***
Taiwan	***	***	***	***	***	▲***	▲***	▲***	▲***
Turkey	***	***	***	***	***	▲***	▼***	▲***	▲***
United Kingdom	***	***	***	***	***	▲***	▲***	▲***	▼***
Subject sources	***	***	***	***	***	▲***	▼***	▲***	▲***
Nonsubject sources	***	***	***	***	***	▲***	▲***	▲***	▼***
All import sources	***	***	***	***	***	▲***	▼***	▲***	▲***
U.S. importers' U.S. shipments of imports from:									
Canada:									
Quantity	***	***	***	***	***	▲***	▲***	▼***	▲***
Value	***	***	***	***	***	▲***	▲***	▼***	▲***
Unit value	***	***	***	***	***	▲***	▼***	▲***	▲***
Ending inventory quantity	***	***	***	***	***	▼***	▼***	▲***	▼***
China:									
Quantity	***	***	***	***	***	▼***	▼***	▲***	▲***
Value	***	***	***	***	***	▼***	▼***	▲***	▲***
Unit value	***	***	***	***	***	▼***	▼***	▲***	▲***
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▲***	▲***
Germany:									
Quantity	***	***	***	***	***	▲***	▲***	▲***	▲***
Value	***	***	***	***	***	▲***	▼***	▲***	▲***
Unit value	***	***	***	***	***	▼***	▼***	▼***	▲***
Ending inventory quantity	***	***	***	***	***	▼***	▲***	▼***	▲***
Netherlands:									
Quantity	***	***	***	***	***	▼***	▼***	▲***	▲***
Value	***	***	***	***	***	▼***	▼***	▲***	▲***
Unit value	***	***	***	***	***	▼***	▼***	▲***	▲***
Ending inventory quantity	***	***	***	***	***	▼***	▲***	▼***	▲***
South Korea:									
Quantity	***	***	***	***	***	▲***	▲***	▼***	▲***
Value	***	***	***	***	***	▲***	▲***	▼***	▲***
Unit value	***	***	***	***	***	▼***	▼***	▲***	▲***
Ending inventory quantity	***	***	***	***	***	▼***	▲***	▼***	▲***
Taiwan:									
Quantity	***	***	***	***	***	▲***	▲***	▲***	▲***
Value	***	***	***	***	***	▲***	▲***	▲***	▲***
Unit value	***	***	***	***	***	▲***	▼***	▲***	▲***
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▲***	▲***

Table continued.

Table C-1 Continued
Tin mill products: Summary data concerning the U.S. market, by item and period
Quantity=short tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short ton; Period changes=percent--exceptions noted

Item	Reported data: Calendar year 2019	2020	2021	Jan-Sep 2021	2022	Period changes: Comparison years 2019-21	2019-20	2020-21	Jan-Sep 2021-22
U.S. importers' U.S. shipments of imports from: Continued									
Turkey:									
Quantity	***	***	***	***	***	▲***	▼***	▲***	▲***
Value	***	***	***	***	***	▲***	▼***	▲***	▲***
Unit value	***	***	***	***	***	▼***	▲***	▼***	▲***
Ending inventory quantity	***	***	***	***	***	▲***	▼***	▲***	▲***
United Kingdom:									
Quantity	***	***	***	***	***	▲***	▲***	▲***	▼***
Value	***	***	***	***	***	▲***	▲***	▲***	▲***
Unit value	***	***	***	***	***	▼***	▼***	▲***	▲***
Ending inventory quantity	***	***	***	***	***	▲***	▼***	▲***	▼***
Subject sources:									
Quantity	***	***	***	***	***	▲***	▲***	▲***	▲***
Value	***	***	***	***	***	▲***	▼***	▲***	▲***
Unit value	***	***	***	***	***	▼***	▼***	▲***	▲***
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▼***	▲***
Nonsubject sources:									
Quantity	***	***	***	***	***	▲***	▲***	▲***	▲***
Value	***	***	***	***	***	▲***	▲***	▲***	▲***
Unit value	***	***	***	***	***	▲***	▼***	▲***	▲***
Ending inventory quantity	***	***	***	***	***	▼***	▼***	▼***	▲***
All import sources:									
Quantity	***	***	***	***	***	▲***	▲***	▲***	▲***
Value	***	***	***	***	***	▲***	▼***	▲***	▲***
Unit value	***	***	***	***	***	▼***	▼***	▲***	▲***
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▼***	▲***
U.S. producers':									
Average capacity quantity	***	***	***	***	***	▼***	▼***	▼***	▼***
Production quantity	***	***	***	***	***	▲***	▲***	▼***	▼***
Capacity utilization (fn1)	***	***	***	***	***	▲***	▲***	▲***	▲***
U.S. shipments:									
Quantity	***	***	***	***	***	▲***	▲***	▼***	▼***
Value	***	***	***	***	***	▲***	▲***	▲***	▲***
Unit value	***	***	***	***	***	▲***	▼***	▲***	▲***
Export shipments:									
Quantity	***	***	***	***	***	▲***	▲***	▼***	▼***
Value	***	***	***	***	***	▲***	▲***	▼***	▲***
Unit value	***	***	***	***	***	▲***	▼***	▲***	▲***
Ending inventory quantity	***	***	***	***	***	▼***	▼***	▲***	▲***
Inventories/total shipments (fn1)	***	***	***	***	***	▼***	▼***	▲***	▲***
Production workers	***	***	***	***	***	▼***	▼***	▼***	▲***
Hours worked (1,000s)	***	***	***	***	***	▼***	▼***	▼***	▲***
Wages paid ($1,000)	***	***	***	***	***	▲***	▼***	▲***	▲***
Hourly wages (dollars per hour)	***	***	***	***	***	▲***	▲***	▲***	▲***
Productivity (short tons per 1,000 hours)	***	***	***	***	***	▲***	▲***	▲***	▼***
Unit labor costs	***	***	***	***	***	▲***	▼***	▲***	▲***

Table continued.

Table C-1 Continued
Tin mill products: Summary data concerning the U.S. market, by item and period
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-Sep		Comparison years			Jan-Sep
Item	2019	2020	2021	2021	2022	2019-21	2019-20	2020-21	2021-22
U.S. producers': Continued									
Net sales:									
Quantity	***	***	***	***	***	▲***	▲***	▼***	▼***
Value	***	***	***	***	***	▲***	▲***	▲***	▲***
Unit value	***	***	***	***	***	▲***	▼***	▲***	▲***
Cost of goods sold (COGS)	***	***	***	***	***	▲***	▲***	▲***	▲***
Gross profit or (loss) (fn2)	***	***	***	***	***	▲***	▼***	▲***	▲***
SG&A expenses	***	***	***	***	***	▲***	▲***	▲***	▲***
Operating income or (loss) (fn2)	***	***	***	***	***	▼***	▼***	▼***	▲***
Net income or (loss) (fn2)	***	***	***	***	***	▼***	▼***	▲***	▲***
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)	***	***	***	***	***	▼***	▼***	▲***	▲***
Capital expenditures	***	***	***	***	***	▼***	▼***	▲***	▲***
Research and development expenses	***	***	***	***	***	▼***	▼***	▼***	▼***
Net assets	***	***	***	***	***	▲***	▲***	▲***	***

Source: Compiled from data submitted in response to Commission questionnaires. 508-compliant tables containing these data are contained in parts III, IV, VI, and VII of this report.

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.

APPENDIX D

APPENDIX FOR PART VI

Table D-1
Tin mill products: Firm-by-firm total net sales quantity, by period

Quantity in short tons

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Cleveland-Cliffs	***	***	***	***	***
Ohio Coatings	***	***	***	***	***
U.S. Steel	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table D-1 Continued
Tin mill products: Firm-by-firm total net sales value, by period

Value in 1,000 dollars

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Cleveland-Cliffs	***	***	***	***	***
Ohio Coatings	***	***	***	***	***
U.S. Steel	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table D-1 Continued
Tin mill products: Firm-by-firm cost of goods sold, by period

Value in 1,000 dollars

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Cleveland-Cliffs	***	***	***	***	***
Ohio Coatings	***	***	***	***	***
U.S. Steel	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table D-1 Continued
Tin mill products: Firm-by-firm gross profit or (loss), by period

Value in 1,000 dollars

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Cleveland-Cliffs	***	***	***	***	***
Ohio Coatings	***	***	***	***	***
U.S. Steel	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table D-1 Continued
Tin mill products: Firm-by-firm selling, general and administrative (SG&A) expenses, by period

Value in 1,000 dollars

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Cleveland-Cliffs	***	***	***	***	***
Ohio Coatings	***	***	***	***	***
U.S. Steel	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table D-1 Continued
Tin mill products: Firm-by-firm operating income or (loss), by period

Value in 1,000 dollars

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Cleveland-Cliffs	***	***	***	***	***
Ohio Coatings	***	***	***	***	***
U.S. Steel	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table D-1 Continued
Tin mill products: Firm-by-firm net income or (loss), by period

Value in 1,000 dollars

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Cleveland-Cliffs	***	***	***	***	***
Ohio Coatings	***	***	***	***	***
U.S. Steel	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table D-1 Continued
Tin mill products: Firm-by-firm ratio of cost of goods sold to net sales value, by period

Ratio in percent

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Cleveland-Cliffs	***	***	***	***	***
Ohio Coatings	***	***	***	***	***
U.S. Steel	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table D-1 Continued
Tin mill products: Firm-by-firm ratio of gross profit or (loss) to net sales value, by period

Ratio in percent

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Cleveland-Cliffs	***	***	***	***	***
Ohio Coatings	***	***	***	***	***
U.S. Steel	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table D-1 Continued
Tin mill products: Firm-by-firm ratio of SG&A expenses to net sales value, by period

Ratio in percent

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Cleveland-Cliffs	***	***	***	***	***
Ohio Coatings	***	***	***	***	***
U.S. Steel	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table D-1 Continued
Tin mill products: Firm-by-firm ratio of operating income or (loss) to net sales value, by period

Ratio in percent

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Cleveland-Cliffs	***	***	***	***	***
Ohio Coatings	***	***	***	***	***
U.S. Steel	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table D-1 Continued
Tin mill products: Firm-by-firm ratio of net income or (loss) to net sales value, by period

Ratio in percent

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Cleveland-Cliffs	***	***	***	***	***
Ohio Coatings	***	***	***	***	***
U.S. Steel	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table D-1 Continued
Tin mill products: Firm-by-firm unit net sales value, by period

Unit value in dollars per short ton

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Cleveland-Cliffs	***	***	***	***	***
Ohio Coatings	***	***	***	***	***
U.S. Steel	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table D-1 Continued
Tin mill products: Firm-by-firm unit total raw materials cost, by period

Unit value in dollars per short ton

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Cleveland-Cliffs	***	***	***	***	***
Ohio Coatings	***	***	***	***	***
U.S. Steel	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table D-1 Continued
Tin mill products: Firm-by-firm unit direct labor cost, by period

Unit value in dollars per short ton

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Cleveland-Cliffs	***	***	***	***	***
Ohio Coatings	***	***	***	***	***
U.S. Steel	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table D-1 Continued
Tin mill products: Firm-by-firm unit other factory costs, by period

Unit value in dollars per short ton

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Cleveland-Cliffs	***	***	***	***	***
Ohio Coatings	***	***	***	***	***
U.S. Steel	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table D-1 Continued
Tin mill products: Firm-by-firm unit conversion costs, by period

Unit value in dollars per short ton

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Cleveland-Cliffs	***	***	***	***	***
Ohio Coatings	***	***	***	***	***
U.S. Steel	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table D-1 Continued
Tin mill products: Firm-by-firm unit COGS, by period

Unit value in dollars per short ton

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Cleveland-Cliffs	***	***	***	***	***
Ohio Coatings	***	***	***	***	***
U.S. Steel	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table D-1 Continued
Tin mill products: Firm-by-firm unit gross profit or (loss), by period

Unit value in dollars per short ton

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Cleveland-Cliffs	***	***	***	***	***
Ohio Coatings	***	***	***	***	***
U.S. Steel	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table D-1 Continued
Tin mill products: Firm-by-firm unit SG&A expenses, by period

Unit value in dollars per short ton

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Cleveland-Cliffs	***	***	***	***	***
Ohio Coatings	***	***	***	***	***
U.S. Steel	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table D-1 Continued
Tin mill products: Firm-by-firm unit operating income or (loss), by period

Unit value in dollars per short ton

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Cleveland-Cliffs	***	***	***	***	***
Ohio Coatings	***	***	***	***	***
U.S. Steel	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table D-1 Continued
Tin mill products: Firm-by-firm unit net income or (loss), by period

Unit value in dollars per short ton

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Cleveland-Cliffs	***	***	***	***	***
Ohio Coatings	***	***	***	***	***
U.S. Steel	***	***	***	***	***
All firms	***	***	***	***	***

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

Note: Conversion cost equals the sum of direct labor cost and other factory costs. See footnote 30 in Part VI regarding the increases in the components of ***.

Note: See footnote 34 in Part VI regarding the decline and increase, respectively, in ***.