Tin- and Chromium-Coated Steel Sheet from Japan

Investigation No. 731-TA-860 (Fourth Review)

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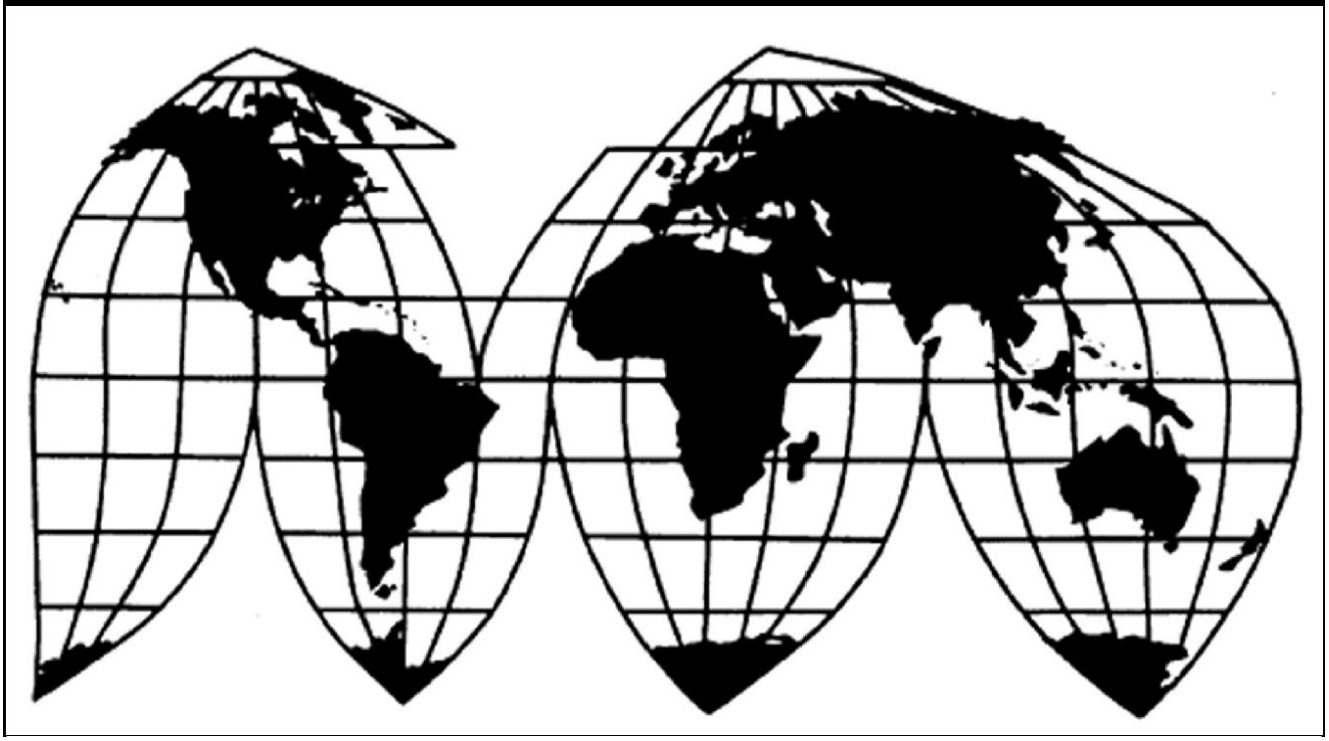
U.S. International Trade Commission



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UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation No. 731-TA-860 (Fourth Review)

Tin- and Chromium-Coated Steel Sheet from Japan

DETERMINATION

On the basis of the record[1] developed in the subject five-year review, the United States International Trade Commission ("Commission") determines, pursuant to the Tariff Act of 1930 ("the Act"), that revocation of the antidumping duty order on tin- and chromium-coated steel sheet from Japan would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

BACKGROUND

The Commission instituted this review on June 1, 2023 (88 FR 35920) and determined on September 5, 2023 that it would conduct a full review (88 FR 64464, September 19, 2023). Notice of the scheduling of the Commission's review and of a public hearing to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* on October 30, 2023 (88 FR 74209). The Commission conducted its hearing on April 9, 2024. All persons who requested the opportunity were permitted to participate.

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

Views of the Commission

Based on the record in this five-year review, we determine under section 751(c) of the Tariff Act of 1930, as amended ("the Tariff Act"), that revocation of the antidumping duty order on tin- and chromium-coated steel sheet ("TCCSS") from Japan would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

I. Background

Original Investigation and Remand Proceedings. The original investigation on TCCSS from Japan resulted from an antidumping duty petition filed on October 28, 1999, by Weirton Steel Corp., the Independent Steel Workers Union, and the United Steel Workers of America, AFL-CIO. On August 9, 2000, the Commission determined that an industry in the United States was materially injured by reason of less than fair value ("LTFV") imports of TCCSS from Japan.[1] On August 28, 2000, Commerce issued an antidumping duty order on imports of TCCSS from Japan.[2]

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[1] *Tin- and Chromium-Coated Steel Sheet from Japan*, Inv. No. 731-TA-860 (Final), USITC Pub. 3337 (August 2000) ("Original Determination"). Chairman Koplan and Commissioner Askey dissented.

[2] 65 Fed. Reg. 52067 (August 28, 2000). The Japanese Respondents appealed the Commission's original affirmative determination to the U.S. Court of International Trade ("CIT"). On December 31, 2001, the CIT remanded the case to the Commission. *Nippon Steel Corp. v. United States*, 182 F. Supp. 2d. 1330 (Ct. Int'l Trade 2001). In the first remand, the Commission made an affirmative determination. *Tin and Chromium-Coated Steel Sheet from Japan*, Inv. No. 731-TA-860, USITC Pub. 3493 (Remand) (March 2002) ("First Remand Determination"). On August 9, 2002, the CIT remanded the case to the Commission for a second time and expressly ordered the Commission to enter a negative determination. *Nippon Steel Corp. v. United States*, 223 F. Supp. 2d. 1349, 1372 (Ct. Int'l Trade 2002). The Commission appealed the CIT's judgment. On October 3, 2002, the Federal Circuit vacated the CIT's decision and ordered a remand to the Commission. *Nippon Steel Corp. v. United States*, 345 F.3d 1379 (Fed. Cir. 2003).

In its second remand determination, the Commission again made an affirmative injury determination. *Tin- and Chromium-Coated Steel Sheet from Japan*, Inv. No. 731-TA-860, USITC Pub. 3674 (Second Remand) (Feb. 2004) ("Second Remand Determination"). On October 14, 2004, the CIT affirmed some aspects of the Commission's decision, but rejected others, and issued a remand with instructions to issue a negative material injury determination. *Nippon Steel Corp. v. United States*, 350 F. Supp. 2d 1186 (Ct. Int'l Trade 2004).

On December 13, 2004, the Commission issued its third remand determination, making negative injury and threat determinations, and noting that it would not have made such determinations in the absence of the CIT's order. *Tin and Chromium-Coated Steel Sheet from Japan*, Inv. No. 731-TA-860, USITC Pub. 3751 (Third Remand) (Dec. 2004) ("Third Remand Determination"). On March 25, 2005, the (Continued…)

Prior Reviews. In the first, second, and third full reviews (all full reviews), the Commission found that revocation of the antidumping duty order on TCCSS from Japan would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[3] Commerce published a notice of continuation of the antidumping duty orders on TCCSS from Japan following each of the prior five-year reviews.[4]

Related Proceedings. On January 18, 2023, Cleveland-Cliffs Inc. ("Cleveland-Cliffs"), a domestic producer of TCCSS, and the United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union, AFL-CIO, CLC, a union representing workers at domestic tin mill products production facilities, filed antidumping and countervailing duty petitions on tin mill products from Canada, China, Germany, Netherlands, South Korea, Taiwan, Turkey, and the United Kingdom.[5] Commerce subsequently issued final negative antidumping duty determinations with respect to tin mill products from the Netherlands, Taiwan, Turkey, and the United Kingdom.[6] Consequently, the Commission terminated the antidumping duty investigations concerning tin mill products from the

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CIT affirmed the negative determinations. *Nippon Steel Corp. v. United States*, Slip Op. 2005-038 (Ct. Int'l Trade 2005).

The Commission appealed the CIT's judgment to the Federal Circuit. On August 10, 2006, the Federal Circuit reversed the CIT's decision, instructed the CIT to vacate the Commission's negative injury and threat determinations, and directed the CIT to reinstate the Commission's affirmative material injury determination. *Nippon Steel Corp. v. United States*, 458 F.3d 1345 (Fed. Cir. 2006). On November 16, 2006, in accordance with the Federal Circuit's mandate, the CIT ordered the Commission's second remand determination sustained and its affirmative material injury determination reinstated. *Nippon Steel Corp. v. United States*, 433 F. Supp. 2d 1336 (Ct. Int'l Trade 2006).

[3] *Tin- and Chromium-Coated Steel Sheet From Japan*, Inv. No. 731-TA-860 (Review), USITC Pub. 3860 (June 2006) ("First Review"); *Tin- and Chromium-Coated Steel Sheet From Japan,* Inv. No. 731-TA-860 (Second Review), USITC Pub. 4325 (May 2012) ("Second Review"); *Tin- and Chromium-Coated Steel Sheet From Japan,* Inv. No. 731-TA-860 (Third Review), USITC Pub. 4795 (June 2018) ("Third Review").

[4] 71 Fed. Reg. 41422 (July 21, 2006); 77 Fed. Reg. 34938 (June 12, 2012); 83 Fed. Reg. 32074 (July 11, 2018).

[5] *See Tin Mill Products from Canada, China, Germany, and South Korea*, Inv. Nos. 701-TA-685 and 731-TA-1599-1601, 1603 (Final), USITC Pub. 5492 (Feb. 2024) at 3-4 & n.1. As discussed below in Section II.A., the scope of this review is substantively identical to the scope of those investigations. *See id*.

[6] Tin Mill Products From the Netherlands: Final Negative Determination of Sales at LTFV, 89 Fed. Reg. 1524 (Jan. 10, 2024); Tin Mill Products From Taiwan: Final Negative Determination of Sales at LTFV and Final Negative Determination of Critical Circumstances, 89 Fed. Reg. 1526 (Jan. 10, 2024); Tin Mill Products From Turkey: Final Negative Determination of Sales at LTFV, 89 Fed. Reg. 1520 (Jan. 10, 2024); Tin Mill Products From the United Kingdom: Final Negative Determination of Sales at LTFV, 89 Fed. Reg. 1535 (Jan. 10, 2024).

Netherlands, Taiwan, Turkey, and the United Kingdom.[7] In the remaining investigations, the Commission determined that an industry in the United States was not materially injured or threatened with material injury by reason of imports of tin mill products from Canada, China, and Germany found by Commerce to be sold in the United States at LTFV and to be subsidized by the government of China. The Commission further found imports of tin mill products from South Korea found by Commerce to be sold in the United States at LTFV to be negligible and therefore terminated that investigation.[8]

Current Review. On June 1, 2023, the Commission instituted the current fourth review of the antidumping duty order on TCCSS from Japan.[9] The Commission received two responses to the notice of institution from domestic interested parties United States Steel Corporation ("U.S. Steel") and Cleveland-Cliffs (collectively, "Domestic Producers"). The Commission also received three responses from respondent interested parties: JFE Steel ("JFE"), Nippon Steel Corporation ("Nippon Steel"), and Toyo Kohan, Japanese producers and exporters of TCCSS (collectively, "Japanese Respondents"). On September 5, 2023, the Commission found that the domestic interested party group response and the respondent interested party group response were adequate.[10] Accordingly, the Commission determined to conduct a full review of the order.[11]

Parties to the Reviews. Domestic Producers filed prehearing and posthearing briefs and appeared at the Commission's hearing represented by counsel.[12] Japanese Respondents JFE, Nippon Steel, and Toyo Kohan, filed joint prehearing and posthearing briefs and were represented by counsel at the hearing.[13] U.S. Steel and Japanese Respondents also filed final comments.[14]

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[7] Tin Mill Products from the Netherlands, Taiwan, Turkey, and the United Kingdom: Termination of Investigations, 89 Fed. Reg. 3694 (Jan. 19, 2024).

[8] Tin Mill Products from Canada, China, Germany, and South Korea, USITC Pub. 5492 at 1; Tin Mill Products From Canada, China, Germany, and South Korea; Determinations, 89 Fed. Reg. 14902 (Feb. 29, 2024).

[9] 88 Fed. Reg. 35920 (June 1, 2023).

[10] *See* Explanation of Commission Determination on Adequacy, EDIS Doc. No. 804249.

[11] 88 Fed. Reg. 64464 (Sept. 19, 2023); *see also* Explanation of Commission Determination on Adequacy, EDIS Doc. No. 804249.

[12] U.S. Steel Prehearing Br., EDIS Doc. No. 817078; U.S. Steel Posthearing Br., EDIS Doc. 818654; Cleveland-Cliffs Prehearing Br., EDIS Doc. No. 817503; Cleveland-Cliffs Posthearing Br., EDIS Doc. No. 818651.

[13] Japanese Respondents Prehearing Br., EDIS Doc. No. 817080; Japanese Respondents Posthearing Br., EDIS Doc. No. 818704.

[14] U.S. Steel Final Comments, EDIS Doc. No. 820826; Japanese Respondents Final Comments, EDIS Doc. 820819.

Data/Response Coverage. U.S. industry data for this review is based on the questionnaire responses of three U.S. producers of TCCSS that accounted for all known domestic production of TCCSS in 2023, and information from the original investigation and the prior five-year reviews.[15]

U.S. import data and related information are based on the questionnaire responses of 21 U.S. importers of TCCSS that are believed to have accounted for the vast majority of U.S. imports during 2023, including *** percent of subject imports from Japan that year, as well as Commerce's official import statistics for certain broader data, and information from the original investigation and the prior five-year reviews.[16]

Foreign industry data and related information are based on the questionnaire responses of three subject producers of TCCSS that are believed to have accounted for all TCCSS production in Japan in 2023, as well as all exports of TCCSS from Japan to the United States that year, and information from the original investigation and prior five-year reviews.[17]

II. Domestic Like Product and Industry

A. Domestic Like Product

In making its determination under section 751(c) of the Tariff Act, the Commission defines the "domestic like product" and the "industry."[18] 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 under this subtitle."[19] The Commission's practice in five-year reviews is to examine the domestic like product definition from the original

[15] Confidential Staff Report, Memorandum INV-WW-034, ("CR"), *Tin-and Chromium-Coated Steel Sheet from Japan*, Inv. No. 731-TA-860 (Fourth Review), USITC Pub. 5507 (May 2024), ("PR"), at III-1.

[16] CR/PR at IV-1 & n.3. The Commission received 21 questionnaire responses from firms that imported TCCSS into the United States, as well as five questionnaire responses from firms that import excluded tin mill products into the United States. *Id.* at IV-1.

[17] CR/PR at IV-13.

[18] 19 U.S.C. § 1677(4)(A).

[19] 19 U.S.C. § 1677(10); *see, e.g., Cleo Inc. v. United States*, 501 F.3d 1291, 1299 (Fed. Cir. 2007); *NEC Corp. v. Department of Commerce*, 36 F. Supp. 2d 380, 383 (Ct. Int'l Trade 1998); *Nippon Steel Corp. v. United States*, 19 CIT 450, 455 (1995); *Timken Co. v. United States*, 913 F. Supp. 580, 584 (Ct. Int'l Trade 1996); *Torrington Co. v. United States*, 747 F. Supp. 744, 748-49 (Ct. Int'l Trade 1990), *aff'd*, 938 F.2d 1278 (Fed. Cir. 1991); *see also* S. Rep. No. 249, 96th Cong., 1st Sess. 90-91 (1979).

investigation and consider whether the record indicates any reason to revisit the prior findings.[20]

Commerce has defined the imported merchandise within the scope of the order under review as follows:

> The products covered by the order 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 tin plate. 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 and 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 the Order unless specifically excluded. The following products, by way of example, are outside and/or specifically excluded from the scope of the order:
>
> - 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

[20] *See*, *e.g.*, *Internal Combustion Industrial Forklift Trucks from Japan*, Inv. No. 731-TA-377 (Second Review), USITC Pub. 3831 at 8-9 (Dec. 2005); *Crawfish Tail Meat from China*, Inv. No. 731-TA-752 (Review), USITC Pub. 3614 at 4 (July 2003); *Steel Concrete Reinforcing Bar from Turkey*, Inv. No. 731-TA-745 (Review), USITC Pub. 3577 at 4 (Feb. 2003).

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 3/4 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) CAT 4 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 CAT 5 temper with 1.00/0.10 pound/base box coating, with alithograph 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. in., 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).

Merchandise subject to the Order is typically classified under subheadings in the 7210.11.0000, 7210.12.0000, 7210.50.0000, 7212.10.0000, and 7212.50.0000 if of non-alloy steel and under HTSUS subheadings 7225.99.0090, and 7226.99.0180 if of alloy steel of the Harmonized Tariff Schedule of the United States (HTSUS). While HTSUS subheadings and ASTM specifications are provided for convenience and customs purposes, the written description of the scope if dispositive.[21]

[21] *Certain Tin Mill Products From Japan: Final Results of the Expedited Fourth Sunset Review of the Antidumping Duty Order*, 88 Fed. Reg. 69133 (Oct. 5, 2023) & accompanying Issues and Decisions Memorandum, EDIS Doc. No. 805435. HTSUS 7210.50.0000 has been subsequently annotated by statistical reporting numbers 7210.50.0020 and 7210.50.0090. CR/PR at I-23 n.46.

The scope in this review defines TCCSS as comprising both tin-coated steel sheet, known as tinplate, and chromium-coated steel sheet, known as tin-free steel ("TFS").[22] 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.[23]

Tinplate is commonly manufactured to several ASTM standard specifications, including A599, A623, A624, and A626.[24] It is primarily used to make two- or three-piece metal cans – *e.g.*, food, aerosol, and paint cans.[25] A specific type of tinplate – drawn and walled ironed ("D&I") tinplate – is used to make two-piece cans.[26] Tinplate is sometimes sold in wider widths for two-piece cans than tinplate used in other applications.[27]

TFS is manufactured to ASTM Standard Specification A657. It is primarily used to make certain two-piece metal cans and ends for food cans. It is also used to make caps and closures for glass containers.[28]

In its original determination and prior five-year reviews, the Commission defined a single domestic like product consisting of all TCCSS corresponding with Commerce's scope.[29] There is no new information on the record of this review indicating that the pertinent characteristics and uses of TCCSS have changed since the prior review so as to warrant the Commission's reconsideration of the domestic like product definition.[30] No party has argued for a different definition.[31] Accordingly, we again define a single domestic like product consisting of all TCCSS coextensive with the scope of the review.

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[22] As noted earlier, the scope of this review is substantively identical to the scope of the recent antidumping duty investigations of tin mill products from Canada, China, Germany, and South Korea. *See Tin Mill Products from Canada, China, Germany, and South Korea*, Inv. Nos. 701-TA-685 and 731-TA-1599-1601, 1603 (Final), USITC Pub. 5492 (Feb. 2024).

[23] CR/PR at I-29 – I-32.

[24] CR/PR at I-29.

[25] CR/PR at I-33 – I-34.

[26] CR/PR at I-33 – I-34. 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. CR/PR at I-33. D&I tinplate is also referred to as "DWI" tinplate. *Id.*

[27] CR/PR at I-34.

[28] CR/PR at I-31 – I-32.

[29] Original Determination, USITC Pub. 3337 at 5; First Review, USITC Pub. 3860 at 5-6; Second Review, USITC Pub. 4325 at 5-6; Third Review, USITC Pub. 4795 at 5-6.

[30] *See generally* CR/PR at I-29 – I-39.

[31] Domestic Producers argue that there is a single domestic like product consisting of TCCSS coextensive with the scope. U.S. Steel Prehearing Br. at 4-6; Cleveland-Cliffs Prehearing Br. at 13-15; (Continued…)

B. Domestic Industry

Section 771(4)(A) of the Tariff Act defines the relevant industry 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."[32] 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.

1. Related Parties

We must determine whether any producer of the domestic like product should be excluded from the domestic industry pursuant to section 771(4)(B) of the Tariff Act. This provision allows the Commission, if appropriate circumstances exist, to exclude from the domestic industry producers that are related to an exporter or importer of subject merchandise or which are themselves importers.[33] Exclusion of such a producer is within the Commission's discretion based upon the facts presented in each investigation.[34]

CR/PR at I-40. Japanese Respondents did not address the domestic like product definition. *See generally*, Japanese Respondents Prehearing Br.; Japanese Respondents Posthearing Br.

[32] 19 U.S.C. § 1677(4)(A). The definitions in 19 U.S.C. § 1677 are applicable to the entire subtitle containing the antidumping and countervailing duty laws, including 19 U.S.C. §§ 1675 and 1675a. *See* 19 U.S.C. § 1677.

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

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

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

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

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

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

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

In the original investigation and prior five-year reviews, the Commission defined a single domestic industry comprised of all domestic producers of TCCSS.[35] In this review, no party has argued for a different definition of the domestic industry.[36]

In this review, one domestic producer, ***, may be subject to possible exclusion pursuant to the related parties provision because ***.[37] The record, however, indicates that *** does not exercise sufficient direct or indirect control over *** for *** to qualify as a related party.[38] In particular, *** and ***.[39] Accordingly, based on the record in this review, and in the absence of contrary party argument, we find that *** is not eligible for exclusion from the domestic industry pursuant to the related parties provision.

Therefore, consistent with our definition of the domestic like product, we again define the domestic industry as all domestic producers of TCCSS.

III. Revocation of the Antidumping Duty Order Would Likely Lead to Continuation or Recurrence of Material Injury Within a Reasonably Foreseeable Time

A. Legal Standards

In a five-year review conducted under section 751(c) of the Tariff Act, Commerce will revoke an antidumping or countervailing duty order unless: (1) it makes a determination that dumping or subsidization is likely to continue or recur and (2) the Commission makes a determination that revocation of the antidumping or countervailing duty order "would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time."[40] The SAA states that "under the likelihood standard, the Commission will engage in a counterfactual analysis; it must decide the likely impact in the reasonably foreseeable future of an important change in the status quo – the revocation or termination of a proceeding and the

[35] Original Determination, USITC Pub. 3337 at 6; First Review, USITC Pub. 3860 at 6; Second Review, USITC Pub. 4325 at 6; Third Review, USITC Pub. 4795 at 6.

[36] U.S. Steel Prehearing Br. at 6-7; Cleveland-Cliffs at 15; *see generally* Japanese Respondents Prehearing Br.; Japanese Respondents Posthearing Br.

[37] CR/PR at III-22. U.S. Steel indicates that, although Japanese producer Nippon recently proposed to acquire U.S. Steel, that transaction remains under regulatory review; therefore, U.S. Steel does not qualify as a related party. U.S. Steel Prehearing Br. at 7 n.27.

[38] *See* 19 U.S.C. § 1677(4)(B)(ii).

[39] CR/PR at III-22 n.10, Table I-9. ***. CR/PR at III-22 n.10.

[40] 19 U.S.C. § 1675a(a).

elimination of its restraining effects on volumes and prices of imports."[41] Thus, the likelihood standard is prospective in nature.[42] The U.S. Court of International Trade has found that "likely," as used in the five-year review provisions of the Act, means "probable," and the Commission applies that standard in five-year reviews.[43]

The statute states that "the Commission shall consider that the effects of revocation or termination may not be imminent, but may manifest themselves only over a longer period of time."[44] According to the SAA, a "'reasonably foreseeable time' will vary from case-to-case, but normally will exceed the 'imminent' timeframe applicable in a threat of injury analysis in original investigations."[45]

Although the standard in a five-year review is not the same as the standard applied in an original investigation, it contains some of the same fundamental elements. The statute provides that the Commission is to "consider the likely volume, price effect, and impact of imports of the subject merchandise on the industry if the orders are revoked or the suspended investigation is terminated."[46] It directs the Commission to take into account its prior injury

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[41] SAA at 883-84. The SAA states that "{t}he likelihood of injury standard applies regardless of the nature of the Commission's original determination (material injury, threat of material injury, or material retardation of an industry). Likewise, the standard applies to suspended investigations that were never completed." *Id*. at 883.

[42] While the SAA states that "a separate determination regarding current material injury is not necessary," it indicates that "the Commission may consider relevant factors such as current and likely continued depressed shipment levels and current and likely continued {sic} prices for the domestic like product in the U.S. market in making its determination of the likelihood of continuation or recurrence of material injury if the order is revoked." SAA at 884.

[43] *See NMB Singapore Ltd. v. United States*, 288 F. Supp. 2d 1306, 1352 (Ct. Int'l Trade 2003) ("'likely' means probable within the context of 19 U.S.C. § 1675(c) and 19 U.S.C. § 1675a(a)"), *aff'd mem.*, 140 Fed. Appx. 268 (Fed. Cir. 2005); *Nippon Steel Corp. v. United States*, 26 CIT 1416, 1419 (2002) (same); *Usinor Industeel, S.A. v. United States*, 26 CIT 1402, 1404 nn.3, 6 (2002) ("more likely than not" standard is "consistent with the court's opinion;" "the court has not interpreted 'likely' to imply any particular degree of 'certainty'"); *Indorama Chemicals (Thailand) Ltd. v. United States*, 26 CIT 1059, 1070 (2002) ("standard is based on a likelihood of continuation or recurrence of injury, not a certainty"); *Usinor v. United States*, 26 CIT 767, 794 (2002) ("'likely' is tantamount to 'probable,' not merely 'possible'").

[44] 19 U.S.C. § 1675a(a)(5).

[45] SAA at 887. Among the factors that the Commission should consider in this regard are "the fungibility or differentiation within the product in question, the level of substitutability between the imported and domestic products, the channels of distribution used, the methods of contracting (such as spot sales or long-term contracts), and lead times for delivery of goods, as well as other factors that may only manifest themselves in the longer term, such as planned investment and the shifting of production facilities." *Id*.

[46] 19 U.S.C. § 1675a(a)(1).

determination, whether any improvement in the state of the industry is related to the order or the suspension agreement under review, whether the industry is vulnerable to material injury if an order is revoked or a suspension agreement is terminated, and any findings by Commerce regarding duty absorption pursuant to 19 U.S.C. § 1675(a)(4).[47] The statute further provides that the presence or absence of any factor that the Commission is required to consider shall not necessarily give decisive guidance with respect to the Commission's determination.[48]

In evaluating the likely volume of imports of subject merchandise if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider whether the likely volume of imports would be significant either in absolute terms or relative to production or consumption in the United States.[49] In doing so, the Commission must consider "all relevant economic factors," including four enumerated factors: (1) any likely increase in production capacity or existing unused production capacity in the exporting country; (2) existing inventories of the subject merchandise, or likely increases in inventories; (3) the existence of barriers to the importation of the subject merchandise into countries other than the United States; and (4) 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.[50]

In evaluating the likely price effects of subject imports if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider whether there is likely to be significant underselling by the subject imports as compared to the domestic like product and whether the subject imports are likely to enter the United States at prices that otherwise would have a significant depressing or suppressing effect on the price of the domestic like product.[51]

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[47] 19 U.S.C. § 1675a(a)(1). Commerce has not issued duty absorption findings since the issuance of the order. *Certain Tin Mill Products From Japan: Final Results of the Expedited Fourth Sunset Review of the Antidumping Duty Order*, 88 Fed. Reg. 69133 (Oct. 5, 2023) & accompanying Issues and Decisions Memorandum, EDIS Doc. No. 805435; CR/PR at I-15 n.34.

[48] 19 U.S.C. § 1675a(a)(5). Although the Commission must consider all factors, no one factor is necessarily dispositive. SAA at 886.

[49] 19 U.S.C. § 1675a(a)(2).

[50] 19 U.S.C. § 1675a(a)(2)(A-D).

[51] *See* 19 U.S.C. § 1675a(a)(3). The SAA states that "{c}onsistent with its practice in investigations, in considering the likely price effects of imports in the event of revocation and termination, the Commission may rely on circumstantial, as well as direct, evidence of the adverse effects of unfairly traded imports on domestic prices." SAA at 886.

In evaluating the likely impact of imports of subject merchandise if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider all relevant economic factors that are likely to have a bearing on the state of the industry in the United States, including but not limited to the following: (1) likely declines in output, sales, market share, profits, productivity, return on investments, and utilization of capacity; (2) likely negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment; and (3) likely negative effects on the existing development and production efforts of the industry, including efforts to develop a derivative or more advanced version of the domestic like product.[52] All relevant economic factors are to be considered within the context of the business cycle and the conditions of competition that are distinctive to the industry. As instructed by the statute, we have considered the extent to which any improvement in the state of the domestic industry is related to the orders under review and whether the industry is vulnerable to material injury upon revocation.[53]

B. Conditions of Competition and the Business Cycle

In evaluating the likely impact of the subject imports on the domestic industry if an order is revoked, the statute directs the Commission to consider all relevant economic factors "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[54] The following conditions of competition inform our determination.

1. Demand Conditions

Original Investigation and Prior Reviews. In the original investigation and prior reviews, the Commission found that U.S. demand for TCCSS depends primarily on the demand for downstream products in which it is used, including cans for food and beverage products, and aerosol, paint, and varnish cans.[55] In the original investigation, the Commission also found that

[52] 19 U.S.C. § 1675a(a)(4).

[53] The SAA states that in assessing whether the domestic industry is vulnerable to injury if the order is revoked, the Commission "considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they may also demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports." SAA at 885.

[54] 19 U.S.C. § 1675a(a)(4).

[55] Original Determination, USITC Pub. 3337 at 7; First Review, USITC Pub. 3860 at 10; Second Review, USITC Pub. 4325 at 15, Third Review, USITC Pub. 4795 at 9-10.

demand for TCCSS had been relatively stable for many years.[56] In the first review, the Commission concluded that demand for TCCSS in the U.S. market would likely be flat or decreasing in the reasonably foreseeable future given the downward trend in apparent U.S. consumption since 2000 and the projections of lower future demand by many market participants.[57] In the second review, the Commission concluded that demand in the reasonably foreseeable future would likely be flat, decreasing, or at best only marginally improved over the current low levels, especially given demand trends between 2006 and 2011 and projections by most firms.[58] In the third review, the Commission observed that most market participants reported that demand decreased between 2012 and 2016 and that they expected the decline to continue in the near future, citing available substitute products and the use of can designs that required less steel.[59] The Commission further found that apparent U.S. consumption declined from 2014 to 2016, continuing a long-term downward trend.[60]

Current Review. We find that demand for TCCSS continues to be derived from demand for the products in which it is used, including food, aerosol spray, and paint cans.[61] Most responding U.S. producers and purchasers reported that U.S. demand for TCCSS fluctuated upward or steadily increased between January 1, 2017, and December 31, 2020, citing the COVID-19 pandemic, while responding importers' responses were mixed but generally indicated that demand fluctuated during the period.[62] Most market participants reported that U.S. demand fluctuated downward or steadily decreased between January 1, 2021, and December 31, 2023.[63] Most market participants report that they expect demand for TCCSS in the U.S. market to remain stable or decline over the next two years.[64] Domestic Producers and Japanese Respondents agree that, although demand for TCCSS in the United States temporarily increased due to the COVID-19 pandemic, it subsequently declined and has declined overall since the original investigation.[65]

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[56] Original Determination, USITC Pub. 3337 at 7.
[57] First Review, USITC Pub. 3860 at 12.
[58] Second Review, USITC Pub. 4325 at 11-12.
[59] Third Review, USITC Pub. 4795 at 10.
[60] Third Review, USITC Pub. 4795 at 10.
[61] CR/PR at II-1.
[62] CR/PR at II-15 & Tables II-5, II-6.
[63] CR/PR at II-15 & Tables II-5, II-6.
[64] CR/PR at II-17 & Tables II-7.
[65] U.S. Steel Prehearing Br. at 8-9; Cleveland-Cliffs Prehearing Br. at 19-20; Japanese Respondents Prehearing Br. at 5, 17-19.

Substitutes for TCCSS used in food packaging or aerosol cans include aluminum, plastic, glass, foil pouches, flexible packaging, and PET.[66] Most firms reported no change in the types of substitutes since January 1, 2017; however, seven importers and seven purchasers reported changes, citing increases in the use of pouches, cardboard, and plastic due to the cost of steel, as well as increases in the use of light gauge cold rolled steel for painted end uses such as oil filters.[67]

During the January 2021 through December 2023 period of review,[68] apparent U.S. consumption declined from 2.5 million short tons in 2021 to 2.3 million short tons in 2022 and 1.9 million short tons in 2023, for an overall decrease of 24.2 percent.[69]

2. Supply Conditions

Original Investigation and Prior Reviews. In the original investigation, the Commission found that the U.S. market for TCCSS was national in scope and that subject imports competed throughout the United States.[70] Subject imports' total market share increased at a substantially greater rate than did that of nonsubject imports, and subject imports' market share had surpassed that of all other imports combined by the end of the period of investigation.[71] Although nonsubject imports did not compete throughout the United States, nonsubject imports were a significant competitive factor in the U.S. market and accounted for a somewhat greater proportion of the market than subject imports during most of the period of investigation.[72]

In the first review, the Commission found that there had been virtually no subject imports from Japan since 2000 and therefore the U.S. market was supplied during the period of review only by domestically produced TCCSS and nonsubject imports.[73] Domestic producers' market share decreased during the period of review, while nonsubject imports' market share

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[66] CR/PR at II-17.

[67] CR/PR at II-17.

[68] Although in this review the Commission collected some information covering the period from January 2017 through December 2023, the data that was collected generally covered only January 2021 through December 2023. *See, e.g.*, CR/PR at Table C-1. Accordingly, when we refer to the period of review, we mean the January 2021 through December 2023 period.

[69] CR/PR at Tables I-12, C-1.

[70] Original Determination, USITC Pub. 3337 at 9.

[71] Original Determination, USITC Pub. 3337 at 9.

[72] Original Determination, USITC Pub. 3337 at 9.

[73] First Review, USITC Pub. 3860 at 12.

increased.[74] The domestic industry's capacity and production decreased over the period of review as a result of consolidation due to mergers and bankruptcies.[75]

In the second review, the Commission found that the U.S. market was supplied during the period of review almost exclusively by domestically produced TCCSS and nonsubject imports.[76] It noted that the domestic industry consisted of the same seven facilities that were operating in the first five-year review notwithstanding changes in ownership among firms.[77] It observed that there were virtually no subject imports from Japan during the period of review, although some Japanese producers supplied tin mill products to the U.S. market that were excluded from the antidumping duty order.[78]

In the third review, the Commission found that the U.S. market was supplied exclusively by domestically produced TCCSS and nonsubject imports during the period of review.[79] It noted that the domestic industry consisted of four domestic producers of TCCSS operating six production facilities.[80] It observed that there were no subject imports from Japan during the period of review, although some Japanese producers supplied tin mill products to the U.S. market that were excluded from the antidumping duty order.[81] The Commission noted that, although the domestic industry's capacity exceeded apparent U.S. consumption throughout the period of review, several purchasers reported supply constraints from domestic producers, including limited supplies and late shipments.[82]

Current Review. The domestic industry, comprising of U.S. Steel, Cleveland-Cliffs, and Ohio Coatings, was the largest supplier of TCCSS to the U.S. market at the beginning of the period of review but had become the second largest supplier of TCCSS by the end of the period, having been overtaken by nonsubject imports in 2022.[83] Subject imports were the smallest source of supply throughout the period of review.[84]

The domestic industry has undergone several changes since the last review. U.S. Steel was the largest domestic supplier of TCCSS to the U.S. market during the period of review,

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[74] First Review, USITC Pub. 3860 at 12.
[75] First Review, USITC Pub. 3860 at 12-14.
[76] Second Review, USITC Pub. 4325 at 12.
[77] Second Review, USITC Pub. 4325 at 12.
[78] Second Review, USITC Pub. 4325 at 12.
[79] Third Review, USITC Pub. 4795 at 11-13.
[80] Third Review, USITC Pub. 4795 at 11-13.
[81] Third Review, USITC Pub. 4795 at 11-13.
[82] Third Review, USITC Pub. 4795 at 12-13.
[83] CR/PR at Tables I-12, C-1.
[84] CR/PR at Tables I-12, C-1.

accounting for *** percent of U.S. production of TCCSS in 2023.[85] During the period of review, U.S. Steel produced TCCSS at four facilities: East Chicago Tin (East Chicago, Indiana), Gary Works (Gary, Indiana), Midwest (Portage, Indiana), and USS-UPI (Pittsburg, California).[86] U.S. Steel's East Chicago plant was idled in 2019 and permanently closed in 2022.[87] U.S. Steel's Gary Works and USS-UPI plants were indefinitely idled in late 2022 and late 2023, respectively.[88] As a result, U.S. Steel currently operates only two TCCSS production lines at its Midwest facility.[89] However, according to U.S. Steel, its Gary Works facility could be restarted quickly if warranted by market conditions.[90]

Cleveland-Cliffs was the second largest domestic supplier of TCCSS to the U.S. market during the period of review, accounting for *** percent of U.S. TCCSS production in 2023.[91] Cleveland-Cliffs produced TCCSS at its facility in Weirton, West Virginia, which it acquired from ArcelorMittal USA LLC in December 2020.[92] On April 20, 2024, Cleveland-Cliffs indefinitely idled its TCCSS plant in Weirton, West Virginia.[93] According to Cleveland-Cliffs, the idled Weirton facility is being maintained so that it could be restarted quickly if warranted by market conditions.[94]

Ohio Coatings was the smallest domestic supplier of TCCSS to the U.S. market during the period of review, accounting for *** percent of U.S. TCCSS production in 2023.[95] As the only non-integrated domestic producer, Ohio Coatings produces TCCSS using black plate acquired from outside suppliers.[96]

The domestic industry's practical TCCSS capacity declined from *** short tons in 2021 to *** short tons in 2022 and *** short tons in 2023.[97]

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[85] CR/PR at Table I-8.

[86] CR/PR at III-1 – III-14 & Tables III-1, III-2. U.S. Steel's USS-UPI facility is so named because U.S. Steel acquired USS-POSCO Industries ("UPI") in February 2020. CR/PR at Table III-1.

[87] CR/PR at III-1 – III-14 & Tables III-1, III-2.

[88] CR/PR at III-1 – III-14 & Tables III-1, III-2.

[89] CR/PR at III-1.

[90] CR/PR at III-1 n.3; Hearing Tr. 19, 42 (Kopf); U.S. Steel Prehearing Br. at 29; U.S. Steel Posthearing Br. at 5-6.

[91] CR/PR at Table I-8.

[92] CR/PR at III-1 – III-14 & Tables III-1, III-2.

[93] CR/PR at III-1 – III-14 & Tables III-1, III-2.

[94] Cleveland-Cliffs Posthearing Br., Exhibit 1 at paras. 10-12.

[95] CR/PR at Table I-8.

[96] CR/PR at III-1.

[97] CR/PR at Table III-3.

During the period of review, *** domestic producers reported that they had experienced supply constraints since January 1, 2017.[98] U.S. producer *** reported that it largely met its contractual commitments for TCCSS during the period of review and did not decline or refuse to continue supplying any existing or new customers, although it reported transitioning to supplying certain existing customers via spot sales rather than annual contracts.[99] U.S. Steel specifically reported supply constraints in ***.[100] U.S. producer *** reported that there was a temporary tightness of supply in 2021 as the economy began to recover from the COVID-19 pandemic, but that it had ample supply available for at least the last 20 months as of the date it responded to the questionnaire.[101] ***, reported that it was forced to put customers on allocation in January 2022, after its largest supplier of black plate, ***, refused to continue supplying it with black plate and the imposition of Section 232 measures made it difficult to source black plate from foreign suppliers.[102]

Purchasers[103] reported delays, refusals, and allocation limits from domestic TCCSS producers, primarily in 2020, 2021, and 2022.[104] Specifically, nine of 22 responding purchasers reported that domestic producers had frequently experienced supply constraints and five reported occasional instances of being unable to obtain domestically produced TCCSS. Purchasers reported being put on allocation (***), refusal by domestic producers to accept orders or provide quotes (***), or an inability by domestic producers to meet contractual obligations for volume (***). *** reported an inability of U.S. Steel and Cleveland-Cliffs to supply volumes in excess of their contracted amounts.[105]

The domestic industry's share of apparent U.S. consumption declined from *** percent in 2021 to *** percent in 2022 and *** percent in 2023.[106]

Subject imports were *** from the U.S. market in 2021 and were the smallest source of supply to the U.S. market in 2022 and 2023, accounting for less than *** percent of apparent U.S. consumption in both years.[107]

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[98] CR/PR at II-9.

[99] CR/PR at II-9 – II-10.

[100] CR/PR at II-9 – II-10. Specifically, U.S. Steel reported that *** *Id.*

[101] CR/PR at II-9.

[102] CR/PR at II-9.

[103] The Commission received 22 usable purchaser questionnaire responses. CR/PR at I-49. The largest responding purchasers were ***, in descending order of 2023 purchase quantity. *Id.*

[104] CR/PR at II-11.

[105] CR/PR at II-11.

[106] CR/PR at Table C-1.

[107] CR/PR at Table C-1.

Nonsubject imports were the second-largest source of TCCSS supply to the U.S. market in 2021 but the largest source of supply in 2022 and 2023. Nonsubject imports increased as a share of apparent U.S. consumption from *** percent in 2021 to *** percent in 2022 and *** percent in 2023.[108] The largest sources of nonsubject imports were ***.[109] As discussed above in Section I, during the period of review, Commerce and the Commission conducted antidumping duty and countervailing duty investigations concerning imports of tin mill products from several nonsubject countries. These investigations, however, did not result in any new antidumping or countervailing duty orders being imposed on imports of tin mill products from nonsubject sources.[110]

Eleven of 21 responding importers reported that they had experienced supply constraints since January 1, 2017, with several citing import restrictions as a reason.[111] With respect to subject imports, no responding purchasers reported frequent or occasional supply constraints, and four purchasers reported rarely or never experiencing supply constraints.[112] Most responding purchasers (11) reported rarely or never experiencing supply constraints from nonsubject sources.[113]

3. Substitutability and Other Conditions

Original Investigation and Prior Reviews. In the original investigation and first and second reviews, the Commission found that the domestic like product and subject imports were generally substitutable.[114] In each of these prior proceedings, the Commission found that the U.S. market for TCCSS was price sensitive notwithstanding that both price and non-price factors

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[108] CR/PR at Table C-1.

[109] CR/PR at IV-2 n.6.

[110] Commerce issued final negative antidumping duty determinations with respect to tin mill products from the Netherlands, Taiwan, Turkey, and the United Kingdom and, as a result, the Commission terminated the antidumping duty investigations concerning tin mill products from those countries. The Commission also terminated its investigation of imports from South Korea that were found by Commerce to be sold at LTFV after determining such imports were negligible. The Commission further determined that an industry in the United States was not materially injured or threatened with material injury by reason of imports of tin mill products from Canada, China, and Germany found by Commerce to be sold in the United States at LTFV and to be subsidized by the government of China.

[111] CR/PR at II-10 – II-11.

[112] During the period of review, *** importer of subject merchandise, ***, and one purchaser of subject merchandise, ***. CR/PR at I-49 n.109, IV-1 n.3.

[113] CR/PR at II-11.

[114] Original Determination, USITC Pub. 3337 at 8, 12; First Review, USITC Pub. 3860 at 14-15; Second Review, USITC Pub. 4325 at 13.

(including quality and delivery) were important factors in purchasing decisions.[115] In the third review, the Commission found that there was at least a moderate degree of substitutability between the domestic like product and subject imports and that both price and non-price factors, including quality, delivery/availability, product consistency, and reliability of supply, were important purchasing factors.[116]

In the original investigation, the Commission found that the U.S. market for TCCSS was concentrated with relatively few purchasers.[117] In the first and second reviews, the Commission found that the U.S. market remained concentrated with fewer purchasers than in the original investigation.[118]

In the original investigation and first two reviews, the Commission observed that most TCCSS was sold in the U.S. market through contract sales establishing both price and target quantities.[119] It found that most TCCSS supply contracts were annual contracts that were negotiated in the fourth quarter of each year for shipments in the following year, although multi-year contracts with meet-or-release or most-favored-nations provisions also were sometimes used.[120] In the second review, the Commission also found that there was significant overlap in the timing of domestic and foreign contract negotiations, and that Japanese prices had been used in contract negotiations with domestic suppliers to leverage lower domestic prices for TCCSS.[121]

In the third review, the Commission noted that during the period of review, nearly all U.S. producers' sales of TCCSS were on an annual or longer-term contract basis with very few spot sales, while importers reported using spot sales and contracts, including short-term and annual contracts.[122]

In terms of other conditions of competition that the Commission identified in prior proceedings, the Commission observed in the second and third reviews that raw material costs accounted for a substantial share of the cost of goods sold ("COGS") for TCCSS, and that the

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[115] Original Determination, USITC Pub. 3337 at 8; Second Remand Determination, USITC Pub. 3674 at 29-33; First Review, USITC Pub. 3860 at 14, 23; Second Review, USITC Pub. 4325 at 24, 28.

[116] Third Review, USITC Pub. 4795 at 14.

[117] Original Determination, USITC Pub. 3337 at 8.

[118] First Review, USITC Pub. 3860 at 15; Second Review, USITC Pub. 4325 at 14.

[119] Original Determination, USITC Pub. 3337 at 8; First Review, USITC Pub. 3860 at 15-16; Second Review, USITC Pub. 4325 at 14-15.

[120] Original Determination, USITC Pub. 3337 at 8; First Review, USITC Pub. 3860 at 15-16; Second Review, USITC Pub. 4325 at 14-15.

[121] Second Remand Determination, USITC Pub. 3674 at 33-36.

[122] Third Review, USITC Pub. 4795 at 15.

cost of steel, rather than tin or chromium, was the largest raw material cost in producing TCCSS.[123]

Finally, in the third review, the Commission observed that on March 8, 2018, the President issued Presidential Proclamation 9705, entitled "Adjusting Imports of Steel into the United States," exercising his authority under Section 232 of the Trade Expansion Act of 1962 ("Section 232"), as amended (19 U.S.C. § 1862), to impose 25 percent ad valorem duties on all steel mill products (including TCCSS) from all countries except Canada and Mexico effective March 23, 2018.[124]

Current Review. We find that there is at least a moderate degree of substitutability between the domestic like product and TCCSS from Japan, although substitutability is higher for products of the same type.[125] As discussed in Section II.A. above, TCCSS is commonly produced to ASTM standards. Additionally, the record indicates that the domestic like product and TCCSS produced in Japan consist of substantially overlapping TCCSS product types in terms of coating type and width.[126] All responding domestic producers reported that TCCSS from domestic and imported sources are always interchangeable, while a majority of responding U.S. importers and purchasers reported that the domestic like product and subject imports are frequently interchangeable.[127] When asked about the comparability of the domestic like product with

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[123] Second Review, USITC Pub. 4325 at 15; Third Review, USITC Pub. 4795 at 15.

[124] Third Review, USITC Pub. 4795 at 15-16.

[125] CR/PR at II-18.

[126] CR/PR at Tables IV-3, IV-4. In 2023, U.S. producers reported that their U.S. shipments were comprised of *** short tons of D&I tin plate (*** percent of their total shipments), *** short tons of other tin plate (*** percent of the total), and *** short tons of tin-free plate (*** percent of the total). CR/PR at Table IV-3. In 2023, Japanese producers reported that their total shipments were comprised of *** short tons of D&I tin plate (*** percent of their total shipments), *** short tons of other tin plate (*** percent of the total), and *** short tons of tin-free plate (*** percent of the total). CR/PR at Table IV-3. U.S. importers' minimal U.S. shipments of subject imports were *** short tons of D&I tin plate and *** short tons of other tin plate. CR/PR at Table IV-3.

In 2023, U.S. producers reported that their U.S. shipments were comprised of *** short tons of TCCSS less than 41 inches (*** percent of the total) and *** short tons of TCCSS equal to or greater than 41 inches (*** percent of the total). CR/PR at Table IV-4. In 2023, Japanese producers reported that their total shipments included *** short tons of TCCSS less than 41 inches (*** percent of the total) and *** short tons of TCCSS equal to or greater than 41 inches (*** percent of the total). CR/PR at Table IV-4. U.S. importers reported that all TCCSS imported from Japan that year was less than 41 inches. CR/PR at Table IV-4.

[127] CR/PR at II-25, Table II-14. Four importers reported that domestic product was frequently interchangeable with subject imports, two reported that domestic product was sometimes interchangeable with subject imports, and one importer reported that domestic product was never (Continued…)

subject imports, responding purchasers' responses were mixed. Most purchasers reported that the domestic like product was comparable or superior to subject imports across most factors, although most purchasers reported the domestic like product to be inferior to subject imports in terms of availability, availability of TCCSS equal to or greater than 41 inches wide, and product range.[128]

The record also shows that price is an important factor in TCCSS purchasing decisions, although other factors, such as quality, availability, and reliability of supply, were reportedly more important. Responding purchasers ranked quality as their top purchasing factor and as among their top three purchasing factors more than any other factor.[129] Availability was the next most frequently reported top purchasing factor and the third most frequently ranked as among the top three purchasing factors.[130] Price was the second most frequently identified factor among purchasers' top three purchasing factors and it was most frequently reported as their third most important factor.[131] Purchasers also most frequently identified reliability of supply as among the very important factors in their purchasing decisions, followed by availability, quality meets industry standards, product consistency, delivery time, availability of product less than 41 inches wide, price, and other factors.[132] As noted above, most purchasers reported that the domestic like product was comparable or superior to subject imports across most factors except availability, availability of TCCSS equal to or greater than 41 inches wide, and product range.[133] In reporting the significance of differences other than price in comparing domestically produced TCCSS with subject imports, responding U.S. producers reported that such differences were only sometimes or never significant.[134] However, most responding importers reported that differences other than price were frequently significant and most purchasers reported that differences other than price were always or frequently significant.[135]

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interchangeable with subject imports. CR/PR at Table II-14. Three purchasers reported that domestic product was frequently interchangeable with subject imports and one purchaser each reported that domestic product was sometimes and never interchangeable. *Id.*

[128] CR/PR at II-24 & Table II-13.
[129] CR/PR at Table II-9.
[130] CR/PR at Table II-9.
[131] CR/PR at Table II-9.
[132] CR/PR at Table II-10.
[133] CR/PR at II-24 & Table II-13.
[134] CR/PR at Table II-15.
[135] CR/PR at Table II-15.

Most responding purchasers (18 of 22) reported that they require their suppliers to become certified or qualified to sell TCCSS to their firm.[136] Sixteen purchasers reported the time to qualify a new supplier ranging from 30 to 540 days.[137] Seven out of 12 purchasers reported that U.S. Steel or Cleveland-Cliffs failed to qualify for certain specifications or at certain times since January 1, 2017.[138] Currently, there are no qualified suppliers in Japan to provide any specification of TCCSS to U.S. purchasers and there were no reports of suppliers in Japan having failed qualification to supply TCCSS to U.S. purchasers.[139] Silgan, however, is currently undergoing the process of qualifying a subject supplier, ***, to provide TCCSS.[140]

U.S. producers predominantly sold TCCSS through annual contracts, with a smaller portion of sales being sold through long-term contracts and the smallest portion of sales being made on the spot market. In 2023, U.S. producers reported that *** percent of their commercial U.S. shipments were sold pursuant to annual contracts, while *** percent were sold pursuant to long-term contracts and *** percent were sold as spot sales.[141] All three U.S. producers reported that their annual contracts fix prices, specify a range for quantities, and are not indexed to raw material prices, and that prices are not re-negotiable during the contract period; however, U.S. producer *** reported that prices are subject to renegotiation during the course of the contract "whe{nev}er foreign offers are aggressively low."[142] Contracts for supplying TCCSS in a given year are generally negotiated in the fall of the preceding year.[143] The small volume of subject imports was *** sold on the spot market.[144] Responding Japanese producers reported that most of their TCCSS sales were on a spot or short-term contract basis. Spot sales comprised *** percent of their sales to the U.S. market in 2023; for sales to other export markets, *** percent were on a short-term contract basis and *** percent were spot sales, with the remainder annual contracts.[145]

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[136] CR/PR at II-21.

[137] CR/PR at II-21. Five of the 16 firms reported 90 days or fewer and the remaining 11 firms reported 180 days to 540 days. *Id.*

[138] CR/PR at II-22.

[139] CR/PR at II-21 – II-22. We recognize that a *** importer ***. CR/PR at II-21 n.24. It clarified that ***. EDIS Doc. No. 818778.

[140] Hearing Tr. at 133, 136 (Arena); Japanese Respondents Prehearing Br. at 43-44; Japanese Respondents Posthearing Br. at 4-6. The small volume of subject imports during the period of review related to that qualification process.

[141] CR/PR at Table V-3.

[142] CR/PR at V-4 – V-5.

[143] CR/PR at V-4 – V-5 n.5.

[144] CR/PR at Table V-3.

[145] CR/PR at V-5.

Most purchasers contact between one and five suppliers before making a purchase, although four purchasers reported contacting ten or more suppliers.[146]

TCCSS is primarily produced to order. U.S. producers reported that *** percent of their U.S. shipments were produced to order in 2023, with lead times averaging *** days for deferred shipment and *** days for shipment upon completion. The sole importer of Japanese TCCSS reported that *** percent of its U.S. shipments were produced to order, with lead times averaging *** days.[147]

The U.S. TCCSS market is relatively concentrated in terms of purchasers. The *** largest purchasers in descending order based on their respective 2023 purchase quantity were ***, which combined accounted for *** percent of all reported purchases of TCCSS, from all sources, in 2023.[148]

Steel coil is the main raw material input for TCCSS.[149] Prices for cold-rolled steel coil ("CRC"), which includes black plate, as well as hot-rolled steel coil ("HRC"), which is used by integrated TCCSS producers to make black plate, increased rapidly from January 2021 through September 2021, declined irregularly through the end of 2022, then fluctuated and partially recovered over the course of 2023. HRC prices were modestly lower in December 2023 than in January 2021, and CRC prices were modestly higher.[150] All three U.S. producers and most responding importers reported that raw material prices increased from 2017 to 2020. Most importers and one U.S. producer reported that raw material prices increased from 2021 to 2023 but the other two U.S. producers reported that raw material prices decreased over the period.[151]

TCCSS imported from Japan was subject to an additional 25 percent *ad valorem* duty pursuant to Section 232, effective March 23, 2018, but became subject to an annual tariff-rate quota ("TRQ"), effective April 1, 2022, with the in-quota volume exempt from additional duties and any over-quota volume subject to the 25 percent duty.[152] For 2023, the TRQ applicable to TCCSS imported from Japan was 56,119 short tons.[153] Under Section 232, as amended, Commerce is authorized, after consulting with other appropriate federal agency heads, to

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[146] CR/PR at V-5.

[147] CR/PR at II-21.

[148] CR/PR at I-49 & *calculated from* Importer Questionnaires at question II-1.

[149] CR/PR at V-1.

[150] CR/PR at V-1 – V-2, Figure V-1, Table V-1.

[151] CR/PR at V-3.

[152] CR/PR at I-25. The TRQ categories for tinplate and tin-free steel originating in Japan covers both TCCSS and out-of-scope products. *Id.*

[153] CR/PR at Table I-6.

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 (exclusions) shall be provided for any article only after a request for exclusion is made by a directly affected party located in the United States."[154] Excluded steel articles, including any TCCSS, count toward filling the TRQs for Japan.[155] The fill rate in 2023 for the TRQ, including tin-free steel for which exclusions were granted, was 100 percent. Not including products for which exclusions were granted, 26,271 short tons of the TRQ was filled in 2023, for a fill rate of 46.8 percent.[156]

C. Likely Volume of Subject Imports

1. The Original Investigation and Prior Five-Year Reviews

In the original investigation and related remand proceedings, the Commission found that the volume of subject imports increased in absolute terms by 85.9 percent between 1997 and 1999, and continued to increase rapidly through the first quarter of 2000.[157] It found that the market share of subject imports increased significantly during the period of investigation.[158] Accordingly, the Commission found that the volume of subject imports, as well as the increase in such volume, was significant, both in absolute terms and relative to production and consumption.[159]

In the first and second reviews, the Commission found that the likely volume of subject imports would be significant within the reasonably foreseeable future if the order were

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[154] CR/PR at I-26.

[155] CR/PR at I-26. Imports of excluded products ("quota exclusion entries") are counted against the quarterly TRQ in place at the time of entry and count toward the annual TRQ. However, as the excluded products are exempt from both the quarterly and annual TRQs, they may exceed the TRQs without becoming subject to the 25 percent duty. *Id.*

[156] CR/PR at Table I-6. The fill rate as calculated in Table I-6 refers to tin-free steel, for which an exclusion was not granted. However, as reflected in Table I-6 and noted by Japanese Respondents, tin-free steel imports, for which exclusions were granted, were greater than the quota limit; therefore, the fill rate for the TRQ including tin-free steel for which exclusions were granted would be 100 percent. *See* CR/PR at Table I-6; Japanese Respondents Final Comments at 3-4.

[157] Original Determination, USITC Pub. 3337 at 10; Second Remand Determination, USITC Pub. 3674 at 61.

[158] Original Determination, USITC Pub. 3337 at 10; Second Remand Determination, USITC Pub. 3674 at 61.

[159] Original Determination, USITC Pub. 3337 at 9-10; Second Remand Determination, USITC Pub. 3674 at 61-62.

revoked.[160] In finding likely significant volumes, the Commission emphasized the Japanese TCCSS producers' large production capacity, excess production capacity, export orientation, declining home market shipments, the inability of the global tin market to absorb Japan's excess capacity, the fact that Japanese producers have well established relationships with U.S. purchasers of excluded tin mill products that are also the main purchasers of TCCSS, the attractiveness of the U.S. market for TCCSS in terms of both its size and relative prices, and the volume behavior of subject imports prior to imposition of the order during the original investigation.[161]

In the third review, the Commission again found that, if the order was revoked, the likely volume of subject imports from Japan would be significant.[162] As support, the Commission emphasized the Japanese TCCSS producers' excess production capacity, declining home market shipments, increasing export orientation, the fact that Mexico was a leading export market for Japanese TCCSS, the fact that Japanese producers had well established relationships with U.S. purchasers of excluded tin mill products that were also the main purchasers of TCCSS, the attractiveness of the U.S. market for TCCSS, and the increasing volume of subject imports during the original investigation, prior to imposition of the order.[163] The Commission was not persuaded by purchasers' affidavits claiming that they would not purchase significant quantities of subject imports if the order was revoked. Rather, the Commission found that the record indicated that purchasers had a strong interest in purchasing more subject imports, citing their purchases of out-of-scope products and their applications for Section 232 exclusions. The Commission was also not persuaded that purchasers prefer domestically produced TCCSS, citing the increased volume of nonsubject imports. The Commission also found that there was information in the record from other purchasers and importers indicating their interest in purchasing more Japanese TCCSS or having subject imports from Japan as an alternative supply source upon revocation.[164]

2. The Current Review

In this review, we find that if the order were revoked, the likely volume of subject imports from Japan would be significant. The volume of subject imports declined dramatically

[160] First Review, USITC Pub. 3860 at 18-22; Second Review, USITC Pub. 4325 at 17-22.
[161] First Review, USITC Pub. 3860 at 18-22; Second Review, USITC Pub. 4325 at 17-22.
[162] Third Review, USITC Pub. 4795 at 17-22.
[163] Third Review, USITC Pub. 4795 at 17-21.
[164] Third Review, USITC Pub. 4795 at 21-22.

after the order was imposed and remained minimal during the period of review.[165] There were *** subject imports in 2021, *** short tons in 2022, and *** short tons in 2023.[166] Subject imports accounted for less than *** percent of apparent U.S. consumption in 2022 and 2023.[167]

The record in this review indicates that Japanese producers have the ability to export significant volumes of subject merchandise to the United States in the event of revocation of the order, however. Although their TCCSS capacity has declined since the original investigation,[168] subject producers maintained significant practical TCCSS capacity throughout the period of review.[169] Subject producers reported practical TCCSS capacity of *** short tons in 2021 and *** short tons in 2022 and 2023 and production of TCCSS of *** short tons in 2021, *** short tons in 2022, and *** short tons in 2023.[170] Thus, the Japanese industry's capacity utilization rate was *** percent in 2021, *** percent in 2022, and *** percent in 2023, leaving them with available capacity that could be used to increase exports of TCCSS to the United

[165] Subject imports have been largely absent from the U.S. market from 2001 onward. CR/PR at C-7 – C-13.

[166] CR/PR at Table IV-1.

[167] CR/PR at Table C-1.

[168] In 1999, Japanese producers' reported TCCSS capacity was 3.2 million short tons, which may have been overstated because it included out-of-scope products. CR/PR at Table IV-10. Subject producers reported 1.9 million short tons of TCCSS capacity in 2005, 1.8 million short tons in 2011, and 1.7 million short tons in 2016. *Id.*

[169] CR/PR at Table IV-13.

[170] CR/PR at Table IV-13.

States.[171] Subject producers' excess capacity was *** in 2023, equivalent to *** percent of apparent U.S. consumption that year.[172] [173]

Additionally, Japanese producers have the ability to increase production of TCCSS by shifting production from excluded tin mill products and/or other out-of-scope products that are produced on the same equipment. *** reported producing out-of-scope products on the same equipment and machinery used to produce TCCSS, although TCCSS accounted for the largest portion of subject producers' overall production on the same equipment and machinery throughout the period of review.[174]

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[171] CR/PR at Table IV-13. We are not persuaded by Japanese Respondents' arguments that subject producers could not produce additional TCCSS because the "'excess' capacity reported by Japanese producers does not represent capacity that the producers could easily bring online." Japanese Respondents Prehearing Br. at 32-33. Subject producers reported their practical TCCSS capacity, which was defined in the questionnaires as "{t}he level of production of TCCSS that your establishment(s) could reasonably have expected to attain." *See* Foreign Producers Questionnaire at II-3a. We likewise are not persuaded by Japanese Respondents' arguments that we should limit our assessment of the Japanese TCCSS industry's available capacity to only the capacity as reported by *** or by ***, as the only subject producers to have exported TCCSS to the United States. Japanese Respondents Prehearing Br. at 33; Japanese Respondents Posthearing Br. at 3-4. All three subject producers exported substantial volumes of TCCSS, and are therefore capable of exporting TCCSS to the U.S. market. *See* Foreign Producer Questionnaires at II-13. Even if we were to focus on the available capacity of *** in Japan, we would still find that the TCCSS industry in Japan had the ability to increase its exports of subject merchandise to the United States to significant levels if the order were revoked. *** alone possessed excess capacity equivalent to *** percent of apparent U.S. consumption in 2023. *Calculated from* *** Foreign Producer Questionnaire at II-3a. In the same vein, Japanese Respondents acknowledge that *** possessed excess capacity that was equivalent to *** percent of apparent U.S. consumption in 2023. Japanese Respondents Prehearing Br. at 33.

[172] CR/PR at Tables IV-13, C-1.

[173] We have also considered subject producers' inventories. Subject producers' end-of-period inventories initially decreased from *** short tons in 2021 to *** short tons in 2022 before increasing to *** in 2023, which was equivalent to *** percent of apparent U.S. consumption that year. CR/PR at Tables IV-15, C-1. We acknowledge, however, that TCCSS in the U.S. market primarily is produced to order. CR/PR at II-21.

[174] CR/PR at IV-28. TCCSS accounted for *** percent of overall production in 2021, *** percent in 2022, and *** percent in 2023. CR/PR at Table IV-17. Thus, TCCSS accounted for a *** of overall production and was relatively stable at these levels throughout the period of review, contrary to Japanese Respondents' assertions that subject producers are increasingly focused on out-of-scope products. Japanese Respondents Prehearing Br. at 29-30; Japanese Respondents Posthearing Br. at 3. Similarly, TCCSS as a share of overall production increased somewhat overall during the period of review, while out-of-scope products as a share of overall production decreased, undercutting Japanese Respondents' arguments that they would not shift production to TCCSS. Japanese Respondents Prehearing Br. at 36-40.

Subject producers are also export oriented. Although Japanese producers' export shipments and home market shipments declined irregularly during the period of review, export shipments accounted for *** of their total shipments throughout the period.[175] Subject producers' exports were *** short tons in 2021, *** short tons in 2022, and *** short tons in 2023.[176] Exports as a share of subject producers' total shipments were *** percent in 2021, *** percent in 2022, and *** percent in 2023.[177] According to Global Trade Atlas ("GTA") data concerning TCCSS, which include subject TCCSS as well as out-of-scope products, Japan is the third largest global exporter of TCCSS.[178] The responding subject producers' exports of TCCSS were largely to markets other than Asia during the period of review, and their TCCSS exports to non-Asian markets accounted for an increasing share of their total exports.[179] Indeed, North America was a top TCCSS export market for subject producers during the period. Mexico was the leading single country export market for Japanese TCCSS, and subject producers' exports to Mexico as a share of their total exports steadily increased throughout the period of review.[180]

In addition to being export oriented, the record shows that subject Japanese producers view the U.S. market as attractive and would have a strong incentive to direct increased volumes of TCCSS to the United States if the order were revoked. According to GTA data, which include subject TCCSS as well as out-of-scope products, the U.S. market is the largest import market in the world for TCCSS.[181] Although subject imports of TCCSS were minimal during the period of review, Japanese TCCSS producers maintained a substantial presence in the U.S. market during the period through their exports of out-of-scope TCCSS products to U.S. customers, giving them knowledge of the U.S. market and relationships with U.S. purchasers.[182]

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[175] CR/PR at Table IV-15.

[176] CR/PR at Table IV-15.

[177] CR/PR at Table IV-15.

[178] CR/PR at Table IV-21. These data include official exports statistics under HS subheadings 7210.11, 7210.12, 7210.50, and 7212.10. *Id.* at Source.

[179] CR/PR at Table IV-16. As a share of total exports, subject producers' exports to Asia decreased from *** percent in 2021 to *** percent in 2022 and *** percent in 2023. *Id.*

[180] CR/PR at Table IV-16. Subject producers reported *** short tons of export shipments of TCCSS to Mexico in 2021, *** short tons in 2022, and *** short tons in 2023. *Id.* Exports to Mexico accounted for *** percent of their total exports of TCCSS in 2021, *** percent in 2022, and *** percent in 2023. *Id.*

[181] CR/PR at Table IV-22.

[182] During the period of review, U.S. importers reported importing *** short tons of out-of-scope tin mill products from Japan in 2021, *** short tons in 2022, and *** short tons in 2022. CR/PR at Table IV-7. Japan accounted for the *** share of importers' out-of-scope tin mill product imports during the period of review, with out-of-scope products from Japan accounting for between *** and *** percent of U.S. importers' reported total imports of out-of-scope tin mill products during 2021-2023. *Id.*

The record in this review also indicates that U.S. prices were generally higher than prices in other markets supplied by subject producers during the period of review.[183] Responding U.S. producers and importers with knowledge of global prices confirmed that prices for TCCSS in the United States were higher than prices in other markets.[184] Indeed, at the hearing, witnesses appearing in opposition to continuation of the order acknowledged that the U.S. market is the highest-priced market in the world for TCCSS, with one witness describing U.S. prices as higher than other markets "by a substantial margin" and another estimating that U.S. prices were 30 percent higher than those in Europe.[185] Moreover, the existence of third-country trade barriers to subject imports would further enhance the relative attractiveness of the U.S. market to subject producers in the event of revocation.[186] We therefore find that Japanese TCCSS producers would have an incentive to shift exports from other markets and, consistent with their behavior in the original period of investigation, to increase exports of TCCSS to the United States, if the order were revoked.

Additionally, purchasers and importers of TCCSS have expressed interest in purchasing subject imports from Japan if the order were revoked.[187] When asked about the likely impact of revocation, five of seven responding importers and six of nine responding purchasers reported that they would consider increasing their imports or purchases of TCCSS from Japan.[188] Indeed, as discussed above in Section III.B.C., the largest U.S. purchaser, ***, is currently engaged in efforts to certify ***, the *** subject producer, to supply TCCSS. Additionally, Japanese producer *** reported exporting small quantities of TCCSS from Japan to ***, during the period of review ***.[189] Moreover, as discussed above, Mexico was the leading export market for Japanese TCCSS producers during the period of review. Thus, if the order were revoked, the

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[183] Subject producers reported that the average unit values ("AUVs") of their exports to the United States were higher than those of their exports to all other markets in 2022 and 2023, ***. CR/PR at Table IV-16. GTA data concerning TCCSS, including subject TCCSS and out-of-scope products, show that the AUVs of U.S. imports of TCCSS were higher than those of TCCSS imports in other markets in 2022 and 2023. CR/PR at Table IV-22.

[184] CR/PR at IV-40. Two U.S. producers and five importers reported that they were aware of TCCSS prices in non-U.S. markets and all responding firms reported that TCCSS prices in the United States were higher than prices in other markets. *Id.*

[185] Hearing Tr. at 163 (Arena), 164-65 (Dietrich), 165 (Hughes), 165 (Porter).

[186] CR/PR at Table IV-20.

[187] Indeed, ***. U.S. Steel Posthearing Br. at 2, Attachment B.

[188] CR/PR at Table D-1 (responses of importers ***, and purchasers ***).

[189] CR/PR at IV-2 n.5. *** also reported that it had arranged for importing *** short tons of TCCSS from Japan in ***. CR/PR at IV-11 & Table IV-6.

Japanese industry, which is already exporting to Mexico, would likely be interested in the U.S. market for TCCSS, which is in close proximity and a larger TCCSS market with higher prices.

We are not persuaded by Japanese Respondents' arguments that subject imports would not be significant if the order were revoked. As an initial matter, the record in this review does not support their assertions that, if the order were revoked, subject imports would be limited to niche or out-of-scope products that are not supplied by the domestic TCCSS producers.[190] As discussed above in Section III.B.3., there is substantial overlap in the product offerings by domestic and subject producers.[191] Additionally, as also discussed above, TCCSS accounted for a *** of the subject producers' overall production and was relatively stable at these levels during the period of review, with a slight increase in TCCSS as a share of their overall production during the period.[192] Further, the record suggests that U.S. demand for out-of-scope tin mill products declined relative to U.S. demand for subject TCCSS during the period of review.[193]

We likewise find unpersuasive Japanese Respondents' arguments that there are barriers to entry in the U.S. market that would prevent subject imports from increasing significantly if the order were revoked. Japanese Respondents argue that the lengthy qualification process required by U.S. purchasers would serve as a barrier preventing significantly increased volumes of subject imports if the order were revoked.[194] As discussed above in Section III.B.3., purchasers reported a wide array of qualification times, with the time to qualify a new supplier reportedly taking anywhere from 30 to 540 days.[195] We note that, as also discussed above in Section III.A., the governing statute states that "the Commission shall consider that the effects of revocation or termination may not be imminent, but may manifest themselves only over a longer period of time."[196] Thus, we find that even at the high end of the qualification time range, which is less than two years, the timeframe required for a purchaser to qualify a new Japanese supplier would fall within the reasonably foreseeable future. We further note that, as discussed above, and acknowledged by Japanese Respondents, the largest U.S. purchaser,

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[190] Japanese Respondents Posthearing Br. at 5; Japanese Respondents Posthearing Br. at 4-6.

[191] *See* CR/PR at Tables IV-3, IV-4.

[192] *See* CR/PR at Table IV-17.

[193] Adding U.S. importers' imports of out-of-scope tin mill (CR/PR at Table IV-7) to apparent U.S. consumption of TCCSS (CR/PR at Table C-1) suggests that the share of the total U.S. market represented by out-of-scope tin mill products decreased irregularly from *** percent in 2021 to *** percent in 2023.

[194] Japanese Respondents Prehearing Br. at 43-44; Japanese Respondents Posthearing Br. at 4-6.

[195] CR/PR at II-21. Five of the 16 firms reported 90 days or fewer and the remaining 11 firms reported 180 days or longer. *Id.* at n.22.

[196] 19 U.S.C. § 1675a(a)(5).

Silgan, is currently undergoing the process of qualifying the *** subject producer *** to supply it with TCCSS.[197] Thus, we do not find that U.S. purchasers' qualification processes would prevent the volume of subject imports from increasing to a significant level in the reasonably foreseeable future if the order were revoked.

We similarly find unavailing Japanese Respondents' claim that the "well-established supply chains" in the U.S. market, including purchasers' "decades-long" relationships with domestic and nonsubject producers and their preference for long term contracts, would constrain the likely volume of subject imports if the order were revoked.[198] As discussed above, subject producers and importers of subject merchandise have already established relationships with U.S. purchasers of out-of-scope tin mill products. Numerous responding importers and purchasers reported that they would consider increasing their imports and purchases of TCCSS from Japan if the order were revoked, and ***, the largest U.S. purchaser, is already in the process of qualifying subject producer ***. Moreover, given the overlap in product offerings between domestic and subject producers, as well as the higher degree of substitutability for products of the same type and the concentrated purchaser base for TCCSS in the United States, subject imports would likely compete with domestic producers for contracts to supply TCCSS to the same customers after revocation.

We likewise find unpersuasive Japanese Respondents' argument that subject imports would not increase to significant levels because subject producers would have no incentive to shift away from supplying their longstanding existing customers in home and third-country export markets in favor of increased exports of TCCSS to the United States.[199] As discussed above, subject producers have sufficient excess capacity to significantly increase their exports of TCCSS to the U.S. market without reducing their shipments to existing customers in Japan and third country markets. Furthermore, given the record evidence that prices are substantially higher in the U.S. market than elsewhere, we find it likely that subject producers would have an economic incentive to shift exports from existing customers in other markets to serve customers in the United States, particularly given their existing relationships with U.S.

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[197] Hearing Tr. at 133, 136 (Arena); Japanese Respondents Prehearing Br. at 43-44; Japanese Respondents Posthearing Br. at 4-6. Japanese Respondents also acknowledge that ***. *Id.* The record, however, indicates that *** possessed available capacity; during the period of review, its capacity utilization rate was *** percent in 2021, *** percent in 2022, and *** in 2023. *Calculated from* *** Foreign Producer Questionnaire at II-3a.

[198] Japanese Respondents Prehearing Br. at 41-43; Japanese Respondents Posthearing Br. at 4-6.

[199] Japanese Respondents Prehearing Br. at 49-51, Exhibit 27; Japanese Respondents Posthearing Br. at 7-8.

purchasers of out-of-scope tin mill products. Indeed, although Japanese Respondents argue that subject producers' relationships with customers in Mexico predate the imposition of the order under review,[200] those relationships did not prevent the volume and market share of subject imports from increasing significantly during the original investigations, as the Commission found.

Finally, we find unavailing Japanese Respondents' claim that the Section 232 TRQ applicable to subject imports from Japan will constrain subject import volumes and prevent them from increasing to significant levels after revocation.[201] As discussed in section III.B.3. above, the TRQ does not limit the volume of subject imports; rather, the in-quota volume is exempt from additional duties and out-of-quota volumes may still enter the United States, subject to an additional duty of 25 percent. As discussed above, the record indicates that TCCSS prices were substantially higher in the United States than in other markets during the period, including 30 percent higher than in Europe, according to respondents' own witness.[202] Moreover, given subject producers excess capacity, there would be an incentive to increase production to sell to the large, attractive U.S. market, even with the additional 25 percent duty. We also are unpersuaded by Japanese Respondents' assertion that subject producers would have no incentive to fill the TRQ with subject imports rather than out-of-scope products if the order were revoked.[203] As discussed above, TCCSS accounted for a *** share of the subject producers' overall production during the period of review, including *** percent in 2023, indicating that their primary interest is in TCCSS production, and out-of-scope products account for a small share of the U.S. market. Based on the attractiveness of the U.S. market and the higher prices available there, and the subject producers' current excess production capacity, we find that if the order were revoked, subject producers would likely significantly increase the volume of their exports of TCCSS to the United States both within the TRQ level and beyond, even with the 25 percent duty applied to any out-of-quota imports. Indeed, similar Section 232 measures on imports from nonsubject countries have not prevented such imports from increasing in volume in 2022 and gaining market share in both 2022 and 2023.[204] As noted

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[200] Japanese Respondents Posthearing Br. at 8.

[201] Japanese Respondents Prehearing Br. at 46-48; Japanese Respondents Posthearing Br. at 6-7.

[202] Hearing Tr. at 164-65 (Dietrich).

[203] Japanese Respondents Prehearing Br. at 46-48.

[204] We recognize that nonsubject imports from Canada are exempt from Section 232 measures. CR/PR at I-25 n.52. However, nonsubject imports from other subject sources, including China, the Netherlands, Germany, Taiwan, Turkey, and the United Kingdom, increased notwithstanding the Section 232 measures applicable to such imports. *See Tin Mill Products from Canada, China, Germany, and*

(Continued…)

above, nonsubject imports now account for the largest share of the U.S. market,[205] and they were larger in volume and market share than in 2016, the last full year of available data prior to the Section 232 measures being put in place in 2018.[206]

In sum, based on the significant volume and market share of subject imports during the original investigations; the subject producers' continued presence in the U.S. market through sales of out-of-scope tin mill products; the subject producers' substantial capacity and excess capacity, ability to product-shift, and their export orientation; and the attractiveness of the U.S. market, we find that the likely volume of subject imports would be significant, both in absolute terms and relative to consumption in the United States, if the order were revoked.

D. Likely Price Effects

1. The Original Investigation and Prior Five-Year Reviews

In the original investigation and related remand proceedings, the Commission found that the domestic like product and subject imports were substitutable, that price was an important factor in purchasing decisions, and that the U.S. market for TCCSS was price sensitive.[207] It found that there was significant underselling by subject imports, which coincided with domestic price declines for TCCSS during the period of investigation.[208] It observed that the aggressive pricing by importers of subject merchandise was used by at least some purchasers in their price negotiations with the domestic suppliers, and that the adverse price effects of subject imports were also reflected in confirmed lost revenue allegations.[209] It

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South Korea, Inv. Nos. 701-TA-685 and 731-TA-1599-1601, 1603 (Final), USITC Pub. 5492 (Feb. 2024) at Table IV-3 (showing that imports from several countries increased during 2020 through 2022).

[205] CR/PR at Tables I-12, C-1.

[206] In 2023, the volume of nonsubject imports was *** short tons and they accounted for *** percent of apparent U.S. consumption. CR/PR at Tables IV-1, C-1. The volume of nonsubject imports in 2016 was 1,058,090, accounting for 43.1 percent apparent U.S. consumption. CR/PR at C-13.

[207] Original Determination, USITC Pub. 3337 at 11-12; Second Remand Determination, USITC Pub. 3674 at 32, 61-62.

[208] Original Determination, USITC Pub. 3337 at 12; Second Remand Determination, USITC Pub. 3674 at 6-26, 61-62. Further analysis upon remand incorporated customer-specific prices, added the volumes of sales won based on particular bids, and aggregated certain company-specific price data to avoid the appearance of overstating the number of bid comparisons. This analysis generally showed increasing levels of underselling by subject imports over the original period of investigation. *See* Second Remand Determination, USITC Pub. 3674 at 6-26. On remand, the Commission further explained that the underselling margins exhibited by the subject imports were not attributable to the domestic industry's lead-time price premium. *Id*. at 26-29.

[209] Original Determination, USITC Pub. 3337 at 12-14.

concluded that subject imports generally undersold nonsubject imports toward the end of the period of investigation, and that subject imports had a significant adverse effect on domestic prices that was distinct from any adverse price effects of nonsubject imports.[210] Given these considerations, the Commission found that significant volumes of underpriced subject imports had significant price-suppressing and price-depressing effects on prices for domestically produced TCCSS.[211]

In the first five-year review, the Commission again found that the domestic like product and subject imports were generally substitutable and that the U.S. market for TCCSS was price sensitive.[212] It found that Japanese producers would likely attempt to win sales contracts through aggressive pricing if the order were revoked as they did prior to the imposition of the order.[213] It concluded that likely significant volumes of low-priced subject imports would have adverse price effects on spot sales and would also likely depress prices that were agreed to during negotiations for new contracts in the event of revocation.[214] Finally, it observed that the U.S. market for TCCSS was characterized by a small number of purchasers, and that even a few low-priced sales of subject imports would have significant adverse price effects in a relatively short period of time.[215]

In the second five-year review, the Commission reiterated that the domestic like product and subject imports were generally substitutable and that the U.S. market for TCCSS was price sensitive.[216] It also found that the U.S. market remained characterized by a small number of large purchasers, which may seek to enter into annual or longer-term contracts, as well as a number of smaller purchasers.[217] If the order were revoked, it concluded, subject producers from Japan would be able to win sales and expand their U.S. market share through spot sales, or by bidding for and winning contracts, and that successful bids would have an immediate impact on spot sales, new contract negotiations, and existing contracts containing meet-or-release or similar clauses.[218] It observed that the credible threat of purchasers buying subject imports could put pressure on domestic prices even when subject producers did not

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[210] Original Determination, USITC Pub. 3337 at 15-16.

[211] Original Determination, USITC Pub. 3337 at 16; Second Remand Determination, USITC Pub. 3674 at 61-62.

[212] First Review, USITC Pub. 3860 at 24-25.

[213] First Review, USITC Pub. 3860 at 26.

[214] First Review, USITC Pub. 3860 at 25-26.

[215] First Review, USITC Pub. 3860 at 25-26.

[216] Second Review, USITC Pub. 4325 at 24.

[217] Second Review, USITC Pub. 4325 at 25.

[218] Second Review, USITC Pub. 4325 at 25.

win a sale and that further downward pressure on domestic TCCSS prices would be particularly harmful to U.S. producers given that the U.S. industry was experiencing a cost/price squeeze even without the presence of subject imports.[219] Given these considerations, it concluded that subject imports were likely to undersell and price aggressively in order to win sales with purchasers and would likely have significant depressing and/or suppressing effects on the prices of the domestic like product.[220]

In the third five-year review, the Commission found that there was at least a moderate degree of substitutability between domestically produced TCCSS and subject merchandise and that price was an important factor in purchasing decisions for TCCSS.[221] Given the absence of subject imports from the U.S. market, the record did not contain any price comparison data for subject imports and domestically produced TCCSS during the period of review.[222] The Commission found that, in light of the Japanese TCCSS industry's export orientation, the substitutability between domestically produced TCCSS and subject merchandise, and the importance of price in purchasing decisions, Japanese exporters had the same incentive and ability to undersell the domestic product to gain U.S. market share as they did during the original investigation.[223] It noted that Japanese TCCSS producers were exporting to third country markets at AUVs well below those prevailing in the U.S. market and would therefore be capable of capitalizing on higher U.S. prices while still underselling the domestic industry in order to gain market share.[224] The Commission concluded that the increased volumes of low-priced subject imports that were likely after revocation would likely force the domestic industry to cut prices or forego price increases or else lose sales to subject imports.[225] Accordingly, it found that subject imports from Japan would likely undersell the domestic like product to a significant degree after revocation, gaining market share and/or having significant price depressing or suppressing effects.[226]

[219] Second Review, USITC Pub. 4325 at 25.
[220] Second Review, USITC Pub. 4325 at 25.
[221] Third Review, USITC Pub. 4795 at 25.
[222] Third Review, USITC Pub. 4795 at 25.
[223] Third Review, USITC Pub. 4795 at 25.
[224] Third Review, USITC Pub. 4795 at 26.
[225] Third Review, USITC Pub. 4795 at 26.
[226] Third Review, USITC Pub. 4795 at 26.

2. The Current Review

As discussed above in Section III.B.3., we find that there is at least a moderate degree of substitutability between domestically produced TCCSS and subject imports and that price is an important factor in purchasing decisions for TCCSS.

The Commission requested quarterly pricing data on four TCCSS products shipped to unrelated U.S. customers during period of review.[227] All three U.S. producers and *** importer of subject merchandise (***) provided usable pricing data for sales of the four requested products, although not all firms reported pricing for all products for all quarters, and there was particularly limited data available for subject imports given the minimal volume of subject imports in the U.S. market during the period of review. Pricing data reported by these firms accounted for *** percent of U.S. producers' U.S. shipments of TCCSS and *** percent of U.S. shipments of subject imports from Japan in 2023.[228] The limited volume of subject imports oversold the domestic like product in all four available quarterly comparisons, involving *** short tons, at margins ranging from *** to *** percent.[229]

We have also considered price trends. Prices for domestically produced TCCSS for all four pricing products increased overall between *** and *** percent during the period of review.[230] Subject import pricing data were only available for pricing products 1 and 2 for the ***, and subject import prices were lower in in fourth quarter of 2023 than in the fourth quarter of 2022.[231]

We find that subject imports are likely to undersell the domestic like product to a significant degree if the order were revoked. As discussed above, during the original

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[227] CR/PR at V-7. The four pricing products were as follows:

> Product 1.-- Single reduced, electrolytic tinplate with base box weights of 75–95 lbs. inclusive and less than 41 inches in width, in coils.
> Product 2.-- Double reduced, electrolytic tinplate with base box weights of 55–65 lbs. inclusive and less than 41 inches in width, in coils.
> Product 3.-- Single reduced, electrolytic chromium-coated steel with base box weights of 65–80 lbs. inclusive and less than 41 inches in width, in coils.
> Product 4.-- Double reduced, electrolytic chromium-coated steel with base box weights of 55–65 lbs. inclusive and less than 41 inches in width, in coils.

Id.

[228] CR/PR at V-7.

[229] CR/PR at Tables V-4 – V-9.

[230] CR/PR at V-14.

[231] CR/PR at Tables V-4, V-5.

investigation, the Commission found that subject imports undersold the domestic like product to a significant degree and observed that aggressive pricing practices had enabled subject imports to gain market share.[232] In light of the Japanese TCCSS industry's excess capacity, its export orientation, the substitutability between domestically produced TCCSS and subject merchandise, the importance of price in purchasing decisions, and the attractiveness of the U.S. market, Japanese exporters have the same incentive and ability to undersell the domestic product to gain U.S. market share as they did at the time of the original investigation.[233] While

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[232] Japanese Respondents' argument that the Commission's price effects findings in the original investigation "no longer apply," Japanese Respondents Posthearing Br. at 10, is without merit. As discussed above in Section III.A., the statute explicitly directs the Commission to consider its findings in the original investigation.

[233] Citing the Commission's recent negative determinations in the investigations of tin mill products from Canada, China, and Germany, in particular the Commission's findings in its material injury and threat analyses, Japanese Respondents argue that the Commission should similarly find that subject imports from Japan are not likely to not compete on the basis of price. Japanese Respondents Prehearing Br. at 22, 52-56. In doing so, Japanese Respondents overlook that the Commission found in the recent tin mill products investigations that subject imports from China, Canada, and Germany had predominantly oversold the domestic like product, with non-price reasons explaining those imports' gain in market share, whereas in this review the Commission finds that subject imports from Japan are likely to undersell the domestic like product to a significant degree. *Tin Mill Products from Canada, China, Germany, and South Korea*, Inv. Nos. 701-TA-685 and 731-TA-1599-1601, 1603 (Final), USITC Pub. 5492 (Feb. 2024) at 38-62. With subject imports likely to undersell the domestic like product to a significant degree to gain market share, and given the importance of price in purchasing decisions, we do not agree that in the event of revocation purchases of subject imports from Japan would be for non-price based reasons. Moreover, Japanese Respondents misconstrue the Commission's finding in the recent tin mill investigations on imports from Canada, China, and Germany that the gain in market share by imports from those countries was for non-priced reasons as indicating an absence of price-based competition in the U.S. tin mill market at large. That is not what the Commission found in those investigations. Further, the limited availability of certain product types from the domestic industry that were being imported from different sources was a relevant non-price factor that affected the Commission's analysis in the recent investigations on tin mill products from Canada, China, and Germany, but the record in the current review shows that there is a substantial overlap in the TCCSS products offered by the domestic industry and subject Japanese producers, particularly with respect to width and non-D&I products. Thus, the record here indicates that competition between the domestic like product and subject imports upon revocation would likely be heavily price-based.

We also find unpersuasive Japanese Respondents' argument that the Commission's recent finding that imports of tin mill products from Canada, China, and Germany had no adverse price effects means that the comparatively smaller likely volume of subject imports could also have no adverse price effects. While the Commission found that imports from Canada, China, and Germany predominantly oversold the domestic like product in its recent investigations, it found in the original investigation of TCCSS from Japan that subject imports had significantly undersold the domestic like product to gain market share. As discussed above, we find that the volume of subject imports is likely to be significant (Continued…)

the limited volume of subject imports in the U.S. market during the period of review oversold the domestic like product, as discussed above, the record indicates that Japanese TCCSS producers are selling in other markets at AUVs well below prevailing prices in the U.S. market and therefore would have additional incentive to obtain higher prices on exports to the U.S. market while still being able to price below the domestic industry in order to gain market share. Absent the discipline of the order, the likely significant volume of low-priced subject imports would likely force the domestic industry to either reduce its prices, forego price increases that would otherwise have occurred, or risk losing market share to subject imports, as occurred in the original investigation.[234] Thus, we find that if the order were revoked, the significant volume of low-priced subject imports would likely have significant adverse price effects within a reasonably foreseeable time.[235]

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upon revocation. Given that such imports are likely to compete aggressively on price in order to gain market share as in the original investigation, increased volumes of low-priced subject imports are likely to have significant price effects, even if comparatively lower in volume than nonsubject imports.

[234] We are unpersuaded by Japanese Respondents' argument that the absence of evidence of price depression and price suppression during the period of review precludes a finding of likely significant price effects by subject imports after revocation. Japanese Respondents Prehearing Br. at 57-61, 63; Japanese Respondents Posthearing Br. at 9-10. As discussed above, subject imports are likely to resume underselling after revocation as a means of gaining market share. Given the importance of price and the substitutability of subject imports and the domestic like product, the underselling is likely to cause subject imports to capture market share from the domestic industry and/or depress or suppress prices for the domestic like product. The absence during the period of review (when subject imports were under the discipline of the order) of evidence that subject imports depressed or suppressed domestic producer prices, and the Commission's finding in its recent investigation of tin mill products from Canada, China, and Germany that those nonsubject imports did not have significant price effects, does not address what is likely to occur in the event of revocation when subject imports from Japan resume underselling. We similarly find unpersuasive Japanese Respondents' argument that the overselling by subject imports during the period of review indicates that subject imports would be limited to certain high value niche products if the order were revoked. Japanese Respondents Prehearing Br. at 63-64. Subject import prices under the discipline of the order are not necessarily predictive of subject import prices after revocation. As discussed above, there is substantial overlap in the types of TCCSS supplied by the domestic industry and subject producers and price is an important purchasing factor, and we find that subject imports will compete directly and aggressively with the domestic like product based on price, as they did in the original investigation.

[235] We also find that the domestic industry would not be insulated from subject import competition by the fact that the domestic like product was sold predominantly ***, while subject imports were sold ***, during the period of review. CR/PR at Table V-3. These spot sales were related to very small volumes of subject imports pursuant to a qualification process, and therefore, are not indicative of likely behavior for larger, commercial volumes of subject imports. As discussed above in Section III.B.3., for sales to other export markets, *** percent of Japanese producers' sales were on a short-term contract basis and *** percent were spot sales, with the remainder sold under annual (Continued…)

E. Likely Impact

1. The Original Investigation and Prior Five-Year Reviews

In the original investigation and related remand proceedings, the Commission found that subject imports had a significant adverse impact on the domestic industry.[236] It emphasized that most of the domestic industry's output, employment, and financial performance indicia declined overall during the period of investigation and noted that the industry's financial performance was lowest when subject import volumes peaked.[237] It rejected respondents' claim that the majority of the increase in the volume of subject imports was by a few large customers for non-price reasons.[238] It also found that the significant adverse impact by subject imports was not offset or outweighed by other factors, including the domestic industry's quality and delivery issues, lead time advantages of domestic producers, and nonsubject imports.[239]

In the first review, the Commission found that revocation of the orders would likely result in a significant volume of low-priced subject imports that would likely have a significant adverse impact on the domestic industry.[240] It found that the domestic industry was vulnerable, especially given flat or declining demand trends, the price sensitive nature of the U.S. market, the cost/price squeeze the industry was experiencing, and the industry's

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contracts. CR/PR at V-5. We also note that, for sales to the Japanese market, their sales were roughly evenly split among long-term contracts, spot sales, and short-term contracts. *Id.*

Further, given the overlap in product offerings and customers, subject imports would likely compete with domestic producers for contracts to supply TCCSS to the same customers if the order were revoked. Moreover, given the limited number of large purchasers and the comparable products that we expect Japanese producers would be able to provide them, even smaller sales or offers at aggressive pricing can negatively impact domestic producers' negotiations for larger contract volumes. Consistent with the Commission's findings in prior reviews, we find that the small number of large U.S. purchasers would likely use low-priced subject imports to leverage price concessions from the domestic industry if the order were revoked. *See* Second Remand Determination, USITC Pub. 3674 at 33-36.*; see also* U.S. Steel Prehearing Br. at 35-37; Cleveland-Cliffs Prehearing Br. at 38-41. Indeed, the record indicates that purchasers sought price concessions from domestic producers during the period of review, underscoring the importance of price in purchasing decisions. *See* U.S. Steel Posthearing Br., Exhibit 1, Attachment B (***).

[236] Original Determination, USITC Pub. 3337 at 16-19; Second Remand Determination, USITC Pub. 3674 at 44-62.

[237] Original Determination, USITC Pub. 3337 at 17-18.

[238] Original Determination, USITC Pub. 3337 at 18.

[239] Second Remand Determination, USITC Pub. 3674 at 44-62.

[240] First Review, USITC Pub. 3860 at 27-30.

consistently poor financial performance during the period of review.[241] Emphasizing that the Japanese industry remained exported-oriented with excess capacity, as well as the attractiveness of the U.S. market, the Commission found that the likely resumption of significant volumes of low-priced subject imports would likely result in continuation or recurrence of material injury to the domestic industry.[242] Rejecting respondents' assertion that subject imports would compete with the domestic like product only to a limited extent, the Commission found that the Japanese producers had indicated that they were still able to produce TCCSS in all varieties and that there was no evidence of any change in the substitutability or high quality of Japanese TCCSS.[243]

In the second review, the Commission found that the domestic industry was vulnerable due to several factors, including declining demand for TCCSS, the price sensitivity of the U.S. market, the domestic industry's cost-price squeeze, and the fact that many domestic industry performance indicia declined during the period of review.[244] Given these considerations, the Commission concluded that the likely aggressive pricing of the likely increased volumes of subject imports would likely lead the domestic industry either to cut prices for the domestic like product or lose sales.[245] Under either scenario, the Commission found, the industry's revenues and operating performance would decline significantly and, thus, revocation of the orders would likely have a significant adverse impact on the domestic industry.[246]

In the third review, the Commission found that the domestic industry continued to struggle and remained vulnerable.[247] The Commission observed that the domestic industry's performance declined by most measures during the period of review.[248] The Commission concluded that the deteriorating demand conditions during the current review period were not likely to improve significantly in the reasonably foreseeable future, leaving the domestic industry particularly susceptible to injury from the reduced sales or lower prices likely to result from renewed competition with low-priced subject imports.[249]

The Commission found that revocation of the order would likely result in a significant increase in the volume of low-priced subject imports that would likely have adverse price

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[241] First Review, USITC Pub. 3860 at 29-30.
[242] First Review, USITC Pub. 3860 at 29-30.
[243] First Review, USITC Pub. 3860 at 29-30.
[244] Second Review, USITC Pub. 4325 at 27-28.
[245] Second Review, USITC Pub. 4325 at 29.
[246] Second Review, USITC Pub. 4325 at 29-30.
[247] Third Review, USITC Pub. 4795 at 28-29.
[248] Third Review, USITC Pub. 4795 at 29.
[249] Third Review, USITC Pub. 4795 at 29.

effects on the domestic industry. It further found that the likely significant volume of subject imports, coupled with their adverse price effects, would likely have a significant impact on the domestic industry upon revocation of the order within a reasonably foreseeable time.[250]

The Commission rejected Japanese Respondents' argument that subject imports would not likely have a significant adverse impact on the domestic industry due to the Section 232 measure.[251] The Commission concluded that the limited evidence on the record did not indicate that the Section 232 tariffs had resulted in significant changes in market conditions for the domestic TCCSS industry as of the closing of the record.[252]

2. The Current Review

During the period of review, the domestic industry's output and employment indicators generally declined, while its financial performance generally improved from 2021 to 2022 but subsequently declined from 2022 to 2023.

The domestic industry's capacity declined by *** percent, from *** short tons in 2021 to *** short tons in 2022 and *** short tons in 2023.[253] The industry's production declined by *** percent, from *** short tons in 2021 to *** short tons in 2022 and *** in 2023.[254] Consequently, the domestic industry's capacity utilization declined by *** percentage points, decreasing from *** percent in 2021 to *** percent in 2022 and *** percent in 2023.[255]

The domestic industry's employment indicia generally declined during the period of investigation: the number of production-related workers ("PRWs") in 2023 was *** percent lower than in 2021,[256] productivity declined by *** percent,[257] total hours worked irregularly decreased by *** percent during this period,[258] and wages paid irregularly decreased by ***

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[250] Third Review, USITC Pub. 4795 at 29-30.

[251] Third Review, USITC Pub. 4795 at 30.

[252] Third Review, USITC Pub. 4795 at 30.

[253] CR/PR at Tables III-5, C-1.

[254] CR/PR at Tables III-5, C-1.

[255] CR/PR at Tables III-5, C-1.

[256] PRWs initially increased from *** in 2021 to *** in 2022 and then decreased to *** in 2023. CR/PR at Tables III-9, C-1.

[257] Productivity declined from *** short tons per 1,000 hours in 2021 to *** short tons per 1,000 hours in 2022 and *** short tons per 1,000 hours in 2023. CR/PR at Tables III-9, C-1.

[258] Total hours worked by PRWs increased from *** hours in 2021 to *** hours in 2022, before decreasing to *** hours in 2023. CR/PR at Tables III-9, C-1.

percent.[259] Hourly wages increased by *** percent[260] and unit labor costs increased by *** percent.[261]

The domestic industry's U.S. shipments declined by *** percent, from *** short tons in 2021 to *** short tons in 2022 and *** short tons in 2023.[262] The industry's overall market share declined by *** percentage points, from *** percent in 2021 to *** percent in 2022 and *** percent in 2023.[263] The industry's end-of-period inventories increased irregularly by *** percent, increasing from *** short tons in 2021 to *** short tons in 2022 and then decreasing to *** short tons in 2023.[264]

The domestic industry's financial performance improved by most measures from 2021 to 2022 but subsequently declined from 2022 to 2023. The domestic industry's net sales value decreased irregularly by *** percent from 2021 to 2023, increasing from $*** in 2021 to $*** in 2022 before decreasing to $*** in 2022.[265] The domestic industry's gross profits increased *** percent over the period of review from $*** in 2021 to $*** in 2022 before declining to $*** in 2023.[266] The domestic industry's operating income increased from $*** in 2021 to $*** in 2022 before decreasing to $*** in 2023.[267] Similarly, the domestic industry's operating income margin improved from *** percent in 2021 to *** percent in 2022 before decreasing to *** percent in 2023.[268] The domestic industry's net income increased from negative $*** in 2021 to $*** in 2022 before declining to $*** in 2023.[269] Similarly, the domestic industry's net income margin improved from *** percent in 2021 to *** percent in 2022 before declining to *** percent in 2023.[270]

The domestic industry's capital expenditures increased from $*** in 2021 to $*** in 2022 before declining to $*** in 2023, a level *** percent lower than in 2021.[271] Research and

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[259] Total wages paid to PRWs initially increased from $*** in 2021 to $*** in 2022 and then decreased to $*** in 2023. CR/PR at Tables III-9, C-1.

[260] Hourly wages increased from $*** per hour in 2021 to $*** per hour in 2022 and $*** per hour in 2023. CR/PR at Tables III-9, C-1.

[261] Unit labor costs increased from $*** per short ton in 2021 to $*** per short ton in 2022 and $*** per short ton in 2023. CR/PR at Tables III-9, C-1.

[262] CR/PR at Tables III-6, C-1.

[263] CR/PR at Tables IV-12, C-1.

[264] CR/PR at Tables III-7, C-1.

[265] CR/PR at Tables III-10, C-1.

[266] CR/PR at Tables III-10, C-1.

[267] CR/PR at Tables III-10, C-1.

[268] CR/PR at Tables III-10, C-1.

[269] CR/PR at Tables III-10, C-1.

[270] CR/PR at Tables III-10, C-1.

[271] CR/PR at Tables III-13, C-1.

development expenses increased throughout the period of review from $*** in 2021 to $*** in 2022 and $*** in 2023.[272] The industry's average operating return on assets increased from negative *** percent in 2021 to *** percent in 2022 before declining to *** percent in 2022.[273]

In addition to the domestic industry's declines output and employment indicators discussed above, the domestic industry also closed or idled several TCCSS facilities. In particular, Cleveland-Cliffs reported that it indefinitely idled its Weirton facility in April 2024.[274] Cleveland-Cliffs states that, while it has indefinitely idled the Weirton facility, the facility is not for sale "in the hopes of an eventual restart."[275] Cleveland-Cliffs claims that indefinitely idling the facility means that it will not be making any products there, but will maintain the equipment so that if market conditions justify restarting the facility, it can do so.[276] [277]

As discussed above, U.S. Steel also idled several of its facilities but likewise reported that it retained the ability to bring additional capacity online imminently, if market conditions warrant.[278] U.S. Steel similarly indicated that the order on TCCSS from Japan has been *** and that revocation of the order ***.[279]

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[272] CR/PR at Tables III-14, C-1.

[273] CR/PR at Tables III-18, C-1.

[274] Cleveland-Cliffs Prehearing Br. at 48-49.

[275] Cleveland-Cliffs Posthearing Br., Exhibit 1 at paras. 10-12.

[276] Hearing Tr. at 44-45 (Smith). According to Cleveland-Cliffs, ***. Cleveland-Cliffs Posthearing Br., Exhibit 1 at paras. 10-12; *see also* CR/PR at Table D-1.

[277] We do not agree with Japanese Respondents that we should consider only the domestic producers that are currently producing TCCSS in our analysis. Japanese Respondents Prehearing Br. at 78-79. As discussed above, Cleveland-Cliffs was the second largest domestic producer during the period of review and is continuing to maintain the Weirton facility in the hope that market conditions will improve to permit its reopening. Thus, even though it is not currently producing TCCSS, we find it appropriate to include its performance and experience as part of the domestic industry in our forward-looking analysis.

[278] U.S. Steel Prehearing Br. at 29; U.S. Steel Posthearing Br. at 5-6. The parties dispute the cause of U.S. Steel's closure of its USS-UPI facility and the effect that closure has had on the U.S. market. Japanese Respondents contend that the closure was for strategic reasons and left a hole in the market with respect to domestic supply, while U.S. Steel contends that it has not refused to supply purchasers with TCCSS. We note that ***. U.S. Steel Posthearing Br., Exhibit 1, Attachment B. This illustrates that domestic producers faced pressure during the period of review to keep prices low to maintain the volume necessary to keep their facilities operating. Such pressure is likely to intensify if the order is revoked and a significant volume of low-priced subject imports compete aggressively for market share.

[279] CR/PR at Table D-1.

The smallest U.S. producer, Ohio Coatings, *** throughout the period of review but reported ***.[280] Ohio Coatings also reported that the order on TCCSS ***.[281]

While the domestic industry's profitability improved somewhat overall over the period of review, its ratio of operating income to net sales declined from *** percent in 2022 to *** percent in 2023. In view of the domestic industry's relatively low profitability and declining performance by most other measures, and in particular the industry's declining output and employment and the idling of production facilities we find that the domestic industry is currently in a vulnerable condition.[282] Several other factors also contributed to the domestic industry's vulnerability. Demand conditions deteriorated throughout the current review period and are not expected to improve significantly in the reasonably foreseeable future. In this declining market, the domestic industry lost market share to increasing volumes of nonsubject imports. These conditions have left the domestic industry particularly susceptible to injury from reduced sales or lower prices as a result of the intensified competition from subject imports that would likely result from revocation of the order.

As discussed above, we have found that if the order were revoked, the volume of subject imports would likely be significant within a reasonably foreseeable time. We have also found that the significant volume of subject imports would likely undersell the domestic like

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[280] CR/PR at Table III-5. Japanese Respondents argue that Ohio Coatings' reduction in supply was due to Cleveland-Cliffs' and U.S. Steel's decisions not to supply Ohio Coatings with black plate during the period of review. Japanese Respondents Prehearing Br. at 71-72; Japanese Posthearing Br. at 13. Regardless of this issue, Ohio Coatings indicated that ***. CR/PR at Tables III-4, D-1.

[281] CR/PR at Table D-1.

[282] We are unpersuaded by the Japanese Respondents' argument that the domestic industry is not vulnerable to injury from subject imports *inter alia* because Ohio Coatings' difficulties obtaining black plate during the period of review were attributable to the domestic industry's refusal to supply it with black plate. Japanese Respondents Prehearing Br. at 71-72; Japanese Posthearing Br. at 13. The Commission may find a domestic industry vulnerable irrespective of whether subject imports contributed to the vulnerability. *See, e.g.*, *Consolidated Fibers, Inc. v. United States*, 571 F. Supp. 2d 1355, 1365 (Ct. Int'l Trade 2008) (noting that the Commission's task is not to determine whether the subject imports significantly contributed to the decline of the domestic industry during the {period of review}" and that "the antidumping duty orders under review imposed duties on subject imports {making} it less likely that subject imports would be source of any domestic industry vulnerability"). Furthermore, notwithstanding any problems that Ohio Coatings may have experienced in sourcing black plate, its share of the domestic industry's production increased from *** percent in 2021 to *** percent in 2023. CR/PR at Table III-5. Ohio Coatings reported that revocation of the order would ***. CR/PR at Table D-1. In any event, Ohio Coatings accounted for only *** percent of the domestic industry's production in 2023, so even if it were faced with injury solely due to the lack of black plate supply, that would not undermine a finding of vulnerability and likely material injury for the domestic industry as a whole.

product to a significant degree, forcing the domestic industry to either cut prices, forego needed price increases, or else lose market share to subject imports. The likely significant volume of cumulated subject imports, coupled with their likely significant price effects, would have a direct adverse impact on the domestic industry's production, shipments, profitability, and employment, as well as its ability to raise capital and make and maintain necessary capital investments. Consequently, we conclude that if the order were revoked, subject imports would be likely to have an adverse impact on the domestic industry within a reasonably foreseeable time.[283]

We have also considered the role of nonsubject imports in the U.S. market. As discussed in Section III.B.2. above, nonsubject imports increased in volume and market share during the period of review to account for the largest source of supply of TCCSS to the U.S. market by the end of the period, with a *** percent share of apparent U.S. consumption in 2023.[284] Notwithstanding this, the record does not indicate that the presence of nonsubject imports would prevent subject imports from Japan from significantly increasing their presence in the U.S. market in the event of revocation of the order, given the available capacity and the export orientation of the subject industry, as well as the relative attractiveness of the U.S. market. Given the domestic industry's *** percent share of apparent U.S. consumption in 2023, as well as the substitutability between subject imports and the domestic like product, their overlap in terms of product offerings and purchasers, and the importance of price to purchasing decisions, it is likely that the significant increase in low-priced subject imports would come at least in part at the expense of the domestic industry, and/or depress or suppress prices for the domestic like product. For these reasons, we find that any effects of nonsubject imports would be distinct from the likely effects attributable to subject imports and that nonsubject

[283] We are unpersuaded by Japanese Respondents' argument that because the domestic industry has allegedly shown no measurable improvement since imposition of the order, there can be no causal link between the industry's performance and continuation of the order. Japanese Respondents Prehearing Br. at 76-77; Japanese Respondents Posthearing Br. at 14. Japanese Respondents misapprehend the Commission's analysis in a five-year review. While we consider whether any improvement in the state of the industry is related to the order and the domestic industry's performance during the period of review informs our forward-looking analysis, particularly in terms of assessing an industry's vulnerability and the likely effect that revocation of an order will have on domestic producers, an industry's poor performance or vulnerable condition with the order in place does not mandate a finding that subject imports could have no effect after revocation. To the contrary, a vulnerable domestic industry would be less capable of withstanding intensified competition from low-priced subject imports after revocation than an industry that is not vulnerable.

[284] CR/PR at Tables I-12, C-1.

imports would not prevent subject imports from having a significant impact on the domestic industry.[285]

We recognize that apparent U.S. consumption was *** percent lower in 2023 than in 2021.[286] As discussed in section III.B.1 above, demand for TCCSS has declined due to the increased use of substitute materials, and most market participants reported expecting demand for TCCSS to remain stable or decline over the next two years.[287] To the extent that demand continues to decline, the increase in low-priced subject imports that is likely after revocation would exacerbate the effects of declining demand on the domestic industry.

We are not persuaded by Japanese Respondents' argument that our recent negative determinations in investigations concerning nonsubject imports from Canada, China, and Germany somehow mandate a negative determination in this review. Specifically, Japanese Respondents highlight the Commission's finding from those investigations that the domestic industry's loss of market share to those imports resulted from widespread issues concerning the availability and quality of domestically produced tin mill products, forcing purchasers to turn to imports,[288] and point to questionnaire responses and testimony on the record of this review indicating that purchasers were unable to obtain TCCSS from domestic producers.[289] Japanese Respondents contend that because these issues are likely to persist after revocation, given the lengthy process that domestic producers would need to undergo to become qualified to supply additional TCCSS, subject imports are likely to serve demand unmet by the domestic industry after revocation and therefore have no impact on the domestic industry.[290]

The facts on the record of this review are distinguishable from those at issue in the recent investigations of tin mill products from Canada, China, and Germany in several

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[285] Even if nonsubject imports or other factors are likely to contribute to a domestic industry's injury after revocation, the Commission may determine that revocation of the order is likely to result in the continuation or recurrence of material injury if subject imports are more than a minimal or tangential cause of the injury. *See, e.g.*, *Nippon Steel Corp. v. United States*, 345 F.3d 1379, 1381 (Fed. Cir. 2003); see also SAA at 885 (factors other than subject imports may be causing injury to the industry but "also may demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports. . . If the Commission finds that an industry is vulnerable to injury from subject imports, it may determine that injury is likely to continue or recur, even if other causes, as well as future imports, are likely to contribute to future injury").

[286] *See* CR/PR at Table C-1.

[287] CR/PR at II-17 & Tables II-7.

[288] Japanese Respondents Prehearing Br. at 72-77.

[289] Japanese Respondents Prehearing Br. at 74-75, Appendices C (Sonoco Declaration), E (Trivium Declaration) (also citing *** Purchaser Questionnaire).

[290] Japanese Respondents Prehearing Br. at 76-77.

important respects. First, as discussed above, the Commission found that tin mill products imported from Canada, China, and Germany had predominantly oversold the domestic like product and had gained market share from the domestic industry for non-price reasons, including the domestic industry's inability to supply certain products available only from those countries.[291] By contrast, the record of this review indicates that there is substantial overlap in the types of TCCSS offered by domestic industry and the subject Japanese producers, making it likely that subject imports would compete with the domestic like product primarily on the basis of price after revocation. Furthermore, unlike the overselling on the record of the recent tin mill products investigations, we assess the likely price effects of subject imports after revocation in this review with reference to the Commission's finding in the original investigation that subject imports undersold the domestic like product to a significant degree to gain market share.[292] We have found that subject imports are likely to resume their underselling strategy from the original investigations if the order were revoked, as a means of gaining market share.

Although we recognize that the record in this review indicates that the domestic industry experienced some supply constraints and certain purchasers reported being unable to obtain TCCSS from domestic sources, we find that domestic supply constraints would not likely prevent subject imports from having a significant adverse impact on the domestic industry within a reasonably foreseeable time.[293] U.S. Steel and Ohio Coatings possess sufficient capacity, including unused capacity, to at least maintain or even increase the domestic industry's share of apparent U.S. consumption from 2023 levels.[294] As we have found, the significant increase in subject import volume that is likely after revocation would likely come at least partly at the domestic industry's expense, particularly given the substantial overlap between the industry's TCCSS product offerings and those of subject producers and ***. Even to the extent that domestic supply constraints continue, increased volumes of low-priced subject imports are likely to depress or suppress prices for the domestic like product on the sales that domestic producers are capable of supplying.

In sum, we conclude that if the order were revoked, subject imports from Japan would likely have a significant adverse impact on the domestic industry within a reasonably foreseeable time.

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[291] *See Tin Mill Products from Canada, China, Germany, and South Korea*, Inv. Nos. 701-TA-685 and 731-TA-1599-1601, 1603 (Final), USITC Pub. 5492 (Feb. 2024) at 38-47.

[292] 19 U.S.C. § 1675a(a)(1).

[293] CR/PR at II-9 – II-11.

[294] CR/PR at Table III-5. U.S. Steel and Ohio Coatings had a combined capacity of *** short tons in 2023. *Id.*

IV. Conclusion

For the above-stated reasons, we determine that revocation of the antidumping order on TCCSS would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

Part I: Introduction

Background

On June 1, 2023, the U.S. International Trade Commission ("Commission" or "USITC") gave notice, pursuant to section 751(c) of the Tariff Act of 1930, as amended ("the Act"),[1] that it had instituted a review to determine whether revocation of the antidumping duty order on tin- and chromium-coated steel sheet ("TCCSS") from Japan would be likely to lead to continuation or recurrence of material injury to a domestic industry.[2] [3] On September 5, 2023, the Commission determined that it would conduct a full review pursuant to section 751(c)(5) of the Act.[4] Table I-1 presents information relating to the background and schedule of this proceeding.[5]

[1] 19 U.S.C. 1675(c).

[2] 88 FR 35920, June 1, 2023. All interested parties were requested to respond to this notice by submitting the information requested by the Commission.

[3] In accordance with section 751(c) of the Act, the U.S. Department of Commerce ("Commerce") published a notice of initiation of a five-year sunset review of the subject antidumping duty order. 88 FR 35832, June 1, 2023.

[4] 88 FR 64464, September 19, 2023. The Commission found that both the domestic and respondent interested party group responses to its notice of institution were adequate and determined that it should proceed to a full review of the antidumping duty order.

[5] The Commission's notice of institution, notice to conduct a full review, and scheduling notice are referenced in appendix A and may also be found at the Commission's web site (www.usitc.gov). Commissioners' votes on whether to conduct an expedited or a full review may also be found at the web site. Appendix B presents a list of witnesses appearing at the Commission's hearing.

Table I-1
TCCSS: Information relating to the background and schedule of this proceeding

Effective date	Action
August 28, 2000	Commerce's antidumping duty order on TCCSS from Japan (65 FR 52067, August 28, 2000)
July 21, 2006	Commerce's continuation of the antidumping order following affirmative determinations by Commerce and the Commission in their first review (71 FR 41422, July 21, 2006)
June 12, 2012	Commerce's continuation of the antidumping order following affirmative determinations by Commerce and the Commission in their second review (77 FR 34938, June 12, 2012)
July 11, 2018	Commerce's continuation of the antidumping order following affirmative determinations by Commerce and the Commission in their third review (83 FR 32074, July 11, 2018)
June 1, 2023	Commerce's initiation of the fourth five-year review on TCCSS from Japan (88 FR 35832, June 1, 2023)
June 1, 2023	Commission's institution of the fourth five-year review on TCCSS from Japan (88 FR 35920, June 1, 2023)
September 5, 2023	Commission's determination to conduct a full five-year review (88 FR 64464, September 19, 2023)
October 5, 2023	Commerce's final results of its expedited five-year review (88 FR 69133, October 5, 2023)
October 25, 2023	Commission's scheduling of a full review (88 FR 74209, October 30, 2023)
April 9, 2024	Commission's hearing
May 10, 2024	Commission's vote
May 28, 2024	Commission's determination and views

The original investigation

The original investigation resulted from a petition filed on October 28, 1999, with Commerce and the Commission, by Weirton Steel Corp., Weirton, West Virginia, the Independent Steelworkers Union, and the United Steelworkers of America, AFL-CIO, alleging that an industry in the United States was materially injured and threatened with material injury by reason of less-than-fair-value ("LTFV") imports of TCCSS from Japan.[6] Following notification of a final determination by Commerce that imports of TCCSS from Japan were being sold at LTFV,[7] the Commission determined on August 9, 2000 that a domestic industry was materially injured by reason of LTFV imports of TCCSS from Japan.[8] Commerce published the antidumping duty order on TCCSS from Japan on August 28, 2000.[9]

[6] Tin- and Chromium-Coated Steel Sheet from Japan, Inv. No. 731-TA-860 (Final), USITC Publication 3337, August 2000 ("Original publication"), pp. 1 and I-1.

[7] 65 FR 39364, June 26, 2000.

[8] 65 FR 50005, August 16, 2000. Chairman Koplan and Commissioner Askey dissented.

[9] 65 FR 52067, August 28, 2000.

Subsequent remand proceedings

The Japanese respondents appealed the Commission's original affirmative material injury determination to the U.S. Court of International Trade ("CIT"). On December 31, 2001, the CIT remanded the case to the Commission.[10] In the first remand, the Commission again made an affirmative injury determination.[11] On August 9, 2002, the CIT remanded the case to the Commission for a second time and expressly ordered the Commission to enter a negative injury determination.[12] The Commission appealed the CIT's order. On October 3, 2002, the Federal Circuit vacated the CIT's decision and ordered a remand to the Commission.[13]

In its second remand determination, the Commission again made an affirmative material injury determination.[14] On October 14, 2004, the CIT affirmed some aspects of the Commission's decision, but rejected others, and issued a remand with instructions to issue a negative material injury determination.[15]

On December 13, 2004, the Commission issued its third remand determination, making negative injury and threat of injury determinations, and noted that it would not have made such determinations in the absence of the CIT's order.[16] On March 25, 2005, the CIT affirmed the negative determinations.[17]

The Commission appealed the CIT's judgment to the Federal Circuit.[18] On August 10, 2006, the Federal Circuit reversed the CIT's decision, instructed the CIT to vacate the Commission's negative injury and threat of injury determinations, and directed the CIT to reinstate the Commission's affirmative material injury determination.[19] On November 16, 2006,

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[10] *Nippon Steel Corp. v. United States*, 182 F. Supp. 2d. 1330 (Ct. Int'l Trade 2001).

[11] Tin- and Chromium-Coated Steel Sheet from Japan, Inv. No. 731-TA-860 (Final) (Remand), USITC Publication 3493, March 2002 ("First Remand Determination"), p. 1.

[12] *Nippon Steel Corp. v. United States*, 223 F. Supp. 2d. 1349, 1372 (Ct. Int'l Trade 2002).

[13] *Nippon Steel Corp. v. United States*, 345 F.3d 1379 (Fed. Cir. 2003).

[14] Tin- and Chromium-Coated Steel Sheet from Japan, Inv. No. 731-TA-860 (Final) (Second Remand), USITC Publication 3674, February 2004 ("Second Remand Determination"), p. 1.

[15] *Nippon Steel Corp. v. United States*, 350 F. Supp. 2d 1186 (Ct. Int'l Trade 2004).

[16] Tin- and Chromium-Coated Steel Sheet from Japan, Inv. No. 731-TA-860 (Final) (Third Remand), USITC Publication 3751, December 2004 ("Third Remand Determination"), p. 1.

[17] *Nippon Steel Corp. v. United States*, Slip Op. 2005-038 (Ct. Int'l Trade 2005).

[18] On July 1, 2005, Commerce initiated and the Commission instituted the first five-year review on TCCSS from Japan (70 FR 38101, 38210). As the Commission's appeal was pending before the Federal Circuit, the order on TCCSS from Japan remained in place and the five-year review continued. Tin- and Chromium-Coated Steel Sheet from Japan, Inv. No. 731-TA-860 (Review), USITC Publication 3860, June 2006 ("First review publication"), p. 4. For additional information, see the "First five-year review" section below.

[19] *Nippon Steel Corp. v. United States*, 458 F.3d 1345 (Fed. Cir. 2006).

in accordance with the Federal Circuit's mandate, the CIT reinstated and sustained the Commission's second remand determination and its affirmative material injury determination.[20]

Subsequent five-year reviews

First five-year review

On October 4, 2005, the Commission determined that it would conduct a full review of the antidumping duty order on TCCSS from Japan.[21] On November 7, 2005, Commerce determined that revocation of the antidumping duty order on TCCSS from Japan would be likely to lead to continuation or recurrence of dumping.[22] On June 26, 2006, the Commission determined that material injury would be likely to continue or recur within a reasonably foreseeable time.[23] Following affirmative determinations in the five-year review by Commerce and the Commission, effective July 21, 2006, Commerce issued a continuation of the antidumping duty order on imports of TCCSS from Japan.[24]

Second five-year review

On September 6, 2011, the Commission determined that it would conduct a full review of the antidumping duty order on TCCSS from Japan.[25] On September 28, 2011, Commerce determined that revocation of the antidumping duty order on TCCSS from Japan would be likely to lead to continuation or recurrence of dumping.[26] On May 25, 2012, the Commission determined that material injury would be likely to continue or recur within a reasonably foreseeable time.[27] Following affirmative determinations in the five-year review by Commerce and the Commission, effective June 12, 2012, Commerce issued a continuation of the antidumping duty order on imports of TCCSS from Japan.[28]

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[20] *Nippon Steel Corp. v. United States*, 433 F. Supp. 2d 1336 (Ct. Int'l Trade 2006).
[21] 70 FR 60110, October 14, 2005.
[22] 70 FR 67448, November 7, 2005.
[23] 71 FR 37944, July 3, 2006; First review publication, p. 1.
[24] 71 FR 41422, July 21, 2006.
[25] 76 FR 58536, September 21, 2011.
[26] 76 FR 60001, September 28, 2011.
[27] 77 FR 32998, June 4, 2012; and Tin- and Chromium-Coated Steel Sheet from Japan, Inv. No. 731-TA-860 (Second Review), USITC Publication 4325, May 2012 ("Second review publication"), p. 1.
[28] 77 FR 34938, June 12, 2012.

Third five-year review

On August 4, 2017, the Commission determined that it would conduct a full review of the antidumping duty order on TCCSS from Japan.[29] On September 5, 2017, Commerce determined that revocation of the antidumping duty order on TCCSS from Japan would be likely to lead to continuation or recurrence of dumping.[30] On June 19, 2018, the Commission determined that material injury would be likely to continue or recur within a reasonably foreseeable time.[31] Following affirmative determinations in the five-year review by Commerce and the Commission, effective July 11, 2018, Commerce issued a continuation of the antidumping duty order on imports of TCCSS from Japan.[32]

Previous and related investigations

The Commission has conducted a number of previous import injury investigations on TCCSS or similar merchandise, as presented in table I-2.

Table I-2
TCCSS: Previous and related Commission proceedings and current status

Date	Number	Country	Product	ITC original determination	Current status
1984	TA-201-51	Global	Carbon and alloy steel	Affirmative	No safeguard measures implemented (see table notes).
2001	TA-201-73	Global	Carbon and alloy steel	Affirmative	President implemented safeguard measures; measures terminated, 12/4/2003 (see table notes).
2022	---	Japan	TCCSS	---	ITC declined request to institute a changed circumstances review, 9/19/2023.

Table continued.

[29] 82 FR 40168, August 24, 2017.
[30] 82 FR 41933, September 5, 2017.
[31] 83 FR 29568, June 25, 2018; and Tin- and Chromium-Coated Steel Sheet from Japan, Inv. No. 731-TA-860 (Third Review), USITC Publication 4795, June 2018 ("Third review publication"), p. 1.
[32] 83 FR 32074, July 11, 2018.

Table I-2 Continued.
TCCSS: Previous and related Commission proceedings and current status

Date	Number	Country	Product	ITC original determination	Current status
2023	701-TA-685	China	Tin mill products	Negative	No order issued, 2/26/2024.
2023	731-TA-1599	Canada	Tin mill products	Negative	No order issued, 2/26/2024.
2023	731-TA-1600	China	Tin mill products	Negative	No order issued, 2/26/2024.
2023	731-TA-1601	Germany	Tin mill products	Negative	No order issued, 2/26/2024.
2023	731-TA-1602	Netherlands	Tin mill products	---	Commerce negative final determination; ITC terminated investigation, 1/10/2024.
2023	731-TA-1603	South Korea	Tin mill products	Terminated (Negligible)	ITC found subject imports negligible (see table notes); ITC terminated investigation, 2/26/2024.
2023	731-TA-1604	Taiwan	Tin mill products	---	Commerce negative final determination; ITC terminated investigation, 1/10/2024.
2023	731-TA-1605	Turkey	Tin mill products	---	Commerce negative final determination; ITC terminated investigation, 1/10/2024.
2023	731-TA-1606	United Kingdom	Tin mill products	---	Commerce negative final determination; ITC terminated investigation, 1/10/2024.

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

Note: “Date” refers to the year in which the proceeding was instituted by the Commission.

Note: In Investigation No. TA-201-51, the President opted to continue to pursue negotiated settlements with steel exporting states.

Note: In Investigation No. TA-201-73, the Commission was equally divided in its determination regarding carbon and alloy steel tin mill products. In instances where the Commission is equally divided, the determination of either group of the Commissioners may be considered by the President to be the determination of the Commission. The President, effective March 20, 2002, implemented safeguard measures on certain carbon and alloy steel tin mill products. On December 4, 2003, the President terminated these safeguard measures due to changed circumstances. 68 FR 68483, December 8, 2003.

Note: In Investigation No. 731-TA-1603, Commerce issued a final weighted-average dumping margin of 0.00 percent for KG Dongbu, the largest TCCSS exporter in South Korea, and 2.69 percent for all others. Consequently, only imports from all others were relevant to the Commission’s negligibility analysis.

Summary data

Table I-3 presents a summary of data for the terminal year of the original investigation (1999), subsequent full five-year reviews (2005, 2011, and 2016), and the current proceeding (2023).[33] Between 1999 and 2023, the quantity of apparent U.S. consumption was lower in each successive terminal year, and overall decreased by more than half. U.S. imports of TCCSS from Japan accounted for a very limited share of the U.S. market after 1999. U.S. imports from nonsubject sources accounted for an expanding share of the U.S. market, while U.S. shipments by U.S. producers accounted for a contracting share of the market. In 2023, U.S. imports from nonsubject sources accounted for the largest share of the U.S. market for TCCSS.

U.S. producers' U.S. shipments of TCCSS declined by *** percent from 3.2 million short tons in 1999 to *** short tons in 2023. In 1999, U.S. importers' U.S. shipments of TCCSS from Japan were reported to be 329,645 shorts tons. Following the imposition of the antidumping duty order on TCCSS from Japan, subject imports were reported to be zero in each terminal year covered by the first, second, and third five-year reviews. In the current proceeding, U.S. importers' U.S shipments of TCCSS from Japan were reported to be *** short tons in 2023. Altogether, importers' U.S. imports/U.S. shipments of TCCSS from Japan were *** percent lower in 2023 than in 1999.Importers' U.S. imports/U.S. shipments of TCCSS from nonsubject sources, in contrast, increased by *** percent from *** short tons in 1999 to *** shorts in 2023.

In terms of U.S. producers' operations on TCCSS, capacity and production decreased by *** percent and *** percent, respectively, between 1999 and 2023. U.S. producers' capacity utilization was 74.5 percent in 1999 compared to *** percent in 2023, a decrease of *** percentage points. In 2023, the U.S. TCCSS industry employed *** production workers earning $*** per hour in wages. Although wage rates were more than double the level in 1999, the number of production workers, and hours worked by such workers, was substantially lower in 2023 than in 1999. In terms of profitability, the U.S. TCCSS industry generated an operating income margin of *** percent in 2023, following operating losses in 1999, 2005, 2011, and 2016.

[33] For a detailed discussion of data coverage in previous proceedings and in the current five-year review, please see "U.S. producers" and "U.S. importers" sections of Part I of this report.

Table I-3
TCCSS: Comparative data from the original investigation, subsequent reviews and current proceeding, 1999, 2005, 2011, 2016, and 2023

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

Item	Measure	1999	2005	2011	2016	2023
U.S. apparent consumption	Quantity	***	3,150,528	2,683,441	2,454,209	1,889,860
U.S. producers market share	Share of quantity	***	82.1	80.7	56.9	***
Japan market share	Share of quantity	***	---	---	---	***
Nonsubject market share	Share of quantity	***	17.9	19.3	43.1	***
All import sources market share	Share of quantity	***	17.9	19.3	43.1	***
U.S. apparent consumption	Value	***	2,382,943	2,778,297	2,199,419	3,478,681
U.S. producers market share	Share of value	***	81.1	78.9	58.4	***
Japan market share	Share of value	***	---	---	---	***
Nonsubject market share	Share of value	***	18.9	21.1	41.6	***
All import sources market share	Share of value	***	18.9	21.1	41.6	***
Japan imports	Quantity	329,645	---	---	---	***
Japan imports	Value	196,185	---	---	---	***
Japan imports	Unit value	$595	---	---	---	***
Nonsubject imports	Quantity	***	563,173	518,383	1,058,090	***
Nonsubject imports	Value	***	450,765	586,977	914,025	***
Nonsubject imports	Unit value	***	$800	$1,132	$864	***
All import sources	Quantity	***	563,173	518,383	1,058,090	***
All import sources	Value	***	450,765	586,977	914,025	***
All import sources	Unit value	***	$800	$1,132	$864	***

Table continued.

Table I-3 Continued
TCCSS: Comparative data from the original investigation, subsequent reviews, and current proceeding 1999, 2005, 2011, 2016, and 2023

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

Item	Measure	1999	2005	2011	2016	2023
Capacity	Quantity	4,607,145	3,670,240	3,543,000	3,068,000	***
Production	Quantity	3,433,592	2,738,382	2,168,240	1,374,409	***
Capacity utilization	Ratio	74.5	74.6	61.2	44.8	***
Producer U.S. shipments	Quantity	3,227,134	2,587,355	2,165,058	1,396,119	***
Producer U.S. shipments	Value	1,898,063	1,932,178	2,191,320	1,285,394	***
Producer U.S. shipments	Unit value	$588	$747	$1,012	$921	***
Producer inventories	Quantity	346,375	307,218	297,562	167,428	***
Producer inventory ratio to total shipments	Ratio	10.0	11.4	***	***	***
Production workers (number)	Noted in label	6,004	3,769	2,984	2,343	***
Hours worked (in 1,000 hours)	Noted in label	13,297	7,665	6,183	4,537	***
Wages paid (1,000 dollars)	Value	344,320	232,355	191,594	202,886	***
Hourly wages (dollars per hour)	Value	$25.89	$30.31	$30.99	$44.72	***
Productivity (short tons per 1,000 hours)	Noted in label	258.2	357.3	350.7	302.9	***

Table continued.

Table I-3 Continued
TCCSS: Comparative data from the original investigation, subsequent reviews, and current proceeding, 1999, 2005, 2011, 2016, and 2023

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

Item	Measure	1999	2005	2011	2016	2023
Net sales	Quantity	3,472,054	2,695,138	2,166,858	1,396,982	***
Net sales	Value	2,034,967	2,016,252	2,193,349	1,286,257	***
Net sales	Unit value	$586	$748	$1,012	$921	***
Cost of goods sold	Value	2,061,471	1,920,750	2,283,740	1,279,130	***
Gross profit or (loss)	Value	(26,504)	95,502	(90,391)	7,127	***
SG&A expense	Value	105,980	110,244	108,403	34,180	***
Operating income or (loss)	Value	(132,484)	(14,742)	(198,794)	(27,053)	***
Unit COGS	Unit value	$594	$713	$1,054	$916	***
Unit operating income	Unit value	($38)	($5)	($92)	($19)	***
COGS/ Sales	Ratio	101.3	95.3	104.1	99.4	***
Operating income or (loss)/ Sales	Ratio	(6.5)	(0.7)	(9.1)	(2.1)	***

Source: Office of Investigations memoranda INV-X-160 (July 18, 2000), INV-X-164 (July 24, 2000), INV-X-172 (July 26, 2000), INV-DD-073 (May 30, 2006), INV-DD-078 (June 6, 2006), INV-DD-082 (June 12, 2006), INV-KK-084 (May 3, 2012), INV-QQ-058 (May 11, 2018); original publication and subsequent five-year review publications; and compiled from data submitted in response to Commission questionnaires.

Note: For 1999, 2005, and 2023, apparent U.S. consumption was derived from U.S. importers' U.S. shipments of imports compiled from responses to Commission questionnaires. For 2011 and 2016, apparent U.S. consumption was derived from official U.S. import statistics adjusted by information from responses 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 I-4 presents U.S. producers' U.S. shipments and importers' U.S. imports / U.S. shipments of imports from 2017 through 2023, the years covered by the current five-year review. U.S. producers' U.S. shipments decreased irregularly between 2017 and 2023. U.S. producers' U.S. shipments increased by *** percent from *** short tons in 2017 to a peak of *** short tons in 2020, then declined in each successive year. In 2023, U.S. producers' U.S. shipments were *** short tons, *** percent lower than in 2017.

Importers' U.S. imports/U.S shipments of TCCSS from Japan were *** during 2017-21. In 2022 and 2023, U.S. importers' U.S. shipments of TCCSS from Japan were ***. Importers' U.S. imports/U.S. shipments of TCCSS from nonsubject sources increased irregularly. Importers' U.S. imports/U.S. shipments of TCCSS from nonsubject sources declined from 2017 to 2018, then increased through 2022, before declining in 2023 from their peak level in 2022. Altogether, importers' U.S. imports/U.S. shipments of TCCSS from nonsubject sources increased by *** percent during 2017-23.

Table I-4
TCCSS: U.S. producers' U.S. shipments and U.S. importers' imports and U.S. shipments data, 2017-23

Quantity in short tons

Source	2017	2018	2019	2020	2021	2022	2023
U.S. producers	***	***	***	***	***	***	***
Japan	***	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***	***
All import sources	***	***	***	***	***	***	***
All sources	2,420,290	2,283,038	2,010,616	2,452,425	2,494,413	2,322,143	1,889,860

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

Note: For 2017-20, import data reflects U.S. importers' actual imports into the United States. For 2021-23, import data reflects U.S. importers' U.S. shipments of imports.

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 "---".

Figure I-1 presents apparent U.S. consumption for the terminal year of the original investigation and subsequent five-year reviews (see table I-3), as well as apparent U.S. consumption for the years under review in this proceeding (see table I-4).

Figure I-1
TCCSS: Historical apparent U.S. consumption based on quantity, 1999, 2005, 2011, 2016, and 2017-23

* * * * * * *

Source: Office of Investigations memoranda INV-X-160 (July 18, 2000), INV-X-164 (July 24, 2000), INV-X-172 (July 26, 2000), INV-DD-073 (May 30, 2006), INV-DD-078 (June 6, 2006), INV-DD-082 (June 12, 2006), INV-KK-084 (May 3, 2012), INV-QQ-058 (May 11, 2018); original publication and subsequent five-year review publications; and compiled from data submitted in response to Commission questionnaires.

Statutory criteria

Section 751(c) of the Act requires Commerce and the Commission to conduct a review no later than five years after the issuance of an antidumping or countervailing duty order or the suspension of an investigation to determine whether revocation of the order or termination of the suspended investigation "would be likely to lead to continuation or recurrence of dumping or a countervailable subsidy (as the case may be) and of material injury."

Section 752(a) of the Act provides that in making its determination of likelihood of continuation or recurrence of material injury--

(1) IN GENERAL.-- . . . the Commission shall determine whether revocation of an order, or termination of a suspended investigation, would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time. The Commission shall consider the likely volume, price effect, and impact of imports of the subject merchandise on the industry if the order is revoked or the suspended investigation is terminated. The Commission shall take into account--

> *(A) its prior injury determinations, including the volume, price effect, and impact of imports of the subject merchandise on the industry before the order was issued or the suspension agreement was accepted,*
>
> *(B) whether any improvement in the state of the industry is related to the order or the suspension agreement,*
>
> *(C) whether the industry is vulnerable to material injury if the order is revoked or the suspension agreement is terminated, and*
>
> *(D) in an antidumping proceeding . . ., (Commerce's findings) regarding duty absorption . . ..*

(2) VOLUME.--In evaluating the likely volume of imports of the subject merchandise if the order is revoked or the suspended investigation is terminated, the Commission shall consider whether the likely volume of imports of the subject merchandise would be significant if the order is revoked or the suspended investigation is terminated, either in absolute terms or relative to production or consumption in the United States. In so doing, the Commission shall consider all relevant economic factors, including--

> *(A) any likely increase in production capacity or existing unused production capacity in the exporting country,*
>
> *(B) existing inventories of the subject merchandise, or likely increases in inventories,*
>
> *(C) the existence of barriers to the importation of such merchandise into countries other than the United States, and*
>
> *(D) 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.*

(3) PRICE.--In evaluating the likely price effects of imports of the subject merchandise if the order is revoked or the suspended investigation is terminated, the Commission shall consider whether--

(A) there is likely to be significant price underselling by imports of the subject merchandise as compared to domestic like products, and

(B) imports of the subject merchandise are likely to enter the United States at prices that otherwise would have a significant depressing or suppressing effect on the price of domestic like products.

(4) IMPACT ON THE INDUSTRY.--In evaluating the likely impact of imports of the subject merchandise on the industry if the order is revoked or the suspended investigation is terminated, the Commission shall consider all relevant economic factors which are likely to have a bearing on the state of the industry in the United States, including, but not limited to–

(A) likely declines in output, sales, market share, profits, productivity, return on investments, and utilization of capacity,

(B) likely negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment, and

(C) likely negative effects on the existing development and production efforts of the industry, including efforts to develop a derivative or more advanced version of the domestic like product.

The Commission shall evaluate all such relevant economic factors . . . within the context of the business cycle and the conditions of competition that are distinctive to the affected industry.

Section 752(a)(6) of the Act states further that in making its determination, "the Commission may consider the magnitude of the margin of dumping or the magnitude of the net countervailable subsidy. If a countervailable subsidy is involved, the Commission shall consider information regarding the nature of the countervailable subsidy and whether the subsidy is a subsidy described in Article 3 or 6.1 of the Subsidies Agreement."

Organization of report

Information obtained during the course of the review that relates to the statutory criteria is presented throughout this report. A summary of trade and financial data for TCCSS as collected in the original investigation, prior reviews, and the current proceeding is presented in appendix C. U.S. industry data are based on the questionnaire responses of three U.S. producers of TCCSS which accounted for all known U.S. production of TCCSS in 2023. Data on U.S. TCCSS imports and related information are based on the questionnaire responses of 21 importers, which accounted for the vast majority of TCCSS imports from Japan and all other sources in 2023. U.S. purchaser data and related information are based on the questionnaire responses of 22 U.S. purchasers of TCCSS. Foreign industry data and related information are based on the questionnaire responses of three subject foreign producers which accounted for all production of TCCSS in Japan in 2023. Responses by U.S. producers, importers, purchasers, and foreign producers of TCCSS to a series of questions concerning the significance of the existing antidumping duty order and the likely effects of revocation of such order are presented in appendix D.

Commerce's reviews[34]

Administrative reviews

Since the antidumping duty order on TCCSS from Japan was issued, there have been no completed administrative reviews.[35]

[34] Commerce has issued no duty absorption findings, company revocations, and anti-circumvention findings since the imposition of the order. See 88 FR 69133, October 5, 2023 and accompanying *Issues and Decision Memorandum for the Final Results of the Expedited Fourth Sunset Review of the Antidumping Duty Order on Certain Tin Mill Products from Japan*, September 28, 2023.

[35] Since the antidumping duty order on TCCSS from Japan was issued, Commerce has initiated five administrative reviews. All five administrative reviews, however, were rescinded. 76 FR 14902, March 18, 2011; 77 FR 5767, February 6, 2012; 84 FR 63618, November 18, 2019; 85 FR 71879, November 12, 2020; and 88 FR 6233, January 31, 2023.

Changed circumstances reviews

Commerce has completed three changed circumstances reviews regarding imports of TCCSS from Japan since the issuance of the order. During the first changed circumstances review in 2001, Commerce determined that changed circumstances with respect to certain chromium coated steel did not exist to warrant revocation of the order in part.[36] During the second changed circumstances review in 2002, Commerce determined that changed circumstances with respect to certain tin-free steel existed and revoked the order in part.[37] During the third changed circumstances review in 2003, Commerce determined that changed circumstances with respect to certain laminated tin-free steel existed and revoked the order in part.[38]

[36] 66 FR 52109, October 12, 2001. Domestic interested parties requested that Commerce revoke the order in part with respect to imports of merchandise which met the following specifications: "double reduced (CADR8 temper) electrolytically chromium coated steel with chromium oxide at a level of 1.6 mg/sq. ft. (#0.9), having a base box weight of 60 pounds (nominal thickness of 0.0066 inch (#5% tolerance)), and a surface with a 7C stone finish, lubricated with butyl stearate oil (BSO) or dioctyl sebacate oil (DOS) with the level ranging from 0.22 to 0.32 gm/base box. The material is 31½ inches in actual width -0/+ 1⁄16 inch width tolerance) and made from fully deoxidized (killed) continuous cast and continuous annealed steel that is free of detrimental non-metallic inclusions (i.e., clean steel) with earring hazard minimized. The maximum edge wave is 1⁄8 inch, with crossbow controllable to less than 2 inches per sheet. The maximum camber per three feet is 0.020 inch, the maximum burr is 0.001 inch, and the maximum pinholes per coil is 0.2%. The maximum coil weight is 25,000 pounds, with an interior coil diameter of 16 inches to 161⁄2 inches, and an exterior coil diameter of 36 inches to 60 inches. When loaded for shipment, the coil is placed on the pallet with the eye of the coil standing vertical, with each side of the pallet being 60 inches having 4 x 4 runners, and outside runners placed a minimum of 37 inches apart." Commerce determined that changed circumstances with respect to this merchandise did not exist to warrant revocation of the order in part. *Id*.

[37] 67 FR 44177, July 1, 2002. Commerce partially revoked the order on TCCSS from Japan with respect to all entries of tin-free steel which met the following specifications: "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." *Id*.

[38] 68 FR 6412, February 7, 2003. Commerce partially revoked the order on TCCSS from Japan with respect to all entries of certain laminated tin-free steel which met the following specifications: "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)." *Id*.

Scope rulings

Commerce has conducted four scope rulings with respect to TCCSS from Japan. On October 12, 2001, Commerce determined that double-reduced electrolytically chromium coated steel was within the scope of the order.[39] On March 21, 2002, Commerce determined that double-reduced electrolytic tin plate meeting the requirements of ASTM specification A 626/A 626M, and double reduced tin-free meeting the requirements of ASTM specification A 657/A 657M, produced in Taiwan from Japanese black plate, were outside the scope of the order.[40] On August 27, 2002, Commerce determined that tin-free single reduced electrolytically chromium coated steel was within the scope of the order.[41] On January 7, 2005, Commerce concluded that certain electrolytic tin plate and tin free steel products, made in Colombia by Hojalata y Laminados S.A. from Japanese single-reduced black plate and double-reduced black plate, were excluded from the scope of the order.[42]

[39] 68 FR 7772, February 18, 2003.
[40] 68 FR 7772, February 18, 2003.
[41] 68 FR 7772, February 18, 2003.
[42] 70 FR 41374, July 19, 2005.

Five-year reviews

On August 9, 2000, Commerce issued the antidumping duty order on TCCSS from Japan. Table I-5 presents the dumping margins calculated by Commerce in its original investigation.

Table I-5
TCCSS: Commerce's original dumping margins for producers/exporters in Japan

Producer/exporter	Original margin (percent)
Kawasaki Steel Corp.	95.29
Nippon Steel Corp.	95.29
NKK Corp.	95.29
Toyo Kohan Co., Ltd.	95.29
All others	32.52

Source: 65 FR 39364, June 26, 2000 and 65 FR 52067, August 28, 2000.

Note: In 2002, Kawasaki Steel Corp. and NKK Corp. merged to established JFE Holdings Co. and in 2003 JFE Holding Co. established JFE Steel Corp., a producer of TCCSS in Japan. First review publication, p. IV-6; second review publication, p. I-13; third review publication, p. I-14.

During the first and second five-year reviews, Commerce determined that revocation of the antidumping duty order on TCCSS from Japan would likely lead to continuation or recurrence of dumping, and that the magnitude of the dumping margins likely to prevail would be weighted-average dumping margins of 95.29 percent for Kawasaki Steel Corp., Nippon Steel Corp., NKK Corp., and Toyo Kohan Co., Ltd., and margins of 32.52 precent for all others.[43]

During the third five-year review and in this current fourth five-year review, Commerce determined that revocation of the antidumping duty order on TCCSS from Japan would be likely to lead to continuation or recurrence of dumping, and that the magnitude of the dumping margins likely to prevail would be weighted-average dumping margins up to 95.29 percent.[44]

[43] 70 FR 67448, November 7, 2005; 76 FR 60001, September 28, 2011.
[44] 82 FR 41933, September 5, 2017; 88 FR 69133, October 5, 2023.

The subject merchandise

Commerce's scope

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

> *The products covered by the order 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 tin plate. 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 and 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 the Order unless specifically excluded. The following products, by way of example, are outside and/or specifically excluded from the scope of the order:*
>
> - *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 3/4 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) CAT 4 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 CAT 5 temper with 1.00/0.10 pound/base box coating, with alithograph 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. in., 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).*

Merchandise subject to the Order is typically classified under subheadings in the 7210.11.0000, 7210.12.0000, 7210.50.0000, 7212.10.0000, and 7212.50.0000 if of non-alloy steel and under HTSUS subheadings 7225.99.0090, and 7226.99.0180 if of alloy steel of the Harmonized Tariff Schedule of the United States (HTSUS). While HTSUS subheadings and ASTM specifications are provided for convenience and customs purposes, the written description of the scope if dispositive.[45] [46]

[45] 88 FR 69133, October 5, 2023; and Commerce's *Issues and Decision Memorandum for the Final Results of the Expedited Fourth Sunset Review of the Antidumping Duty Order on Certain Tin Mill Products from Japan*, September 28, 2023 (see EDIS # 805435).

[46] HTSUS 7210.50.0000 has been subsequently annotated by statistical reporting numbers 7210.50.0020 and 7210.50.0090.

Tariff treatment

TCCSS is currently imported under Harmonized Tariff Schedule of the United States ("HTSUS" or "HTS") statistical reporting numbers 7210.11.0000, 7210.12.0000, 7210.50.0020, 7210.50.0090, 7212.10.0000, and 7212.50.0000 if of non-alloy steel and under HTS statistical reporting numbers 7225.99.0090 and 7226.99.0180 if of alloy steel.[47] The 2024 general rate of duty is "Free."[48] Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection ("CBP").

Effective September 1, 2019, TCCSS originating in China, a nonsubject country, was subject to an additional 15 percent ad valorem duty under section 301 of the Trade Act of 1974. Effective February 14, 2020, the section 301 duty for TCCSS was reduced to 7.5 percent.[49] Products of China subject to section 301 tariffs also continue to be subject to all applicable duties and charges, as well as the additional ad valorem rate of duty imposed by the HTS heading.[50]

[47] Prior to July 1, 2021, TCCSS was imported under HTS subheading 7210.50.0000; after that date this subheading was annotated with establishment of HTS statistical reporting numbers 7210.50.0020 and 7210.50.0090. USITC (2021) Basic Revision 5, Publication 5213, July 2021, Change Record, p. 4.

[48] USITC, HTSUS (2024) Revision 1, USITC Publication 5491, January 2024, pp. 72-17, 72-19, 72-41, 72-42, 72-47.

[49] 84 FR 43304, August 20, 2019; 84 FR 45821, August 30, 2019; 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 (2024) Revision 1, USITC Publication 5491, January 2024, pp. 72-47, 99-III-87 – 99-III-88, 99-III-97 – 99-III-98, 99-III-241 – 99-III-244, 99-III-246 – 99-III-247, 99-III-303, 99-III-305 – 99-III-309.

[50] See U.S. note 20(r). USITC, HTSUS (2024) Revision 1, USITC Publication 5491, January 2024, pp. 99-III-87, 99-III-303.

See also the next paragraph for the 25 percent additional section 232 duties on steel articles originating in China.

Effective March 23, 2018, TCCSS originating in Japan was subject to an additional 25 percent ad valorem duty under section 232 of the Trade Expansion Act of 1962, as amended. Effective April 1, 2022, TCCSS originating in Japan became subject to a tariff-rate quota ("TRQ") with imports above the quota level subject to section 232 duties. The TRQ categories for tinplate and tin-free steel originating in Japan covers TCCSS and out-of-scope products.[51] Otherwise, TCCSS originating in any other U.S. trade partner, not otherwise granted exemptions, absolute quotas, or TRQs, is subject to these 25 percent additional duties.[52] Products subject to section 232 tariffs also continue to be subject to all applicable duties and charges, as well as the additional ad valorem rate of duty imposed by the respective HTS headings and subheadings.[53]

[51] CBP, "2023 4th Quarter Tariff Rate Quota for Steel Articles of Japan or the United Kingdom," Quota Bulletin No. QB 23-624, January 5, 2023, https://www.cbp.gov/trade/quota/bulletins/qb-23-624-2023; CBP, "Japan or United Kingdom Sec 232 Steel Tariff Rate Quota (TRQ) Quarter 2 Usage / Quarter 4 Limits 2023," September 21, 2023, https://www.cbp.gov/sites/default/files/assets/documents/2023-Sep/Japan_UK_Steel_TRQ_Q2_Usage_Q4_Limits_2023.pdf; CBP, "Japan or United Kingdom Sec 232 Steel Tariff Rate Quota (TRQ) Quarter 1 Usage / Quarter 3 Limits 2023," June 20, 2023, https://www.cbp.gov/sites/default/files/assets/documents/2023-Jun/Japan_UK_Steel_TRQ_Q1_Usage_Q3_Limits_2023.pdf.

83 FR 11625, March 15, 2018. See also HTS heading 9903.80.01, HTS subheadings 9903.81.34, 9903.81.35, and U.S. notes 16(a) and 16(g) to subchapter III of chapter 99 and related tariff provisions for this duty treatment. USITC, HTSUS (2024) Revision 1, USITC Publication 5491, January 2024, pp. 72-47, 99-III-5, 99-III-8, 99-III-272, 99-III-287, 99-III-292.

[52] Section 232 import duties on steel articles currently cover all countries of origin except Argentina, Australia, Brazil, Canada, Mexico, and South Korea. Imports from Australia, Canada, and Mexico are exempt from section 232 duties and quotas on steel articles, while imports originating in Argentina, Brazil, and South Korea are exempt from duties but are instead subject to absolute quotas. EU member countries (effective January 1, 2022, to December 31, 2025), Japan (effective April 1, 2022), and the United Kingdom (effective June 1, 2022) are currently subject to tariff-rate quotas ("TRQs") for steel articles, and imports that exceed the TRQ limits are subject to the section 232 tariffs. Section 232 import duties on steel articles originating in Turkey were temporarily raised from 25 percent to 50 percent, effective August 13, 2018, but restored to 25 percent effective May 21, 2019. In addition, section 232 duties on steel articles originating in Ukraine are suspended, effective June 1, 2022, to June 1, 2024. 83 FR 11625, March 15, 2018; 83 FR 13361, March 28, 2018; 83 FR 20683, May 7, 2018; 83 FR 25857, June 5, 2018; 83 FR 40429, August 15, 2018; 84 FR 23421, May 21, 2019; 84 FR 23987, May 23, 2019; 87 FR 11, January 3, 2022; 87 FR 19351, April 1, 2022; 87 FR 33407, June 2, 2022; 87 FR 33591, June 3, 2022; 88 FR 36437, June 5, 2023; 89 FR 227, January 3, 2024. See HTS heading 9903.80.01 and U.S. notes 16(a), 16(b), 16(e), 16(f), and 16(g) to subchapter III of chapter 99 and related tariff provisions for this duty treatment. USITC, HTSUS (2024) Revision 1, USITC Publication 5491, January 2024, pp. 72-47, 99-III-5 – 99-III-8, 99-III-272 – 99-III-273, 99-III-279 – 99-III-280, 99-III-287, 99-III-292 – 99-III-293.

[53] See U.S. note 16(a). USITC, HTSUS (2024) Revision 1, USITC Publication 5491, January 2024, pp. 99-III-5, 99-III-272.

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."[54] Commerce reviews all exclusion requests and any objections, rebuttals, and sur-rebuttals to the requests and determines whether the items warrant an exclusion based on the above criteria.[55]

Excluded steel articles, including any TCCSS, do not count toward filling the TRQs for the EU member countries, effective January 1, 2022.[56] Conversely, these "quota exclusion entries" do count toward filling the quotas for Argentina, Brazil, and South Korea, effective August 30, 2018;[57] and the TRQs for Japan, effective April 1, 2022;[58] and the TRQs for the United Kingdom, effective June 1, 2022.[59] Imports of excluded products ("quota exclusion entries") are counted against the quarterly quota in place at the time of entry and count toward the annual quota. However, as the excluded products are exempt from both the quarterly and annual quotas, they continue to be accepted until closure of the annual quota. CBP tracks and reports exclusion quantities quarterly or "exclusion quota overflow" quantities annually.[60]

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[54] 83 FR 45025, September 4, 2018.

[55] U.S. Bureau of Industry and Security ("BIS"), "Section 232 National Security Investigation of Steel Imports, Information on the Exclusion Process," December 20, 2022, https://www.bis.doc.gov/index.php/232-steel. See also HTS heading 9903.80.01, HTS subheadings 9903.80.60 – 9903.80.62, HTS heading 9903.81.80, and U.S. notes 16(c) and 16(d) to subchapter III of chapter 99 and related tariff provisions for this duty treatment. USITC, HTSUS (2024) Revision 1, Publication 5491, January 2024, pp. 99-III-7, 99-III-279, 99-III-292.

[56] 87 FR 11, January 3, 2022; CBP, "2023 Fourth Quarter Tariff Rate Quota (TRQ) for Steel Mill Articles of European Union (EU) Member Countries," Quota Bulletin No. QB 23-614, January 5, 2024, https://www.cbp.gov/trade/quota/bulletins/qb-23-614-2023.

[57] 83 FR 45025, September 4, 2018.

[58] 87 FR 19351, April 1, 2022.

[59] 87 FR 33591, June 3, 2022.

[60] 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, "2023 Fourth Quarter Absolute Quota for Steel Mill Articles of Argentina, Brazil, and South Korea," Quota Bulletin No. QB 23-604, September 21, 2023, https://www.cbp.gov/trade/quota/bulletins/qb-23-604-2023; CBP, "2023 4th Quarter Tariff Rate Quota for Steel Articles of Japan or the United Kingdom," Quota Bulletin No. QB 23-624, January 5, 2024, https://www.cbp.gov/trade/quota/bulletins/qb-23-624-2023.

Table I-6 presents the section 232 steel absolute quota and TRQ limits, usages, and fill rates for imports originating in Japan during 2022. Likewise, table I-7 presents these limits, usages, and fill rates for 2023. The purchaser respondents note that the TRQ for tin-free steel ("TFS") also includes out-of-scope laminated TFS. Commerce granted numerous product exclusions for laminated TFS since the Section 232 measures entered into effect, including dozens of such product exclusions in the past six months for major U.S. steel can manufacturers, including Crown Cork & Seal USA Inc. ("Crown"), Silgan Containers Manufacturing Corp. ("Silgan"), Sonoco Products Co. ("Sonoco"), and Trivium Packaging USA Inc. ("Trivium").[61]

Table I-6
TCCSS and other tin mill products: Japan, section 232 steel TRQ limits, usages, and fill rates; and product exclusions, 2022

Limits, usages, and exclusions in short tons; fill rates in percent

Source	Quota type	Item	Tin-free steel	Tinplate	Total
Japan	Tariff-rate	Limit	56,023	96	56,119
Japan	Tariff-rate	Usage	26,246	25	26,271
Japan	Tariff-rate	Fill rate	46.8	26.0	46.8
Japan	Tariff-rate	Exclusions	56,804	0	56,804

Sources: CBP, "2022 4th Quarter Tariff Rate Quota for Steel Articles of Japan or the United Kingdom," Quota Bulletin No. QB 22-624, December 16, 2022, https://www.cbp.gov/trade/quota/bulletins/qb-22-624-2022; CBP, "2022 Tariff Rate Quota (TRQ) for Steel Articles of Japan or the United Kingdom," Quota Bulletin No. QB 22-623, December 16, 2022, https://www.cbp.gov/trade/quota/bulletins/QB%2022-623; CBP, "2022 Tariff Rate Quota (TRQ) for Steel Articles of Japan," Quota Bulletin No. QB 22-622, December 28, 2022, https://www.cbp.gov/trade/quota/bulletins/qb-22-622-2022-tariff-rate-quota-trq-steel-articles-japan; CBP, "Japan and United Kingdom Steel TRQ 2022 Annual Totals," October 2, 2023, https://www.cbp.gov/sites/default/files/assets/documents/2023-Oct/Japan_and_UK_Steel_TRQ_2022_Annual%20Totals.pdf.

Note: CBP Quota ID categories with HTS subheadings for TCCSS:
Japan TRQs— 9903.80.34: Tin-free steel (HTS 7210.50.00) and 9903.81.35: Tinplate (HTS 7210.11.00, 7210.12.00, 7212.10.00).
Other HTS subheadings for TCCSS are included in Quota ID categories, containing numerous other HTS subheadings for nonsubject products, 9903.81.28: Cold-rolled sheet, 9903.81.29: Cold-rolled strip, and 9903.81.33: Flat-rolled products, coated.
Usages are recorded for the second through fourth quarters of 2022. Effective April 1, 2022, steel articles, including TCCSS and other tin mill products, originating in Japan became subject to TRQs with imports above the quota levels subject to section 232 duties. 83 FR 11625, March 15, 2018.

[61] Japanese respondents' prehearing brief, March 28, 2024, pp. 46–47; exhs. 24–26; hearing transcript, April 9, 2024, pp. 114–115 (Dietrich), 124 (Madrecki), 152 (Stringer), 230 (McNamera); U.S. Steel's posthearing brief, April 16, 2024, exh. 9: Purchaser 232 Exclusion Requests.

For more information about laminated TFS, see the "Description and applications" and "Manufacturing processes" sections below.

Table I-7
TCCSS and other tin mill products: Japan, section 232 steel TRQ limits, usages, and fill rates; and product exclusions, 2023

Limits, usages, and exclusions in short tons; fill rates in percent

Source	Quota type	Item	Tin-free steel	Tinplate	Total
Japan	Tariff-rate	Limit	56,023	96	56,119
Japan	Tariff-rate	Usage	52,581	75	52,656
Japan	Tariff-rate	Fill rate	93.9	78.2	93.8
Japan	Tariff-rate	Exclusions	14,489	0	14,489

Sources: CBP, "2023 4th Quarter Tariff Rate Quota for Steel Articles of Japan or the United Kingdom," Quota Bulletin No. QB 23-624, January 5, 2023, https://www.cbp.gov/trade/quota/bulletins/qb-23-624-2023; CBP, "Japan or United Kingdom Sec 232 Steel Tariff Rate Quota (TRQ) Quarter 2 Usage / Quarter 4 Limits 2023," September 21, 2023, https://www.cbp.gov/sites/default/files/assets/documents/2023-Sep/Japan_UK_Steel_TRQ_Q2_Usage_Q4_Limits_2023.pdf; CBP, "Japan or United Kingdom Sec 232 Steel Tariff Rate Quota (TRQ) Quarter 1 Usage / Quarter 3 Limits 2023," June 20, 2023, https://www.cbp.gov/sites/default/files/assets/documents/2023-Jun/Japan_UK_Steel_TRQ_Q1_Usage_Q3_Limits_2023.pdf; CBP, "Japan and United Kingdom Steel TRQ 2023 Annual Totals," February 12, 2024, https://www.cbp.gov/sites/default/files/assets/documents/2024-Feb/Japan_and_UK_Steel_TRQ_2023_Annual_Totals.pdf.

Note: CBP Quota ID Nos. (HTS subheadings):
Japan TRQs-- 9903.80.74: Tin-free steel (HTS 7210.50.00) and 9903.80.75: Tinplate (HTS 7210.11.00, 7210.12.00, 7212.10.00).
Other HTS subheadings for TCCSS are included in Quota ID categories, containing numerous other HTS subheadings for nonsubject products, 9903.81.28: Cold-rolled sheet, 9903.81.29: Cold-rolled strip, and 9903.81.33: Flat-rolled products, coated.

The product[62]

Description and applications

Tinplate

Tinplate is a tin-coated flat-rolled steel product that is manufactured from black plate, an uncoated flat-rolled steel which is the substrate material for tin mill products. To produce tinplate, the black plate is coated on both sides with commercially pure tin via electrolytic deposition (figure I-2). Tin coatings vary by thickness, depending on intended end use. A common commercial weight for tin is 20 pounds/base box.[63] Tinplate is also available with different coating weights on the two sides of the sheet. Single-reduced (or conventional) electrolytic tinplate is commonly produced via cold rolling in thicknesses of 0.49 mm and lighter while double-reduced electrolytic tinplate is normally produced via cold rolling and annealing, followed by further cold reduction in thicknesses of 0.29 mm and lighter. Tinplate is manufactured to several ASTM Standard Specifications, including A599,[64] A623,[65] A624,[66] and A626.[67]

[62] Unless otherwise noted, this information is based on third review publication, pp. I-17 – I-19; and Tin Mill Products from Canada, China, Germany, and South Korea, Investigation Nos. 701-TA-685 and 731-TA-1599-1601 and 1603 (Final), USITC Publication 5492, February 2024, pp. I-21 – I-26.

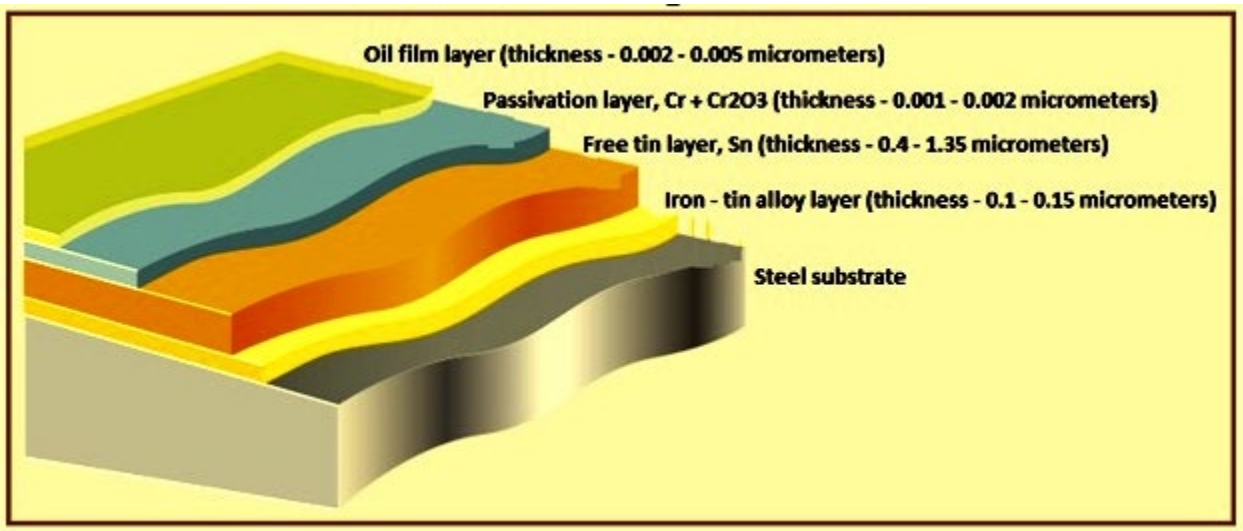
[63] A base box (or basis box) is a unit of area equivalent to 31,360 square inches (217.78 square feet or 20.23 square meters) consisting of 112 tinplate sheets, each measuring 14 inches (356 mm) by 20 inches (508 mm). The corresponding surface area (on both sides) of a base box is 62,720 square inches (435.56 square feet or 40.46 square meters). The weight of the tinplate coating is expressed in terms of pounds per base box (lbs/bb). Satyendra Kumar Sarna, "Tinplate," ISPAT Guru, July 14, 2013, https://www.ispatguru.com/tinplate/; and ITRI Ltd., "Thickness" and "The Tin Coating," Guide to Tinplate, August 2019, pp. 27, 30, https://www.tinplategroup.com/wp-content/uploads/2019/08/Guide-toTinplate.pdf.

For more details about how to calculate the equivalent number of base boxes, see: ASTM International, "Annex AI. Abbreviated Ratio Tables for Tin Mill Products," in "A623-11: Standard Specification for Tin Mill Products, General Requirements," Annual Book of ASTM Standards 2017, Section 1 Iron and Steel Products, Volume 01.06 Coated Products, 2017, pp. 122–134.

[64] ASTM International, "A599/A599M-07 (Reapproved 2012): Standard Specification for Tin Mill Products, Electrolytic Tin-Coated, Cold-Rolled Sheet," Annual Book of ASTM Standards 2017, Section 1 Iron and Steel Products, Volume 01.06 Coated Products, 2017, pp. 108–110.

[65] ASTM International, "A623-11: Standard Specification for Tin Mill Products, General Requirements," Annual Book of ASTM Standards 2017, Section 1 Iron and Steel Products, Volume 01.06 Coated Products, 2017, pp. 117–121; "A623M-11: Standard Specification for Tin Mill Products, General Requirements (Metric)," pp. 155–160.

Figure I-2
Tin-coated steel sheet: Tin coating layers



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

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

- ***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.
- ***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.

(…*continued*)

[66] ASTM International, "A624/A624M-13: Standard Specification for Tin Mill Products, Electrolytic Tin Plate, Single Reduced," Annual Book of ASTM Standards 2017, Section 1 Iron and Steel Products, Volume 01.06 Coated Products, 2017, pp. 181–185.

[67] ASTM International, "A626/A626M-13: Standard Specification for Tin Mill Products, Electrolytic Tin Plate, Double Reduced," Annual Book of ASTM Standards 2017, Section 1 Iron and Steel Products, Volume 01.06 Coated Products, 2017, pp. 188–192.

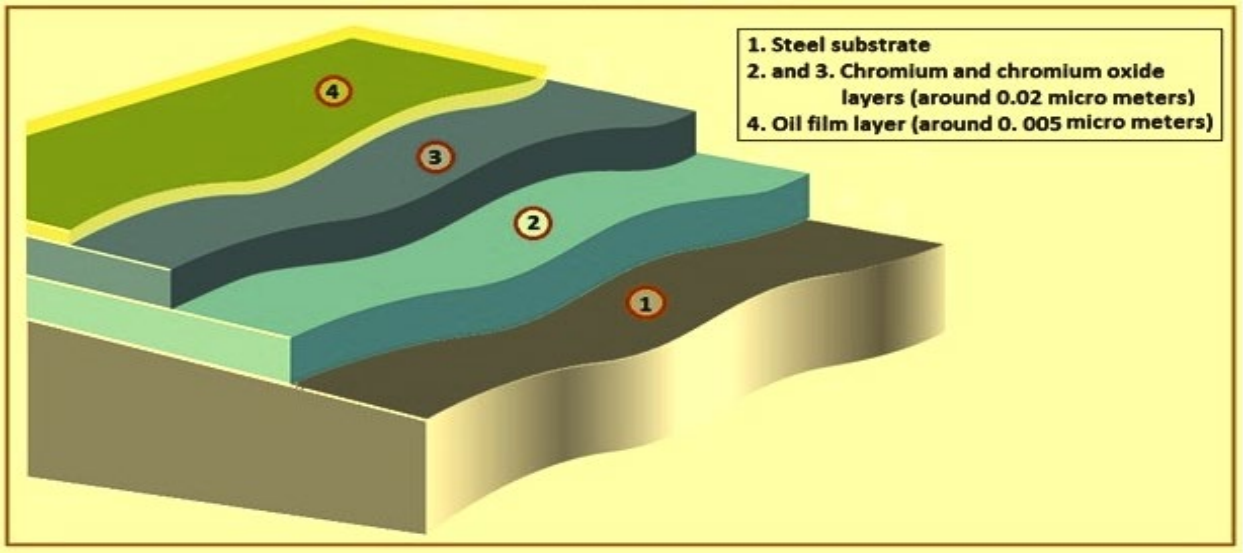
- ***Silver finish***– Consists of a matte finish product which has been flow melted. This type of finish is also called satin finish. This is a rough dull finish mainly used for making artistic cans.

Double reduced tinplate is customarily supplied with a stone finish; however, it is also available with an unmelted tin coating.

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 via the electrolytic deposition of chromium metal and chromium oxide on both sides (figure I-3). Like tinplate, single-reduced chromium-coated steel sheet is commonly available in thicknesses of 0.38 mm and lighter, while double-reduced electrolytic 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.[68]

Figure I-3
Chromium-coated steel sheet: Tin-free coating layers



Source: Satyendra Kumar Sarna, "Tin-free Steel," ISPAT Guru, July 31, 2013, https://www.ispatguru.com/tin-free-steel/.

[68] ASTM International, "A657/A657M-13: Standard Specification for Tin Mill Products, Black Plate, Electrolytic Chromium-Coated, Single and Double Reduced," Annual Book of ASTM Standards 2017, Section 1 Iron and Steel Products, Volume 01.06 Coated Products, 2017, pp. 225–232.

Some TFS can also be surface coated, lacquered, or laminated. Lamination, in particular, provides high formability to minimize potential damage to the resin coating, corrosion resistance, and low surface adhesion to readily release the contents of steel containers.[69] Laminated TFS is utilized for food and beverage containers, lug caps (threaded lids for glass containers), and aerosol cans.[70] According to a witness for Crown, there is no substitute for laminated TFS in the production of fish and pet food cans to prevent black sulfur staining of protein-rich products. Moreover, proper application of the laminated resin film and maintenance of bisphenol limits are critical to can performance and food safety, corrosion resistance, and proper shelf life.[71] However, the scope of Commerce's order excludes laminated TFS that meets the content limitations for "environmental hormones" (i.e., hazardous bisphenols[72]). This out-of-scope laminated TFS is coated with either a polyethylene terephthalate ("PET"), polypropylene ("PP"), or polyethylene ("PE") film.[73] A witness for Trivium does not consider coated or lacquered TFS, available from domestic producers, as an acceptable substitute for many can and end uses, especially due to documented safety, shelf life, and corrosion-resistance issues.[74] All three Japanese respondents produce laminated TFS and *** export this higher value-added product to the U.S. market.[75] According to Crown's product exclusion request, "US mills do not have the capability to produce polymer laminated steel and have shown no interest in adding that capability."[76]

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[69] Katsumi Kojima, "Typical Products and Manufacturing Processes of Can Materials in JFE Steel," JFE Technical Report, vol. 23, March 2018, pp. 2–3, https://www.jfe-steel.co.jp/en/research/report/023/pdf/023-02.pdf.

For more details about laminated TFS, see e.g., JFE Steel's "JFE Universal Bright" laminated steel sheet in JFE Steel, Tin Mill Products: JFE Advanced Technology for Tin Mill Products, no date, pp. 5–6, 17–20; Japanese respondents' prehearing brief, March 28, 2024, exh. 21.

[70] TCC Steel, "Products Laminated Steel (LAMI)" webpage, ©2019, https://www.tccsteel.com/en/business/laminated, retrieved April 12, 2024.

[71] Hearing transcript, April 9, 2024, p. 102 (Hughes).

[72] Bisphenols, used to produce polymers and resins, are "endocrine disrupting chemicals" or "EDCs." Daniel Ruiz and Heather Patisaul, "Endocrine-Disrupting Chemicals (EDCs)," Endocrine Society, January 24, 2022, https://www.endocrine.org/patient-engagement/endocrine-library/edcs.

[73] TCC Steel, "Laminated Steel (LAMI-T)," Product Catalog, no date, pp. 16–17, https://www.tccsteel.com/download/TCCSTEEL_Product_Catalog.pdf, retrieved April 12, 2024.

[74] Hearing transcript, April 9, 2024, p. 114 (Dietrich).

[75] Japanese respondents' posthearing brief, April 16, 2024, p. 3.

[76] Japanese respondents' prehearing brief, March 28, 2024, p. 47, exh. 25; hearing transcript, April 9, 2024, p. 102 (Hughes).

Applications

Major end uses of tinplate are in the manufacture of welded or drawn cans for food, beverages, aerosols, and paint. Tinplate is used for drawn can bodies because of its corrosion-resistant qualities. Chromium-coated steel sheet is used for can ends that require less resistance to corrosion, given that the ends have less contact with the contents of the can. Moreover, tinplate is used for the can itself because it imparts a shinier surface than chromium coating while chromium-coated steel sheet, with its duller surface finish, is considered adequate for use in the can ends. Chromium-coated steel sheet is used primarily for two-piece drawn cans and ends for beer and soft drinks, as well as ends for food cans and caps and crown closures for glass containers. According to respondent interested party Nippon Steel, U.S. and global demand for canned goods, the main end use for TCCSS products, has substantially increased since the last review due to the COVID-19 pandemic and increasing consumer interest.[77]

Steel cans for food and drinks are constructed from either two or three pieces. Three-piece cans consist of a cylindrical body rolled from a rectangular piece of coated steel sheet with a longitudinal seam (usually formed by welding) together with two can ends, which are crimped over each end of the open cylindrical body. Two-piece cans have only one seam around the top end of the cylindrical can body where a can end is crimped over to close the can. Manufacturing two-piece cans— referred to as either "drawn and ironed" ("D&I") or "drawn and wall-ironed" ("DWI") cans— begins with drawing the disk into a shallow "cup." The cup is further shaped by "drawing (elongating) and ironing (thinning)" by passing through a series of progressively smaller diameter tungsten carbide rings (dies) that lengthen its height, reduce its diameter, thin its wall, and shape its top and base to form the base and body of the can from a single piece of steel.[78]

[77] Nippon Steel's response to the notice of institution, July 3, 2023, p. 15.

[78] Metal Packaging Manufacturers Association ("MPMA"), "How Cans Are Made," ©2023, https://www.mpma.org.uk/information/how-cans-are-made/#:~:text=Drawn, retrieved June 13, 2023; MPMA, "How a Three-piece Welded Food Can is Made," ©2023, https://www.mpma.org.uk/wp-content/uploads/3-Piece-Food-Cans-1.pdf, retrieved June 13, 2023; MPMA, "How a Two-piece Drawn and Wall-ironed Food Can is Made," ©2023, https://www.mpma.org.uk/wp-content/uploads/HOW-2piecefood-low-res.pdf, retrieved June 13, 2023; MPMA, "How a Two-Piece Draw and Wall-Ironed Drinks Can is Made," ©2023, https://www.mpma.org.uk/wp-content/uploads/2-Piece-Drinks-Cans.pdf, retrieved June 13, 2023; and ITRI Ltd., "Drawn and Wall-Ironed Cans," Guide to Tinplate, August 2019, pp. 49–53, https://www.tinplategroup.com/wp-content/uploads/2019/08/Guide-toTinplate.pdf.

According to the Can Manufacturers Institute ("CMI"), a trade association composed of many of the leading U.S. metal can manufacturers, demand has been shifting away from three-piece cans toward two-piece cans over the past decade, a trend that accelerated during the COVID-19 pandemic. Some can producers consider two-piece cans as lighter and faster to produce, offer superior quality standards, and a simpler supply chain than three-piece cans. Industry data collected by CMI showing a trend away from three-piece and toward two-piece food cans from 2015 to 2022, with two-piece cans accounting for 75 percent of food cans produced in the United States in 2022.[79]

Tinplate is sometimes sold in wider widths for two-piece cans than for other applications. Some U.S. can manufacturers utilize wider tinplate (typically greater than 44.5 inches) for more efficient can production. Wider width tin mill products allow can manufacturers to punch more can blanks per row across the sheet in their manufacturing process.[80]

Manufacturing processes[81]

Both tinplate and chromium-coated steel sheet are manufactured in five major steps (figure I-4). The manufacturing processes for both products and the production workers employed are identical until the final coating step. Producers need not engage in all five production steps, as steel inputs can be obtained from outside sources.

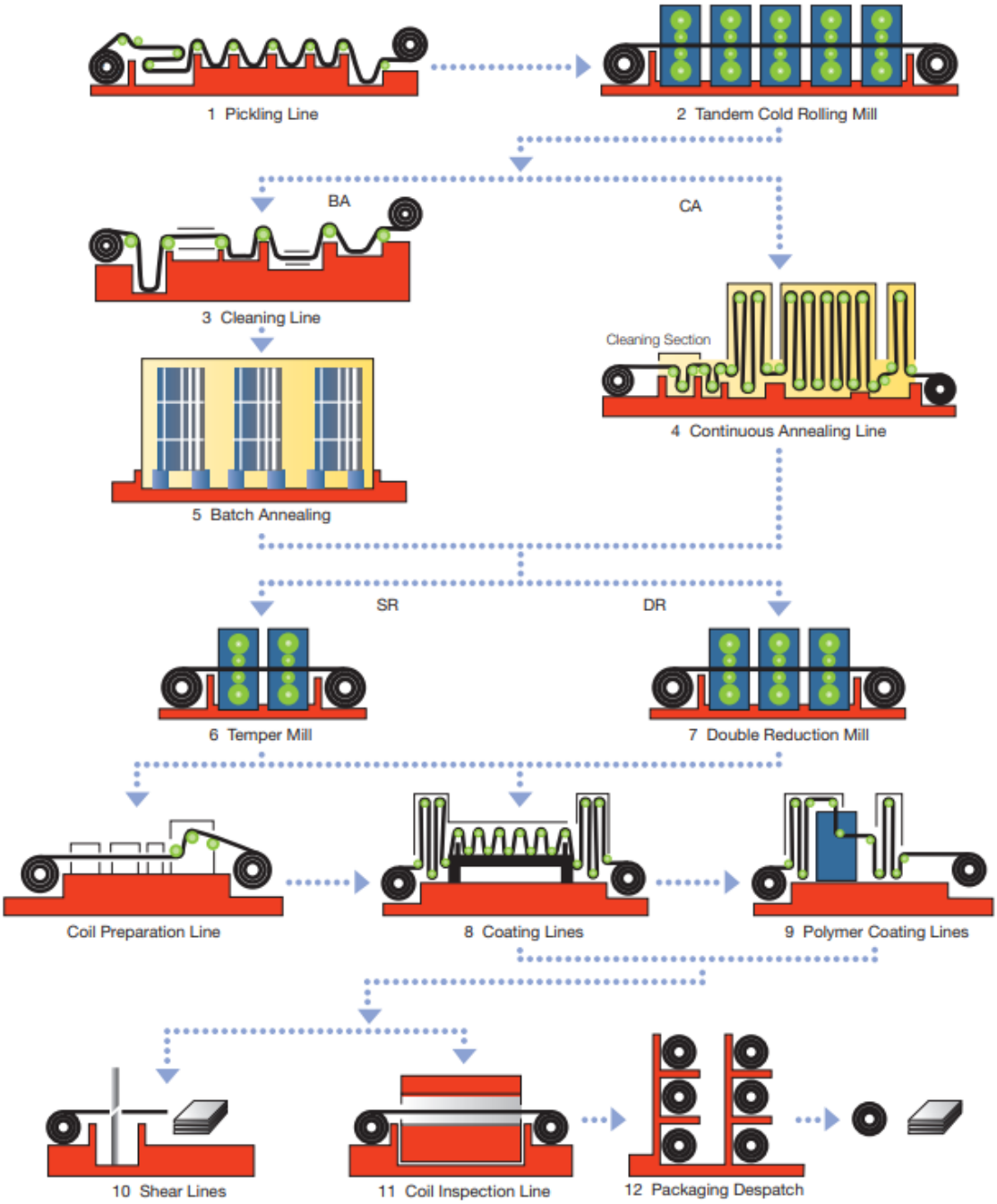
[79] Tin Mill Products from Canada, China, Germany, and South Korea, Investigation Nos. 701-TA-685 and 731-TA-1599-1601 and 1603 (Final), USITC Publication 5492, February 2024, p. I-24.

[80] Tin Mill Products from Canada, China, Germany, and South Korea, Investigation Nos. 701-TA-685 and 731-TA-1599-1601 and 1603 (Final), USITC Publication 5492, February 2024, pp. I-24 – I-25.

According to a witness for Crown, domestic producers offering their narrower TCCSS sheets for Crown's two-piece DWI can-making machines designed to utilize wider sheets is considered a request to operate less efficiently at a greater cost. Hearing transcript, April 9, 2024, p. 104 (Hughes).

[81] Unless otherwise noted, this information is based on the third review publication, pp. I-19 – I-22; and Tin Mill Products from Canada, China, Germany, and South Korea, Investigation Nos. 701-TA-685 and 731-TA-1599-1601 and 1603 (Final), USITC Publication 5492, February 2024, pp. I-26 – I-30.

Figure I-4
TCCSS: Manufacturing flow diagram



Source: Steel Mills of the World, "The Manufacturing Route for Tinplate Products," https://www.steelmillsoftheworld.com/products/cs/tinplatecoils/Tinplate_manufacturing_route.pdf, retrieved June 13, 2023.

Note: BA=batch annealing, CA=continuous annealing, SR=single reduction, and DR=double reduction.

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 which 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. After cooling, the hot-rolled strip is uncoiled and pickled 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. The oil serves as a protection against rusting prior to, and as a lubricant during, cold reduction. 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. The cold-reduction process work hardens the strip, requiring it to be subsequently annealed.

Annealing

There are two basic types of annealing operations for cold-reduced strip: batch annealing and continuous annealing. In batch annealing ("BA" in figure I-4), 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. A relatively bright surface finish is attained, and oxidation is reduced by the introduction of an inert or slightly reducing gas into the container during the operation. Batch annealing produces a steel product with greater flexibility. Continuous annealing ("CA" in figure I-4) is accomplished by passing the cold-reduced strip through a series of vertical passes within a furnace consisting of heating, soaking, and cooling zones. Continuous annealing results in a steel product with less flexibility than batch-annealed steel. The strip is heated rapidly to the desired temperature and cooled before leaving the furnace.

Temper rolling

After annealing, single-reduced strip is rolled in one or more passes through a temper mill ("SR" in figure I-4). The object of temper rolling is to improve mechanical and surface properties by imparting the desire degree of stiffness and hardness, minimizing fluting and stretcher straining, and producing the desired surface type or texture.

Additional cold reduction

Double-reduced strip ("DR" in figure I-4) 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 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 and 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. Because this "black plate" is highly susceptible to rusting in storage and transportation, it is typically oiled, or chemically treated and then oiled, after cold reduction. The oil is then removed prior to coating.[82]

Coating

The continuous electroplating process has replaced the hot-dip process worldwide. Advantages of the electroplating include a high degree of coating thickness control, differential coating thicknesses on each side of a steel substrate, higher output rates, superior coating quality, and lower production costs. Further, improvements to both plating technology and steel chemistry allowed for reductions to the steel base and tin coating, with the latter ranging from 0.1 to 1.5 micrometers (microns), depending upon the end use application.[83] In the continuous electroplating process, the temper-rolled or double-reduced coiled strip is loaded onto one of the two uncoilers required for continuous operations. To allow successive coils to be held stationary for welding together the trailing and leading ends without shutting down the entire coating line, adjustable entry and exit looping towers (or accumulators) that can hold varying lengths of uncoiled strip, often up to 600 meters (1,968 feet) (figure I-5).[84] To plate each side in succession, the strip passes through either a series of vertical plating cells or thorough

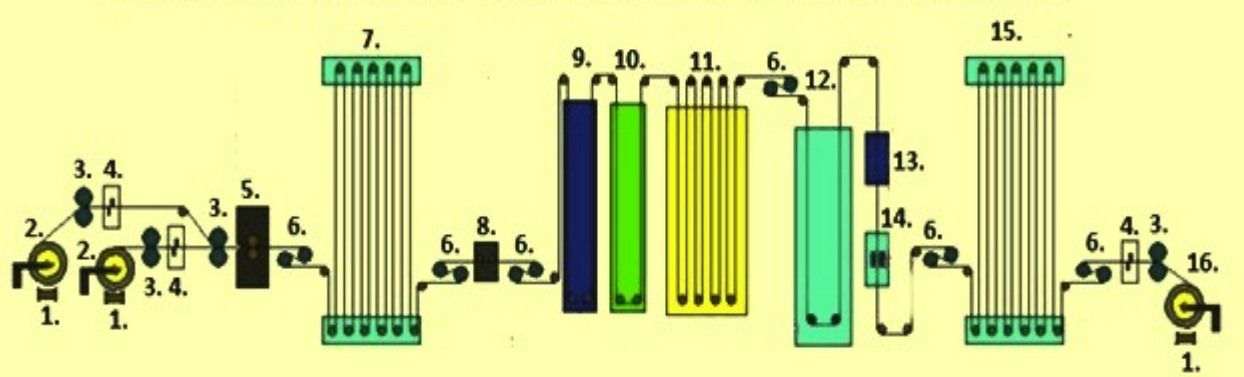
[82] According to counsel for the Japanese respondent interested parties in the third review, tin product mills typically have greater capacity for producing black plate than tin mill steel products, not only to accommodate production yield losses, but also for sale as tin mill black plate to another tin mill facility or to other manufacturers.

[83] ITRI Ltd., "Electrolytic Tinning," Guide to Tinplate, August 2019, p. 14, https://www.tinplategroup.com/wp-content/uploads/2019/08/Guide-toTinplate.pdf; and Satyendra Kumar Sarna, "Tinplate and Process of Tinning," ISPAT Guru, June 22, 2019, https://www.ispatguru.com/tinplate-and-process-of-tinning/.

[84] Modern electroplating lines also include side trimmers to cut the strip to the desired width and tension (or stretch) levelers that apply controlled tension across the strip to remove distortions. Satyendra Kumar Sarna, "Tinplate and Process of Tinning," ISPAT Guru, June 22, 2019, https://www.ispatguru.com/tinplate-and-process-of-tinning/.

lower and upper horizontal plating units.[85] Individual plating cells are arranged in tandem plating cells and contain the plating solution, either a stannous tin (Sn^{+2}) sulphonic acid or halogen solution for tinplate, or a chromate chromic acid 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.

Figure I-5
TCCSS: Continuous electroplating process flow diagram



Source: Satyendra Kumar Sarna, "Tinplate and Process of Tinning," ISPAT Guru, June 22, 2019, https://www.ispatguru.com/tinplate-and-process-of-tinning/.

[85] For more details, see, e.g., H. López, A. M. López, G. Ojea, I. Machón, N. de Abajo, and V. Torre, "Control of Coating Thickness in a Tinplate Line," 15th International Federation of Automatic Control ("IFAC") Proceedings, vol. 35, issue 1, 2002, p. 161, https://www.sciencedirect.com/science/article/pii/S1474667015395999; World of Steel, "Electrolytic Tinning Process," no date, https://www.worldofsteel.com/pages/electrolytic-tinning-process/, retrieved February 13, 2024; ITRI Ltd., "Electrolytic Tinning," Guide to Tinplate, August 2019, p. 14, https://www.tinplategroup.com/wp-content/uploads/2019/08/Guide-toTinplate.pdf; and Satyendra Kumar Sarna, "Tinplate and Process of Tinning," ISPAT Guru, June 229, 2019, https://www.ispatguru.com/tinplate-and-process-of-tinning/.

Tinplate and chromium-coated steel sheet are produced in varying coating weights and can be differentially coated on opposite sides, where the heavier coated surface is employed as the more protected inside of containers.[86] Most producers that manufacture both tinplate and chromium-coated steel sheet do so in the same mill, but on different coating lines. Although the coating process is similar for both tinplate and chromium-coated steel sheet, it is impractical to shift product to another production line because of the expense that would be involved in retrofitting the production line. The Japanese respondents apply the resin film to out-of-scope laminated TFS on a separate coating line in a subsequent production step after the tin-free coating line.[87]

After coating, the coiled sheets are further processed, typically by the can manufacturers (the end users) and in a location close to the packing facility. Here the coil may be cut into sheets or slit into several coils of narrow width and decorated by applying lacquer to either one or both sides, before being sliced into can bodies and welded into a can.

[86] The coating thickness is controlled by both the line speed through and electrical current flow (amperage) within the plating cells. H. López, A. M. López, G. Ojea, I. Machón, N. de Abajo, and V. Torre, "Control of Coating Thickness in a Tinplate Line," 15th International Federation of Automatic Control ("IFAC") Proceedings, vol. 35, issue 1, 2002, p. 161, https://www.sciencedirect.com/science/article/pii/S1474667015395999.

[87] Japanese respondents' prehearing brief, March 28, 2024, pp. 39–40. According to a witness for Crown, producing laminated TFS is more labor-intensive and technically advanced than standard TCCSS products. Hearing transcript, April 9, 2024, p. 102 (Hughes).

Domestic like product issues

In its original determination and its full first, second, and third five-year review determinations, the Commission defined the domestic like product as TCCSS corresponding to Commerce's definition of the scope.[88] In its notice of institution in this current five-year review, the Commission solicited comments from interested parties regarding the appropriate domestic like product and domestic industry.[89] Domestic interested parties Cleveland-Cliffs and U.S. Steel commented on the Commission's definition of the domestic like product and both indicated that they agreed with the Commission's previous definitions of the domestic like product.[90] Japanese respondent interested parties JFE Steel, Nippon Steel, and Toyo Kohan also commented on the Commission's definition of the domestic like product and all stated that they do not take a position on the definition of the domestic like product.[91] No party requested that the Commission collect data concerning other possible domestic like products in their comments on the Commission's draft questionnaires.[92]

[88] Original publication, p. 5; first review publication, p. 6; second review publication, p. 6.; and third review publication, p. 6.

[89] 88 FR 35920, June 1, 2023.

[90] Cleveland-Cliffs' response to the notice of institution, July 3, 2023, p. 40; Cleveland-Cliffs' prehearing brief, March 28, 2024, pp. 13-15; U.S. Steel's response to the notice of institution, July 7, 2023, pp. 21-22; U.S. Steel's prehearing brief, March 28, 2024, pp. 4-6.

[91] JFE Steel's response to the notice of institution, June 30, 2023, p. 10; Nippon Steel's response to the notice of institution, July 3, 2023, p. 16; Toyo Kohan's response to the notice of institution, July 3, 2023, p. 6.

[92] See generally Cleveland-Cliff's comments on draft questionnaires, December 11, 2023; U.S. Steel's comments on draft questionnaires, December 11, 2023; and Nippon Steel and Toyo Kohan's joint comments on draft questionnaires, December 11, 2023. JFE Steel did not provide comments on the draft questionnaires.

U.S. market participants

U.S. producers

During the final phase of the original investigation, the Commission received U.S. producer questionnaires from seven firms, which accounted for all known U.S. production of TCCSS in the United States during 1999.[93] During the first five-year review, the Commission received U.S. producer questionnaires from four firms, which accounted for all known production of TCCSS in the United States during 2005.[94] During the second five-year review, the Commission received U.S. producer questionnaires from five firms, which accounted for all known production of TCCSS in the United States during 2011.[95] During the third five-year review, the Commission received U.S. producer questionnaires from four firms, which accounted for all known production of TCCSS in the United States during 2016.[96]

In this current fourth five-year review, the Commission issued U.S. producers' questionnaires to three firms. The Commission received usable questionnaires from all three firms, which accounted for all known U.S. production of TCCSS in 2023.[97] Table I-8 presents a list of the current domestic producers of product and each company's position on continuation of the order, production locations, and share of reported production of TCCSS in 2023.

Table I-8
TCCSS: U.S. producers, positions on the order, U.S. production location, and shares of reported U.S. production, 2023

Share in percent

Firm	Position on order	Production locations	Share of production
Cleveland-Cliffs	***	Weirton, WV	***
Ohio Coatings	***	Yorkville, OH	***
U.S. Steel	***	Gary, IN; Portage, IN; East Chicago, IN; Pittsburg, CA	***
All firms	Various	Various	***

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

Table I-9 presents U.S. producers' reported affiliations and relationships to firms engaged in the production of TCCSS or engaged in the exportation/importation of TCCSS into the United States.

[93] Original publication, p. III-1.
[94] First review publication, pp. I-12 and I-21.
[95] Second review publication, pp. I-11-I-12.
[96] Third review publication, p. I-12.
[97] On April 20, 2024, Cleveland-Cliffs permanently idled its TCCSS operations at its Weirton, West Virginia plant. See Part III of this report for more information.

Table I-9
TCCSS: 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.

U.S. Steel is related to U.S. Steel Kosice, a TCCSS producer in Slovakia,[98] and in 2020 it acquired USS-UPI, a TCCSS producer in the United States.[99] U.S. Steel has announced plans to merge with Nippon Steel, a TCCSS producer in Japan, pending U.S. governmental regulatory approval.[100] Ohio Coatings is a 50-50 joint venture owned by Esmark, Inc., a steel holdings company, and TCC Steel, a TCCSS producer in South Korea.[101] Ohio Coatings is also related to Nippon Steel Trading Americas, Inc., a U.S. importer of TCCSS ***.[102]

Historical overview of the U.S. TCCSS industry

Table I-10 presents a chronological overview of the U.S. TCCSS industry, including current and past producers, their production facilities, and operational status since imposition of the antidumping duty order on TCCSS from Japan in 2000.

[98] U.S. Steel Kosice, "About Us," retrieved March 1, 2024, https://www.usske.sk/en/about-us/corporation-u-s-steel; U.S. Steel Kosice, "Tin Mill," retrieved March 1, 2023, https://www.usske.sk/en/products/tin-mill.

[99] 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://www.globenewswire.com/news-release/2020/03/01/1993067/0/en/U-S-Steel-Acquires-Remaining-50-Percent-Ownership-Interest-in-USS-POSCO-Industries-UPI-From-POSCO-California-Corporation.html.

[100] U.S. Steel, "U. S. Steel Stockholders Approve Transaction with Nippon Steel Corporation (NSC)," April 12, 2024, https://investors.ussteel.com/news-events/news-releases/detail/673/u-s-steel-stockholders-approve-transaction-with-nippon.

[101] Samuel Spatter, "Esmark Inc. Buys Ohio Steel Plant," TRIB Live, October 12, 2012, https://archive.triblive.com/business/local-stories/esmark-inc-buys-ohio-steel-plant/.

[102] For a historical perspective on this relationship, Wheeling-Pittsburgh reported on p. 10 of its SEC Form 10-K Report for Fiscal Year Ending December 31, 2006, that Nippon Steel Trading Americas, Inc. holds nonvoting preferred stock in Ohio Coatings. Wheeling-Pittsburgh, SEC Form 10-K Report for Fiscal Year Ending December 31, 2006, March 20, 2007, https://www.sec.gov/Archives/edgar/data/941738/000095015207002330/l24082ae10vk.htm.

Table I-10
TCCSS: Historical overview of the U.S. TCCSS industry since January 1, 2000

Facility (current status)	2000–03	2004–07
Aliquippa, PA (U.S. Steel, closed)	LTV Corp. bankruptcy filing (December 2000). U.S. Steel facility acquisition (March 2001); facility closure (late-2001).	Closed facility.
East Chicago, IN (U.S. Steel, closed)	LTV bankruptcy filing (December 2000). U.S. Steel facility acquisition (March 2001).	U.S. Steel operating facility.
Fairless Hills, PA (U.S. Steel, closed)	U.S. Steel facility closure (late-2001).	Closed facility.
Gary, IN (U.S. Steel, indefinitely idled)	U.S. Steel operating facility.	U.S. Steel operating facility.
Pittsburg, CA (U.S. Steel, indefinitely idled)	USS-POSCO Industries ("UPI") operating facility, as a joint venture between U.S. Steel and POSCO (South Korea).	UPI operating joint-venture facility.
Portage (Midwest), IN (U.S. Steel, operating)	National Steel Corp. ("National") bankruptcy filing (March 2002). U.S. Steel facility acquisition (May 2003).	U.S. Steel operating facility.
Sparrows Point, MD (RG Steel, closed)	Bethlehem Steel Corp. ("Bethlehem") bankruptcy filing (October 2001. International Steel Group ("ISG") facility acquisition (May 2003).	Mittal Steel NV ("Mittal") acquisition of ISG (April 2005); Mittal shuts down the chromium-coating line but continues operating the tin plating line (October 2005). ArcelorMittal S.A. formed from Mittal's acquisition of Arcelor S.A., but U.S. regulators required divestiture of the Dofasco (Canada), Sparrows Point, MD, or Weirton, WV, facility (June 2006).
Weirton, WV (Cleveland-Cliffs, indefinitely idled)	Weirton Steel Corp. ("Weirton") bankruptcy filing (May 2003).	ISG facility acquisition (May 2004). Mittal acquisition of ISG (April 2005). Mittal shuts down steelmaking (early-2006). ArcelorMittal S.A. formed from Mittal Steel's acquisition of Arcelor S.A. (June 2006). ArcelorMittal shuts down hot-rolling operations but continued tinplate production (December 2007).
Yorkville, OH (Esmark and TCC Steel joint venture, operating)	Ohio Coatings Co. operating joint-venture facility of Wheeling-Pittsburgh Corp. and Dongyang Tinplate Co. Ltd. ("Dongyang," South Korea). TCC Steel Co. Ltd. is the new name for Dongyang (March 2003). Wheeling-Pittsburgh bankruptcy filing (November 2000); and emergence from bankruptcy protection (August 2003).	Ohio Coatings operating joint-venture facility. Esmark Inc. acquisition of Wheeling-Pittsburgh (December 2006), completed (July 2007).

Table continued.

Table I-10 Continued
TCCSS: Historical overview of the U.S. TCCSS industry since January 1, 2000

Facility (current status)	2008–11	2012–15
Aliquippa, PA (U.S. Steel, closed)	Closed facility.	Closed facility.
East Chicago, IN (U.S. Steel, closed)	U.S. Steel operating facility.	U.S. Steel announced temporarily idling of tin mill operations (March 2015).
Fairless Hills, PA (U.S. Steel, closed)	Closed facility.	Closed facility.
Gary, IN (U.S. Steel, indefinitely idled)	U.S. Steel operating facility.	U.S. Steel operating facility.
Pittsburg, CA (U.S. Steel, indefinitely idled)	UPI operating joint-venture facility.	UPI operating joint-venture facility.
Portage (Midwest), IN (U.S. Steel, operating)	U.S. Steel operating facility.	U.S. Steel operating facility.
Sparrows Point, MD (RG Steel, closed)	Severstal Holdings LLC facility acquisition ("Severstal," May 2008). RG Steel Corp. LLC acquisition of Severstal's U.S. facilities (March 2011); temporary operations shutdown due to fire (October 2011); steelmaking and hot-rolling operations shut down, reportedly to conserve cash (December 2011).	RG Steel resumed production operations after receiving a cash infusion from equity firm Cerberus Capital Management LP (January 2012); production operations idled (April 2012); bankruptcy filing shuts down facility (May 2012). Closed facility site sold to Sparrows Point Terminal for redevelopment into an industrial business park (September 2014).
Weirton, WV (Cleveland-Cliffs, indefinitely idled)	ArcelorMittal operating facility.	ArcelorMittal operating facility.
Yorkville, OH (Esmark and TCC Steel joint venture, operating)	Ohio Coatings operating joint-venture facility. Severstahl acquisition of Esmark (August 2008). RG Steel acquisition of Severstal's joint-venture share (March 2011).	RG Steel bankruptcy filing idled tin mill operations (May 2012). Esmark joint-venture share re-acquisition (October 2012) with plans to restart tin mill operations (in January 2013).

Table continued.

Table I-10 Continued
TCCSS: Historical overview of the U.S. TCCSS industry since January 1, 2000

Facility (current status)	2016–19	2020 onward
Aliquippa, PA (U.S. Steel, closed)	Closed facility.	Closed facility.
East Chicago, IN (U.S. Steel, closed)	U.S. Steel resumed production operations citing improved market conditions (June 2016). U.S. Steel indefinitely idled tin mill operations (by mid-November 2019).	U.S. Steel permanently closed tin mill operations (March 2022). Tin mill operations shifted to the Portage and Gary facilities.
Fairless Hills, PA (U.S. Steel, closed)	Closed facility.	Closed facility.
Gary, IN (U.S. Steel, indefinitely idled)	U.S. Steel announced capital investments for facility revitalization including tin mill operations (August 2018).	U.S. Steel idled one tin mill line (August 2022) and finally indefinitely idled most tin mill operations (December 2022).
Pittsburg, CA (U.S. Steel, indefinitely idled)	UPI operating joint-venture facility.	U.S. Steel acquired full ownership of UPI from former joint-venture partner POSCO (February 2020); UPI final facility indefinite idling (December 2023).
Portage (Midwest), IN (U.S. Steel, operating)	U.S. Steel completed repairs and restarted chromium-coating operations after a process release of hexavalent chromium (April 2017).	U.S. Steel operating facility.
Sparrows Point, MD (RG Steel, closed)	Closed facility.	Closed facility.
Weirton, WV (Cleveland-Cliffs, indefinitely idled)	ArcelorMittal sold-off 1,100 acres of unused facility property to Frontier Group for industrial redevelopment and stated that tin mill operations will continue (February 2017).	Cleveland-Cliffs Inc. facility acquisition (December 2020), announced plans to idle the facility (February 2024), with all operations ceased and the facility indefinitely idled (mid-late April 2024).
Yorkville, OH (Esmark and TCC Steel joint venture, operating)	Ohio Coatings operating joint-venture facility.	Ohio Coatings operating joint-venture facility.

Table continued.

Table I-10 Continued
TCCSS: Historical overview of the U.S. TCCSS industry since January 1, 2000

Source: Tin and Chromium-Coated Steel Sheet from Japan, Inv. No. 731-TA-860 (Third Review), USITC Publication 4795, June 2018, pp. III-1 – III-6; Inv. No. 731-TA-860 (Second Review), USITC Publication 4325, May 2012, pp. I-19 – I-21, III-1 – III-2; Inv. No. 731-TA-860 (Review), USITC Publication 3860, June 2006, pp. I-21 – I-24; Inv. No. 731 -TA-860 (Final), USITC Publication 3337, August 2000, pp. III-1 – III-2; TCC, "TCC Steel Looks Forward to Celebrating the Centennial Anniversary," ©2019, https://www.tccsteel.com/en/company/message, retrieved February 27, 2024; TCC, "History, 1992–2009," ©2019, https://www.tccsteel.com/en/company/history/11/3 , retrieved February 27, 2024; Goldman Sachs, "Goldman Sachs Advises Mittal Steel on Historic Acquisition of Arcelor SA," ©2024, https://www.goldmansachs.com/our-firm/history/moments/2006-arcelor-mittal.html, retrieved February 27, 2024; Samuel Spatter, "Esmark Inc. Buys Ohio Steel Plant," TRIB Live, October 12, 2012, https://archive.triblive.com/business/local-stories/esmark-inc-buys-ohio-steel-plant/;
Len Boselovic, "Steel Company Esmark Restarting Ohio Plant," Pittsburgh Post-Gazette, October 13, 2012, https://www.esmarksteelgroup.com/esg/steel-company-esmark-restarting-ohio-plant/;
Wheeling-Pittsburgh, SEC Form 10-K Report for Fiscal Year Ending December 31, 2006, March 20, 2007, https://www.sec.gov/Archives/edgar/data/941738/000095015207002330/l24082ae10vk.htm;
Caroline Humer, "Esmark Plans for Wheeling-Pittsburgh, Reuters, August 9, 2007, https://www.reuters.com/article/specialeventii-mining-summit-esmark-dc/esmark-plans-for-wheeling-pittsburgh-idUKN2242618820070522/;
Severstal, "Severstal Completes Acquisition of Esmark Incorporated," August 5, 2008, https://www.sec.gov/Archives/edgar/data/1392600/000104746908008717/a2187205zex-99_a5h.htm;
PR Newswire, "RG Steel Completes Purchase of Three Steel Companies With Capacity of 7.5 Million Tons," March 31, 2011, https://www.prnewswire.com/news-releases/rg-steel-completes-purchase-of-three-steel-companies-with-capacity-of-75-million-tons-119026734.html;
Craig Howell, "Cleveland Cliffs in Weirton Idled," The Marietta Times (Marietta, Ohio), April 22, 2024, https://www.mariettatimes.com/news/local-news/2024/04/cleveland-cliffs-in-weirton-idled/;
*** questionnaire response, Attachment D.
Cleveland-Cliffs, prehearing brief, March 28, 2024, pp. 1–2, exhs. 1, 4;
U.S. Steel, prehearing brief, March 28, 2024, pp, 11–12, exh. 1;
Japanese respondents' prehearing brief, March 28, 2024, p. 9, exh. 6;
Hearing transcript, April 9, 2024, pp. 18 (Kopf), 23, 25–27 (Smith).

Note: The current status for each facility in the first column includes the current or last corporate owner(s) and current or last operating, idled, or closure status.

U.S. importers

During the final phase of the original investigation, the Commission received usable data from 18 firms representing virtually 100 percent of imports of TCCSS from Japan.[103] During the first five-year review, the Commission received useable data from 27 firms, which accounted for virtually all imports of TCCSS from Japan during 2000-05.[104] During the second five-year review, the Commission received U.S. importer questionnaires from 21 firms, which accounted for virtually all imports of TCCSS from Japan during 2011.[105] During the third five-year review, the Commission received U.S. importer questionnaires from 10 firms, which accounted for approximately 60 percent of U.S. imports of TCCSS during 2016.[106]

In the current proceeding, the Commission issued an importer questionnaire to 29 firms believed to be U.S. importers of TCCSS. The Commission received 21 questionnaire responses from firms which import TCCSS into the United States, as well as five questionnaire responses from firms which import excluded tin mill products.[107] The responding firms' imports accounted for the vast majority of TCCSS imports from Japan and all other sources in 2023. Table I-11 lists all responding U.S. importers of TCCSS from Japan and other sources, their headquarters, and their shares of U.S. imports in 2023.

[103] Original publication, pp. I-1 and IV-1.

[104] First review publication, pp. I-12 fn. 61 and I-24.

[105] Second review publication, p. I-12.

[106] Third review publication, pp. I-12 and IV-1.

[107] These five firms included: ***. Since these firms reported that they only imported excluded tin mill products they are not presented in the U.S. importers table below.

Table I-11
TCCSS: U.S. importers, their headquarters, and share of imports within each source, 2023

Share in percent

Firm	Headquarters	Japan	Nonsubject sources	All import sources
ArcelorMittal Dofasco	Hamilton, Canada	***	***	***
Arcelormittal International	Chicago, IL	***	***	***
CCA	Blandon, PA	***	***	***
CSN	Chicago, IL	***	***	***
Duferco Steel	Houston, TX	***	***	***
EP Steel	South River, NJ	***	***	***
JFE Shoji America	Long Beach, CA	***	***	***
Kemeny	Fort Myers, FL	***	***	***
KG Steel Americas	Fountain Valley, CA	***	***	***
Lakeside Metals	Willowbrook, IL	***	***	***
Metal One	Rosemont, IL	***	***	***
Nippon Steel Americas	Schaumburg, IL	***	***	***
Reynolds Services	Greenville, PA	***	***	***
Songlin	Buena Park, CA	***	***	***
Tata International	Schaumburg, IL	***	***	***
Tata Steel Ijmuiden	Ijmuiden, Netherlands	***	***	***
Tata Steel UK	London, England	***	***	***
TCC America	Torrance, CA	***	***	***
Titan	Baltimore, MD	***	***	***
TKSNA	Southfield, MI	***	***	***
Trivium	Rosemont, IL	***	***	***
All firms	Various	***	***	***

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

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

U.S. purchasers

The Commission received 22 usable questionnaire responses from firms that have purchased TCCSS since January 1, 2017.[108] [109] Twelve purchasers are can producers, two are other end users (***), four are distributors, and five reported being other types of users (including food processor, trader, and steel processor).[110] The largest responding purchasers were ***.

[108] The following firms provided purchaser questionnaire responses: ***.

[109] Of the 22 responding purchasers, 17 purchased the domestic product, one (***) purchased imports of the subject merchandise from Japan, and 18 purchased imports of TCCSS from other sources.

[110] Some firms reported more than one role.

Apparent U.S. consumption and market shares

Quantity

Table I-12 and figure I-6 present data by quantity on apparent U.S. consumption and U.S. market shares for TCCSS during 2021-23. The quantity of apparent U.S. consumption declined by 6.9 percent between 2021 and 2022 and by 18.6 percent between 2022 and 2023. U.S. producers' U.S. shipments decreased by *** percent from *** short tons in 2021 to *** short tons in 2023. Importers' U.S. shipments of TCCSS from Japan increased from *** short tons in 2021 to *** short tons in 2022 to *** short tons in 2023. However, the market share of these shipments was *** percent in each calendar year. Importers' U.S. shipments of TCCSS from nonsubject sources were *** short tons in 2021, *** short tons in 2022, and *** short tons in 2023.

Table I-12
TCCSS: Apparent U.S. consumption and market shares based on quantity, by period and source

Quantity in short tons; shares in percent

Source	Measure	2021	2022	2023
U.S. producers	Quantity	***	***	***
Japan	Quantity	***	***	***
Nonsubject sources	Quantity	***	***	***
All import sources	Quantity	***	***	***
All sources	Quantity	2,494,413	2,322,143	1,889,860
U.S. producers	Share	***	***	***
Japan	Share	***	***	***
Nonsubject sources	Share	***	***	***
All import sources	Share	***	***	***
All sources	Share	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 "---".

Figure I-6
TCCSS: Apparent U.S. consumption based on quantity, by period and source

* * * * * * *

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

Value

Table I-13 and figure I-7 present data by value on apparent U.S. consumption and U.S. market shares for TCCSS during 2021-23. The value of apparent U.S. consumption increased sharply between 2021 and 2022, then decreased in 2023. The value of U.S. producers' U.S. shipment of TCCSS decreased irregularly by *** percent during 2021-23, starting at $*** in 2021 then increasing to $*** in 2022 before decreasing to $*** in 2023. Conversely, importers' U.S. shipments of TCCSS from Japan and nonsubject sources increased. Importers' U.S. shipments of TCCSS from Japan were *** in 2021 before rising to $*** in 2022 and to $*** in 2023. Importers' U.S. shipments of TCCSS from nonsubject sources increased irregularly by *** percent during 2021-23 from $*** in 2021 to $*** in 2022 then decreasing to $*** in 2023.

Table I-13
TCCSS: Apparent U.S. consumption and market shares based on value, by period and source

Value in 1,000 dollars; shares in percent

Source	Measure	2021	2022	2023
U.S. producers	Value	***	***	***
Japan	Value	***	***	***
Nonsubject sources	Value	***	***	***
All import sources	Value	***	***	***
All sources	Value	2,907,642	4,705,717	3,478,681
U.S. producers	Share of value	***	***	***
Japan	Share of value	***	***	***
Nonsubject sources	Share of value	***	***	***
All import sources	Share of value	***	***	***
All sources	Share of value	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 "---".

Figure I-7
TCCSS: Apparent U.S. consumption based on value, by period and source

* * * * * * *

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

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

U.S. market characteristics

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

All 3 U.S. producers, 7 of 22 importers, and 11 of 21 responding purchasers indicated that the market was subject to distinctive conditions of competition other than business cycles. Responses from all three groups identified competition from substitute products (e.g., aluminum, paper, glass, and plastic packaging) as contributing to the distinctive competitive conditions. Importer *** reported other steel products, such as cold-rolled, hot-dipped galvanized, and electro-galvanized steel can often be used as substitutes in some TCCSS applications, which leads to demand shifts in certain markets and/or applications.

Two purchasers reported section 232 measures as having a distinct impact on the market, with *** indicating the unique impacts from section 232 measures resulted from the limited number of suppliers of TCCSS in the domestic market. Three purchasers reported the links between TCCSS and can manufacturing. For example, *** reported increased tinplate and can manufacturing costs has led to a "dramatic increase" in imports of food-filled cans.

The TCCSS market was supplied by U.S. producers and by imports from nonsubject sources during 2021 through 2023. Imports of TCCSS from Japan, in contrast, were limited during these years. The quantity of apparent U.S. consumption of TCCSS decreased in 2022 (from 2.5 million to 2.3 million short tons) and, more sharply, in 2023 (from 2.3 million to 1.9 million short tons). Overall, apparent U.S. consumption in 2023 was 24.2 percent lower than in 2021 in terms of quantity.

Impact of section 301 tariffs and section 232 measures

Firms were asked to report the impact of section 301 tariffs on Chinese-origin products on the TCCSS market in the United States, including effects on TCCSS cost, price, supply, and demand. Two of three U.S. producers, 4 of 23 importers, and 5 of 22 purchasers reported that

[1] *Tin Mill Products from Canada, China, Germany, and South Korea*, Inv. Nos. 701-TA-685 and 731-TA-1599-1601 and 1603 (Final), USITC Publication 5492, February 2024, p. II-1.

the section 301 tariffs had an impact on the U.S. TCCSS market; five importers, four purchasers, and three foreign producers reported the section 301 tariffs did not have an impact; and 1 U.S. producer, 14 importers, and 13 purchasers did not know.

Firms were also asked to report the impact of the section 232 measures on steel and aluminum on the U.S. TCCSS market on overall demand, supply, prices and raw material costs (table II-1). All three U.S. producers, 16 of 23 importers, and 15 of 22 purchasers reported that the section 232 measures had an impact on impact the TCCSS market in the United States. The majority of responding firms reported there was no change in overall demand in the TCCSS market due to the section 232 measures; those that did report a change in overall U.S. demand reported factors other than the section 232 measures as causing that change.[2]

U.S. producers reported that domestic and imported supply of TCCSS fluctuated but were mixed as to whether supply fluctuated up or down during 2017-23. U.S. producer *** reported that the section 232 measures are not sufficient to prevent further harm, given the lack of orders seen at its *** facility.[3] Most importers reported that there was no change in domestic supply due to the section 232 measures and that import supply either declined steadily or fluctuated down. Importer/purchaser *** reported that it had hoped the measures would result in increased investments and capacity by U.S. producers, but the opposite occurred. It continued that there was no change in the aggregate supply of imports, though the sources shifted depending on section 232 exclusions, exemptions, and quotas. Most purchasers also reported that there was no change in domestic supply due to the section 232 measures, but most also reported no change in the supply of TCCSS imports.

[2] These factors are discussed below in "Demand trends".

[3] ***. The Commission received responses to its questionnaires for this proceeding prior to *** announcement regarding ***. ***.

Table II-1
TCCSS: Count of firms' responses regarding the impact of the 232 measures on steel and aluminum imports

Impact on	Firm type	Steadily increase	Fluctuate up	No change	Fluctuate down	Steadily decrease
Demand	U.S. producers	0	0	2	0	0
Demand	Importers	1	2	8	4	1
Demand	Purchasers	0	2	10	2	0
Domestic supply	U.S. producers	0	1	0	1	0
Domestic supply	Importers	1	3	9	1	2
Domestic supply	Purchasers	1	0	9	2	2
Imported supply	U.S. producers	0	1	0	1	0
Imported supply	Importers	1	2	4	6	3
Imported supply	Purchasers	1	5	8	0	0
Prices	U.S. producers	0	1	0	1	0
Prices	Importers	6	10	0	1	0
Prices	Purchasers	5	8	2	0	0
Raw material cost	U.S. producers	0	0	1	1	0
Raw material cost	Importers	4	4	7	0	0
Raw material cost	Purchasers	3	4	7	0	0

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

Most firms (one U.S. producer, 10 importers, and 8 purchasers) reported that prices fluctuated upward, while an additional 6 importers and 5 purchasers reported that prices steadily increased. Several purchasers reported increased prices as the result of section 232 measures. U.S. importer/purchaser *** and purchaser *** reported that market prices increased approximately by the tariff percent. *** and U.S. importer/purchaser *** reported that U.S. producers did not boost production/increase capacity after the section 232 measures went into effect. U.S. producer *** reported that section 232 measures resulted in a sharp increase in prices for TCCSS during 2021-22, but that prices fell in subsequent years.

With respect to raw materials, *** also reported 232 measures “significantly limited” its ability to source *** from offshore sources but did not link this impact to specific price effects. Separately, purchaser *** reported that the section 232 measures allowed Cleveland-Cliffs and U.S. Steel to effectively choke supply to Ohio Coatings, which requires black plate to make TCCSS, and that Cleveland-Cliffs reportedly refused to sell Ohio Coatings the substrate and that U.S. Steel only sold a fraction of the total volume Ohio Coatings could consume. It also noted that Ohio Coatings’ efforts to source black plate offshore were severely hampered by the section 232 tariffs including efforts by Weirton (Cleveland-Cliffs’) and U.S. Steel to contest Ohio Coatings’ applications for exclusions. Relatedly, U.S.

producer *** reported that "black plate seems to be readily available if the buyer is willing to pay a market-based price."[4]

One foreign producer, *** reported that the section 232 measures impacted its exports to the United States, stating that even though Japanese producers shifted focus to other markets following the antidumping orders, the section 232 measures further reduced the incentive for Japanese producers to increase exports of subject TCCSS to the United States.

Channels of distribution

U.S. producers and importers sold mainly to can manufacturers, as shown in table II-2.

Table II-2
TCCSS: Share of U.S. shipments by source, channel of distribution, and period

Shares in percent

Source	Channel	2021	2022	2023
United States	Distributors	***	***	***
United States	Can manufacturers	***	***	***
United States	Other end users	***	***	***
Japan	Distributors	***	***	***
Japan	Can manufacturers	***	***	***
Japan	Other end users	***	***	***
Nonsubject sources	Distributors	***	***	***
Nonsubject sources	Can manufacturers	***	***	***
Nonsubject sources	Other end users	***	***	***
All import sources	Distributors	***	***	***
All import sources	Can manufacturers	***	***	***
All import sources	Other end users	***	***	***

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

[4] ***. Cleveland-Cliffs' posthearing brief, exhibit 1, p. 2.

Geographic distribution

U.S. producers reported selling TCCSS to all regions in the contiguous United States (table II-3). 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. Subject importers sold *** of their U.S. point of shipment.

Table II-3
TCCSS: Count of U.S. producers' and U.S. importers' geographic markets

Region	U.S. producers	Japan
Northeast	3	***
Midwest	3	***
Southeast	3	***
Central Southwest	2	***
Mountain	1	***
Pacific Coast	3	***
Other	0	***
All regions (except Other)	1	***
Reporting firms	3	***

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-4 provides a summary of the supply factors regarding TCCSS from U.S. producers and Japan. While U.S. producers' production capacity was *** than Japanese producers', Japanese capacity utilization rates were *** than U.S. producers' during 2021-23.

Table II-4
TCCSS: 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

Factor	Measure	United States	Japan
Capacity 2021	Quantity	***	***
Capacity 2023	Quantity	***	***
Capacity utilization 2021	Ratio	***	***
Capacity utilization 2023	Ratio	***	***
Inventories to total shipments 2021	Ratio	***	***
Inventories to total shipments 2023	Ratio	***	***
Home market shipments 2023	Share	***	***
Non-US export market shipments 2023	Share	***	***
Ability to shift production	Count	***	***

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

Note: Responding U.S. producers accounted for all of U.S. production of TCCSS in 2023. Responding foreign producer/exporter firms accounted for all U.S. imports of TCCSS from Japan to the United States during 2023. For additional data on the number of responding firms and their share of U.S. production and of U.S. imports from Japan, please refer to Part I, "Summary Data and Data Sources."

Note: *** when asked about the ability to shift production between TCCSS and other products using the same equipment and labor.

Domestic production

Based on available capacity information, U.S. producers of TCCSS have the ability to respond to changes in demand with moderate-to-large changes in the quantity of shipments of U.S.-produced TCCSS to the U.S. market.[5] The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity and elevated levels of inventories. Factors mitigating responsiveness of supply include a limited ability to shift shipments from export markets and no ability to shift production to or from alternate products.

[5] On February 15, 2024, U.S. producer Cleveland-Cliffs announced that its facility in Weirton, West Virginia will be indefinitely idled. The facility was indefinitely idled as of April 20, 2024. *Cleveland Cliffs in Weirton Idled*, https://www.mariettatimes.com/news/local-news/2024/04/cleveland-cliffs-in-weirton-idled/, retrieved April 22, 2024. This production location was responsible for *** percent of domestic production in 2023 (table I-8). As a result of this event, there will likely be a decrease in the ability to respond to changes in demand with changes in the quantity of shipments of U.S.-produced TCCSS to the U.S. market. Cleveland-Cliffs has stated that the facility would reopen if there are "firm orders." Hearing transcript, p. 44 (Smith).

While U.S. capacity and production both decreased during 2021 to 2023,[6] a larger relative decline in production resulted in lower capacity utilization.[7] U.S. producers' U.S. shipments decreased by *** percent from 2021 to 2023. The ratio of ending inventories to total shipments increased by *** percentage points from 2021 to 2023. Exports comprised a very small share of U.S. producer shipments (less than *** percent) throughout the period.

*** U.S. producers reported being unable to produce other products on the same equipment used to product TCCSS. ***.[8]

Subject imports from Japan

Based on available information, producers of TCCSS from Japan have the ability to respond to changes in demand with moderate-to-large changes in the quantity of shipments of TCCSS to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of some unused capacity, ability to shift shipments from alternate markets, and ability to shift production to or from alternate products. Factors mitigating responsiveness of supply include limited availability of inventories.

Japanese producers' capacity and production declined at different rates between 2021 and 2023, leading to fluctuating but increased capacity utilization during the period. Japanese producers shipped *** quantities to the United States; their major export markets during 2021-23 were ***.[9] Other products that responding foreign producers reportedly can produce on the same equipment as TCCSS are laminated TFS, ***

[6] In 2022, U.S. Steel indefinitely idled productions lines at its East Chicago Tin and Gary Works plants.

[7] Capacity decreased by *** percent and production decreased by *** percent between 2021 and 2023.

[8] ***.

[9] As noted in Part IV and the hearing, Mexico has been the top export market of subject product from Japan in recent years. Hearing transcript, p. 9 (Brunda).

***. Factors affecting foreign producers' ability to shift production include profitability of other products (i.e., film laminated steel has a higher profit margin), responsibility to supply regular customers, and demand.

Imports from nonsubject sources

Nonsubject imports accounted for virtually all of U.S. imports in 2023. The largest nonsubject sources of TCCSS were the Netherlands, Germany, and Canada. These three countries accounted for 67.2 percent of the quantity of total U.S. imports of TCCSS in 2023.[10]

Changes in availability from subject and nonsubject sources

Most firms reported that there had not been changes in the availability of imports of TCCSS from Japan since January 1, 2017, and most do not anticipate a change in the availability of these imports. One U.S. producer, two importers, and three purchasers reported that there were changes in the availability of subject imports between 2017 and 2020. One U.S. producer, two importers, and three purchasers reported that there were changes to the availability of subject imports between 2021 and 2023. No U.S. producers, one importer, and three purchasers reported that they anticipate changes to the availability of subject imports. The few firms reporting changes in availability cited the impact of section 232 measures, supply chain issues, and the increase of specialized, out-of-scope laminated TFS imports.

Two U.S. producers, seven importers, and six purchasers reported that there were changes in the availability of imports of TCCSS from nonsubject sources between 2017 and 2020. Some firms noted that there was new and increased capacity in Asia and Europe while others reported that the availability of imports from nonsubject sources was impacted by the section 232 measures and supply chain issues. Three U.S. producers, ten importers, and seven purchasers reported that there were changes in the availability of nonsubject imports between 2021 and 2023. Firms again cited increased imports as firms became familiar with the section 232 measures and supply chain issues eased, while others reported that the then-ongoing antidumping and countervailing duty investigation on tin mill products from Canada, China, Germany, and South Korea impeded imports.[11] One U.S. producer, eight importers, and five

[10] Compiled from official U.S. import statistics of the U.S. Department of Commerce Census Bureau using statistical reporting numbers 7210.11.0000, 7210.12.0000, 7210.50.0000, 7210.50.0020, 7210.50.0090, and 7212.10.0000, accessed February 22, 2024.

[11] The original petition for that proceeding included four other countries: the Netherlands, Taiwan, Turkey, and the United Kingdom—imports from those sources may have also been impacted.

purchasers reported that they anticipate changes to the availability of imports of TCCSS from nonsubject sources.

New suppliers

Eight of 21 responding purchasers indicated that new suppliers entered the U.S. market since January 1, 2017, and 5 expect additional entrants. Purchasers were generally uncertain regarding expectations of new TCCSS suppliers entering the U.S. market.[12]

Supply constraints

*** U.S. producers reported that they had experienced supply constraints since January 1, 2017.[13] U.S. producer *** reported that it was forced to put customers on allocation relative to the volume of tin mill black plate (black plate) that could be purchased from other sources because its largest supplier of black plate, ***, refused to continue supplying it beginning January 2022, as well as the section 232 measures make it difficult to source black plate from offshore suppliers. U.S. producer *** reported that there was a temporary tightness of supply in 2021 as the economy began to recover from the COVID-19 pandemic, but it has had ample supply available for at least the last 20 months. U.S. producer *** reported that it largely met its contractual commitments for TCCSS during the period of review. It has not declined or refused to continue supplying any existing customers, although it transitioned to supplying certain customers via spot sales rather than annual contracts and has not declined new customers at any point during the review period. It listed the following supply constraints:

- ***
- ***

[12] *** cited rumors that SDI may enter the market and *** reported that an unnamed producer in Vietnam has shown interest in the U.S. market.

[13] Producer questionnaire responses, section IV-21.

- ***

Eleven of 21 importers reported that they had experienced supply constraints since January 1, 2017. Several importers cited import restrictions as causes for supply constraints:[14]

- *** noted that its imports are limited due to various import tariffs, duties, and regulations.
- *** reported that its supply was stopped after the preliminary determination in the Tin Mill Products AD/CVD investigation on Canada, China, Germany, and South Korea.
- *** reported it is limited to a small quota of around 12 metric tons per year.
- *** reported that there was a 10-month period of uncertainty which no orders were placed by its customers for TCCSS produced in ***; and,
- *** reported that imposed tariffs limit the supply base and is the largest constraint.
- Importer *** reported that contracts are negotiated annually, and sometimes demand has exceeded available capacity for specific products. It stated that changes in demand from customers under contracts cannot always be accommodated due to production capacity having already been committed to other customers during the contract negotiation process for that year.
- Importer *** was unable to meet increased demand on occasion due to production reliability issues.
- Importer *** reported that demand of all its customers was higher than installed capacity.

[14] Importer questionnaire responses, section III-19.

- Importer *** reported that during the second half of 2020 and parts of 2021, it declined orders for preexisting customers due to the lack of container availability and/or inconsistent vessel schedules, declined new/additional orders due to uncertainties surrounding its ability to deliver on a normal schedule and with its usual delivered pricing terms, and was unable to deliver certain arriving shipments due to issues unrelated to the countervailing duty and antidumping investigations.

Importer and purchaser *** reported that Cleveland-Cliffs, Duferco, and Ohio Coatings did not accept orders in 2020 and 2021. Importer *** reported monthly and reduced annual allocations as domestic mills would limit volume(s) and specifications they would produce, as well as reduced next year's contract volume from prior years contractual volume and or actual shipped tons. It also reported that production orders were often called complete short by more than contractual leeway on a majority of the orders. Lastly, it stated that orders would not be available for shipment as confirmed on the producing mills order acknowledgements, often being several months late, requiring alternate supply chains to be sought in order to meet customer requirements.

Seventeen of 22 purchasers reported that they experienced supply constraints by suppliers of TCCSS since January 1, 2017. Nine of these purchasers reported that domestic firms have frequently had supply constraints and five reported occasional instances of being unable to obtain domestically produced TCCSS. Purchasers reported domestic supply issues in 2020, 2021, and 2022, including being put on allocation (***), refusal to accept orders or provide quotes (***), and an inability to meet contractual obligations for volume (***). *** reported an inability of U.S. Steel and Cleveland-Cliffs to supply volumes in excess of their contracted amounts. With respect to Japan, there were no purchasers that reported frequent or occasional supply constraints, and four purchasers reported rarely or never experiencing supply constraints. Most responding purchasers (11) reported rarely or never experiencing such supply constraints with nonsubject sources.

Contracted delivery refusal

Two U.S. producers reported that their customers declined to accept contractually obligated TCCSS since January 1, 2017. U.S. producer *** reported that customers always have the option to refuse to buy and will exercise that option if they can get a better price elsewhere. For example, it stated that many customers refused to take the full amount for which they had contracted in 2022, which is why its end-of-period inventories increased so

much from 2021 to 2022. U.S. producer *** reported that despite continued strong demand in 2022, multiple contract customers refused to accept delivery of TCCSS, resulting in a shortfall of more than *** short tons compared to their minimum contractual commitments for the year. Forecasted high pricing and demand signals in the second half of 2021 allowed the producer to secure higher prices in its annual TCCSS contracts for 2022. The producer alleges that customers' failure to purchase contractually obligated volumes in 2022 was, in general, driven by preference for lower-priced imported TCCSS. In contrast, when the producer's contractual prices were generally lower than market prices in 2021, customers sought out additional volumes from it beyond the contracted volumes to stockpile products prior to 2022 contract prices going into effect. For 2023 contracts, the producer attempted to secure "take or pay" contracts from key customers so that a shortfall like what occurred in 2022 would not recur. Customers largely rejected this, and the producer was only able to secure lower volumes when it tried to otherwise maintain higher contract prices.

Purchasers were also asked if they had declined acceptance of contractually obligated TCCSS since 2017. Most purchasers (18 of 22) reported that they had not declined acceptance and 4 reported that they did. When asked how frequently they declined domestic product deliveries, three of the four firms that reported declining acceptance of product reported declining delivery of domestic product "occasionally" since 2017. *** reported that it is committed to fulfilling supply agreement obligations with domestic and foreign steel mills, but there have been instances of volatility in the market since 2017 where the rise and fall of demand has prompted it to purchase less (or oftentimes more) than originally negotiated through the annual supply negotiation process. *** reported a post-COVID-19 demand decline in mid-2022 and into 2023, and that it was forced to cut volumes with all suppliers during this time. *** reported that it refused delivery of TCCSS that was delivered more than 6 months later than promised.

Impact of production facility closures

Two U.S. producers, ten importers, and nine purchasers reported that there were changes in the availability of U.S.-produced TCCSS between 2017 and 2020. Domestic producer U.S. Steel indefinitely idled two of its mills: East Chicago Tin (in December 2019) and Gary Works (in August 2022). It also idled a line at UPI in Pittsburg, California in late 2023. Firms cited declining U.S. production and reduced capacity due to the idlings, particularly U.S. Steel's East Chicago plant in late 2019, which led to a narrowing of product offerings.

Three U.S. producers, 15 importers, and 17 purchasers reported that there were changes in the availability of U.S.-produced TCCSS between 2021 and 2023. For this time

period, firms again cited declining U.S. production and reduced capacity due to the idling of multiple domestic mills, particularly U.S. Steel's Gary Works plant in 2022 and UPI's closure in late 2023.[15] Purchaser *** stated that U.S. producers shifted their investments and available production capacity away from TCCSS to higher margin, rolled products for much of 2021 and the first half of 2022. This shift occurred despite increases in TCCSS demand and significantly reduced practical U.S. tinplate production capacity in recent years, which includes permanent reduction in U.S. capacity caused by the complete removal of assets from tin mill steel production, the indefinite idling of other assets, and the planned closure of other capacity. It also stated that Cleveland-Cliffs has taken capacity out of service despite strong demand, including the indefinite idling of its Indiana Harbor #3 and #4 blast furnaces. Lastly, it stated that Ohio Coatings was not able to use much of its available tin mill steel production capacity because it was completely unable to obtain the black plate substrate from Cleveland-Cliffs or U.S. Steel.

One U.S. producer, eight importers, and eight purchasers reported that they anticipate changes to the availability of U.S.-produced TCCSS. Several firms, including U.S. producer ***, expect additional declines in U.S. production. Firms indicated concern about the long-term viability of Cleveland-Cliffs' Weirton facility. Firms cited the planned acquisition of U.S. Steel by Nippon Steel, which alternatively could bring idled facilities back online.

When asked whether they had been impacted by the closure of domestic TCCSS production facilities since 2017, purchasers were relatively split. Nine purchasers reported they had been impacted by the closure of production facilities and six reported they had not. Seven of the nine purchasers that reported they had been impacted by a closure specifically cited closures at U.S. Steel facilities. Silgan stated the reduction in domestic suppliers to two mills has impacted back-up plans to address situations with late deliveries.[16] Purchasers were asked the same question with respect to closures of Japanese TCCSS production facilities. Eight purchasers reported they were not impacted, and 14 reported they did not know.

Additionally, purchasers were asked what effects the reduction in production of TCCSS facilities at East Chicago and Gary Works have had on purchasers and the TCCSS products market in the United States. Several purchasers reported limited or no impact on their purchases (***). Some reported that U.S. Steel is able to produce the same specifications at its

[15] Silgan has stated that they are seeking 175,000 tons of product to replace the lost West Coast supply resulting from UPI's closure. Hearing transcript, p. 194 (Arena).

[16] Hearing transcript, p. 176 (Arena).

remaining facilities (***), while others reported needing to turn to foreign sources to fill the gap (***). Firms noted the lead time and capacity concerns, price uncertainty, and reduced availability as general effects on the TCCSS market in the United States. Several firms anticipate the need to rely on imports with domestic supply declining and increased costs. Among the 15 responding purchasers that purchased TCCSS from East Chicago and Gary Works, 9 purchasers reported that U.S. Steel did not offer TCCSS from alternative sources to meet contractual commitments or secure incremental volumes and 6 reported that U.S. Steel did. All six purchasers noted that U.S. Steel filled orders from its Midwest plant. *** elaborated that before and after the COVID-19 pandemic, U.S. Steel did work to supply material from alternative TCCSS plants but that during the pandemic, TFS production was "sold out" and no TFS availability was offered from its Midwest plant.

On-time, in-full delivery rates

Fourteen of the 22 purchasers provided on-time in-full delivery rates by source in 2023. They generally reported a lower rate for domestic sources than import sources. ***. The average rate reported for domestic sources overall was 64.4 percent (based on responses of nine purchasers).[17] The average rate reported for nonsubject sources overall was 73.9 percent (based on the responses of 11 purchasers). Seven purchasers reported on-time in-full delivery rates from U.S. Steel; rates ranged from 30 to 68 percent, with six purchasers reporting rates of 50 percent or below. Four purchasers reported rates for Cleveland-Cliffs, ranging from 12 to 84 percent. Two purchasers reported rates for Ohio Coatings, ranging from 76 to 84 percent.

U.S. demand

Based on available information, the overall demand for TCCSS 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 TCCSS 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.

[17] Purchasers' responses for domestic suppliers included the three U.S. producers as well as other domestic suppliers.

End uses and cost share

U.S. demand for TCCSS largely depends on the demand for U.S.-produced downstream products. Reported end uses include aerosol cans, automotive products, can bodies and bottoms, food cans, filter components, general line cans, kitchen goods, metal packaging, mounting cups, and paint cans and trays. No responding U.S. producer, importer, or purchaser reported changes in end uses.

Most reported cost shares for cans and other downstream products were 40 to 80 percent, with reported shares ranging from 41 percent (popcorn tins) to 100 percent (bakeware and mounting cups). With respect to food cans, firms noted that TCCSS comprises 50 to 85 percent of the cost of manufacturing the can.

Business cycles

Most firms (all 3 U.S. producers, 13 of 22 importers, and 16 of 21 purchasers) indicated that the TCCSS market was subject to business cycles. Many firms reported seasonality in demand, with higher demand in the summer when food and produce are 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 TCCSS specifications are seasonal while others have more consistent use throughout the year and that weather and other conditions affecting harvests can affect demand. Firms also noted seasonal demand for items like bakeware or other holiday products. Other downstream uses of a cyclical nature reported by purchasers may also affect demand for TCCSS, such as automotive production, home canning, or manufacturing building products.

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 disinfectant sprays. Purchaser *** noted that food container demand, which can drive demand for TCCSS, can be counter-cyclical to observed trends in GDP.

Demand trends

Most U.S. producers and purchasers reported that U.S. demand for TCCSS fluctuated upward or steadily increased between January 1, 2017, and December 31, 2020, while importers responses were mixed but generally indicate that demand fluctuated (table II-5). Most firms indicated that increases in demand were due to the COVID-19 pandemic while decreases in demand were due to demand for alternate or substitute packaging.

Most firms reported that U.S. demand fluctuated downward or steadily decreased for TCCSS between January 1, 2021, and December 31, 2023 (table II-6). Firms reported that U.S.

demand remained high in 2021 due the COVID-19 pandemic, but demand has decreased since 2021 due to abatement of COVID-19 related demand, inflation, reduced can shipments, inventory overhang/backlogs, and increased use of substitutes. Some firms noted that the market returned to pre-pandemic levels.

Table II-5
TCCSS: Count of firms' responses overall domestic and foreign demand in 2017-20, by firm type

Market	Firm type	Steadily increased	Fluctuated up	No change	Fluctuated down	Steadily decreased
U.S. demand	U.S. producers	0	2	0	1	0
U.S. demand	Importers	2	7	3	7	1
U.S. demand	Purchasers	2	12	2	3	0
U.S. demand	Foreign producers	0	1	1	0	0
Foreign demand	U.S. producers	0	1	0	0	0
Foreign demand	Importers	2	3	1	3	2
Foreign demand	Purchasers	1	7	2	1	1
Demand in Japan	Foreign producers	0	0	0	2	1
Demand in other export markets	Foreign producers	0	3	0	0	0
Demand for end use products	Purchasers	1	1	1	10	2

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

Table II-6
TCCSS: Count of firms' responses overall domestic and foreign demand in 2021-23, by firm type

Market	Firm type	Steadily increased	Fluctuated up	No change	Fluctuated down	Steadily decreased
U.S. demand	U.S. producers	0	0	0	3	0
U.S. demand	Importers	3	3	3	9	3
U.S. demand	Purchasers	0	3	2	12	2
U.S. demand	Foreign producers	0	0	1	1	0
Foreign demand	U.S. producers	0	0	1	0	0
Foreign demand	Importers	3	3	1	3	3
Foreign demand	Purchasers	0	2	3	4	2
Demand in Japan	Foreign producers	0	0	0	3	0
Demand in other export markets	Foreign producers	0	0	1	2	0

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

A majority of purchasers reported that demand for their final products incorporating TCCSS fluctuated downward (10 of 15 firms) or steadily decreased (2) since January 1, 2017. Fourteen of these firms reported that the change in demand for their final products effected their demand for TCCSS. Several firms reported a direct effect of changing demand from their customers on their demand for TCCSS. Others noted that demand for food cans and aerosol products substantially increased during the COVID-19 pandemic and subsequent decline in demand post-COVID.

Firms expect demand to remain stable or decline over the next two years (table II-7).

Table II-7
TCCSS: Count of firms' responses regarding anticipated overall domestic and foreign demand, by firm type

Market	Firm type	Steadily increase	Fluctuate up	No change	Fluctuate down	Steadily decrease
U.S. demand	U.S. producers	0	1	1	1	1
U.S. demand	Importers	0	1	8	8	8
U.S. demand	Purchasers	0	1	8	7	7
U.S. demand	Foreign producers	0	0	2	0	0
Foreign demand	U.S. producers	0	0	1	0	0
Foreign demand	Importers	0	2	5	3	3
Foreign demand	Purchasers	1	3	4	1	1
Demand in Japan	Foreign producers	0	0	0	3	3
Demand in other export markets	Foreign producers	0	2	1	0	0

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

Substitute products

Substitutes for TCCSS include aluminum, plastic, glass, foil pouches, flexible packaging, and PET, for food packaging or aerosol cans.[18] Most firms report no change in the types of substitutes since January 1, 2017, however seven importers and seven purchasers reported changes. These firms cited increased demand for BPA-free coatings and coating products, such as TFS laminate products; pouches, cardboard, and plastic use increased due to the cost of steel; and cold roll (light gauge) for painted end uses like oil filters.

[18] *Tin- and Chromium-Coated Steel Sheet from Japan, Inv. No. 731-TA-860 (Third Review),* USITC Publication 4795, June 2018, p. II-8.

Substitutability issues

This section assesses the degree to which U.S.-produced TCCSS and imports of TCCSS from subject countries can be substituted for one another by examining the importance of certain purchasing factors and the comparability of TCCSS from domestic and imported sources based on those factors. Based on available data, staff believes that there is at least a moderate degree of substitutability between domestically produced TCCSS and TCCSS imported from Japan.[19] The main factors limiting substitutability were availability/available capacity to produce domestic tin mill products, 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[20]

Purchaser decisions based on source

As shown in table II-8, most purchasers reported that they at least sometimes make purchasing decisions based on the producer and the country of origin. Of the 8 purchasers that reported that they always make decisions based on the manufacturer, 4 firms cited qualification status; other reasons cited include quality, availability, and avoiding potential trade issues. ***.

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

[20] Eighteen purchasers indicated they had marketing/pricing knowledge of domestic TCCSS, 5 of Japanese TCCSS, and 19 of TCCSS from nonsubject countries.

Table II-8
TCCSS: Count of purchasers' responses regarding frequency of purchasing decisions based on producer and country of origin

Firm making decision	Decision based on	Always	Usually	Sometimes	Never
Purchaser	Producer	8	0	8	7
Customer	Producer	2	3	6	9
Purchaser	Country	6	2	6	8
Customer	Country	1	3	8	8

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

Importance of purchasing domestic product

Responding purchasers reported that domestic product was not required for nearly all their total purchases (approximately 96 percent in 2023). Twenty of 22 purchasers reported that most or all of their purchases did not require purchasing U.S.-produced product. Two purchasers reported that domestic product was required by law (for 2 to 3 percent of their purchases), 8 reported it was required by their customers (for 2 to 100 percent of their purchases), and 2 reported other preferences for domestic product. Reasons cited for preferring domestic product included promoting goods "Made in USA," contingency of supply, and lead times.

Most important purchase factors

The most often cited top three factors firms consider in their purchasing decisions for TCCSS were quality (20 firms), price or cost (14 firms), and availability or supply (13 firms) as shown in table II-9. Quality was the most frequently cited first-most important factor (cited by 9 firms), followed by availability or supply (5 firms); quality was the most frequently reported second-most important factor (6 firms); and price or cost was the most frequently reported third-most important factor (7 firms).

Table II-9
TCCSS: Count of ranking of factors used in purchasing decisions as reported by purchasers, by factor

Factor	First	Second	Third	Total
Quality	9	6	5	20
Price or cost	3	4	7	14
Availability or supply	5	4	4	13
Delivery	0	3	2	5
Ability to produce desired specifications	2	1	0	3
All other factors	3	3	3	NA

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

Note: Other factors include traditional supplier of other products, credit, service, and trust.

The majority of purchasers (12 of 22) reported that they sometimes purchase the lowest-priced product. Six reported usually, two reported always, and three reported never purchasing the lowest-priced product.

Importance of specified purchase factors

Purchasers were asked to rate the importance of 18 factors in their purchasing decisions (table II-10). The factors rated as very important by more than half of responding purchasers were reliability of supply (22 firms), availability and quality meets industry standards (21 firms each), product consistency (20), delivery time (19), availability of TCCSS less than or equal to 41 inches wide (15), delivery terms and price (14 each), payment terms and technical support/service (13 each), and quality exceeding industry standards (11). A majority of responding purchasers identified availability of TCCSS greater than 41 inches in width (11) and availability of drawn and ironed TCCSS (12) as "not important."

Table II-10
TCCSS: Count of purchasers' responses regarding importance of purchase factors, by factor

Factor	Very important	Somewhat important	Not important
Availability	21	1	0
Availability – product ≥41 inches	7	3	11
Availability – product <41 inches	15	5	2
Availability – drawn & ironed product	6	3	12
Delivery terms	14	7	1
Delivery time	19	3	0
Discounts offered	8	11	3
Minimum quantity requirements	2	15	4
Packaging	9	11	2
Payment terms	13	7	1
Price	14	8	0
Product consistency	20	2	0
Product range	9	11	2
Quality meets industry standards	21	1	0
Quality exceeds industry standards	11	9	1
Reliability of supply	22	0	0
Technical support/service	13	9	0
U.S. transportation costs	10	10	2

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

Lead times

TCCSS is primarily produced-to-order. U.S. producers reported that *** percent of their U.S. shipments were produced-to-order in 2023, with lead times averaging *** days for deferred shipment and *** days for shipment upon completion.[21] The sole importer of Japanese TCCSS reported that *** percent of its U.S. shipments were produced-to-order, with lead times averaging *** days.

Supplier certification

Eighteen of 22 responding purchasers require their suppliers to become certified or qualified to sell TCCSS to their firm. Sixteen purchasers reported the time to qualify a new supplier; responses ranged from 30 to 540 days.[22] There are currently no qualified suppliers in Japan for any specification of TCCSS for U.S. purchasers.[23]

Purchasers were requested to report the share of their total purchases in 2023 that involved TCCSS specifications for which at least one supplier from each source (United States, Japan, and nonsubject countries) was qualified. Fourteen purchasers reported that at least one U.S. producer was qualified to produce a portion of the TCCSS they purchased in 2023, with shares reported ranging from 4 to 100 percent.[24] Fifteen purchasers reported that nonsubject sources were qualified, with shares reported ranging from 12 to 100 percent. ***.

[21] Firms were asked to report separately for shipments that were produced-to-order with deferred shipment (including sales the firm produced for a specific customer that were held in their inventories for delivery at a later date) and those that were produced-to-order for shipment upon completion. ***.

[22] Five of the 16 firms reported 90 days or fewer and the remaining 11 firms reported 180 days or longer.

[23] Hearing transcript, p. 171 (Stringer).

[24] ***.

Twelve purchasers reported that a domestic or foreign supplier had failed in its attempt to qualify TCCSS or had lost its approved status since January 1, 2017. Seven of these purchasers reported that a U.S. producer, specifically Cleveland-Cliffs or U.S. Steel, failed to qualify on certain specifications or at certain times. Eight purchasers reported that one or more foreign mills in nonsubject countries failed qualification. There were no reports of mills in Japan failing qualification.

Minimum quality specifications

As shown in table II-11, most responding purchasers reported that domestically produced TCCSS always (5 firms) or usually (8 firms) met minimum quality specifications, although 5 firms responded that domestic product sometimes met minimum quality specifications. Most purchasers did not know whether Japanese TCCSS product met minimum quality specifications; among those with knowledge, three responded that it usually did, and one responded that it always did. Purchasers reported that TCCSS from nonsubject sources always (11 firms) or usually (7 firms) met minimum quality specifications. All 22 responding purchasers reported factors that determined the quality of TCCSS. Generally, purchasers will order a trial or small batch of product from suppliers and test for performance in purchasers' manufacturing process, adherence to requested specifications, while also reviewing suppliers' delivery performance and technical support.

Table II-11
TCCSS: Count of purchasers' responses regarding suppliers' ability to meet minimum quality specifications, by source

Source of purchases	Always	Usually	Sometimes	Rarely or never	Don't Know
United States	5	8	5	0	4
Japan	1	3	0	0	18
Nonsubject sources	11	7	0	0	3

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

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

Rejection rates

Purchasers were asked to provide the proportion of the TCCSS products that were delivered to them by their top five suppliers of TCCSS in 2023 that ended up being rejected (e.g., returned or scrapped). Fourteen purchasers provided information on rejections for deliveries received in 2023 (see appendix F). For deliveries from domestic suppliers, rejection rates varied from 0.1 percent to 50 percent and averaged 7.3 percent. Corresponding rejection

quantities ranged from 1 short ton to 853 short tons, totaling 5,677 short tons of rejected TCCSS. Twelve purchasers provided information on rejections for deliveries received in 2023 from non-U.S. sources.[25] Rejection rates for these deliveries varied from 0.04 percent to 9 percent and averaged 1.5 percent. Corresponding rejection quantities ranged from 2 short tons to 1,116 short tons, totaling 4,672 short tons. Reasons for rejecting deliveries were similar across sources and included rust, visual defects, shape defects, and damage.

Changes in purchasing patterns

Eight purchasers reported that they had changed suppliers since January 1, 2017, while 14 reported that they had not. Specifically, firms dropped or reduced purchases from China because of antidumping cases, ***. Firms added purchases from ***.

Purchasers were also asked about changes in their purchasing patterns from different countries since January 1, 2017 (table II-12). Purchasers reported decreased purchases of U.S.-produced product because of lack of domestic availability and product, inability to validate domestic sources, and reduced customer demand. Purchasers reported they did not purchase product from Japan. Purchasers reported fluctuating purchases of product from nonsubject countries because of reduced domestic availability and changing demand trends.

Table II-12
TCCSS: Count of purchasers' responses regarding changes in purchase patterns from U.S., subject, and nonsubject countries

Source of purchases	Decreased	Increased	Constant	Fluctuated	Did not purchase
United States	7	0	0	14	3
Japan	0	0	0	0	18
Nonsubject sources	2	2	1	14	1
Sources unknown	0	0	1	1	11

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

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

Purchasers were asked a number of questions comparing TCCSS produced in the United States, Japan, and nonsubject countries. First, purchasers were asked for a country-by-country

[25] No information on rejections of deliveries from Japan was received.

comparison on the same 18 factors (table II-13) for which they were asked to rate the importance.

Purchaser responses comparing domestically produced TCCSS and TCCSS imported from Japan were few and mixed across most factors. Most purchasers reported that U.S. and nonsubject TCCSS were comparable on availability of TCCSS less than 41 inches wide, delivery terms, discounts, minimum quantity requirements, packaging, payment terms, price, and quality meeting industry standards. All responding purchasers noted that domestic availability of product greater than or equal to 41 inches were inferior to the TCCSS from Japan. A majority of purchasers also noted that U.S. product range and availability (in general) are inferior to that for TCCSS from Japan. A majority of respondents reported that delivery time was superior for TCCSS produced in the United States. Factors that the majority of respondents indicated were very important in their purchasing decisions (table II-10) and described as comparable when comparing the domestic and nonsubject country supply were: availability of TCCSS under 41 inches wide, delivery terms, payment terms, price, and quality meeting industry standards.

Table II-13
TCCSS: Count of purchasers' responses comparing U.S.-produced and imported product, by factor and country pair

Factor	Country pair	Superior	Comparable	Inferior
Availability	U.S. v. Japan	2	0	3
Availability – product ≥41 inches	U.S. v. Japan	0	0	3
Availability – product <41 inches	U.S. v. Japan	1	2	1
Availability – drawn & ironed product	U.S. v. Japan	0	2	2
Delivery terms	U.S. v. Japan	2	2	0
Delivery time	U.S. v. Japan	3	1	0
Discounts offered	U.S. v. Japan	1	3	0
Minimum quantity requirements	U.S. v. Japan	2	1	1
Packaging	U.S. v. Japan	1	3	0
Payment terms	U.S. v. Japan	1	3	0
Price	U.S. v. Japan	2	2	0
Product consistency	U.S. v. Japan	1	1	2
Product range	U.S. v. Japan	1	1	3
Quality meets industry standards	U.S. v. Japan	1	2	1
Quality exceeds industry standards	U.S. v. Japan	1	2	1
Reliability of supply	U.S. v. Japan	2	0	2
Technical support/service	U.S. v. Japan	2	0	2
U.S. transportation costs	U.S. v. Japan	2	2	0

Table continued.

Table II-13 Continued
TCCSS: Count of purchasers' responses comparing U.S.-produced and imported product, by factor and country pair

Factor	Country pair	Superior	Comparable	Inferior
Availability	U.S. v. Nonsubject	2	6	10
Availability – product >=41 inches	U.S. v. Nonsubject	0	0	11
Availability – product <41 inches	U.S. v. Nonsubject	0	10	6
Availability – drawn & ironed product	U.S. v. Nonsubject	0	4	5
Delivery terms	U.S. v. Nonsubject	2	11	3
Delivery time	U.S. v. Nonsubject	7	6	3
Discounts offered	U.S. v. Nonsubject	0	14	1
Minimum quantity requirements	U.S. v. Nonsubject	3	9	4
Packaging	U.S. v. Nonsubject	0	12	4
Payment terms	U.S. v. Nonsubject	1	11	4
Price	U.S. v. Nonsubject	0	11	5
Product consistency	U.S. v. Nonsubject	0	6	10
Product range	U.S. v. Nonsubject	0	7	10
Quality meets industry standards	U.S. v. Nonsubject	0	10	6
Quality exceeds industry standards	U.S. v. Nonsubject	0	6	10
Reliability of supply	U.S. v. Nonsubject	2	3	11
Technical support/service	U.S. v. Nonsubject	3	7	6
U.S. transportation costs	U.S. v. Nonsubject	7	7	2

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

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

Comparison of U.S.-produced and imported TCCSS

In order to determine whether U.S.-produced TCCSS can generally be used in the same applications as imports from Japan, U.S. producers, importers, and purchasers were asked whether the products can always, frequently, sometimes, or never be used interchangeably. As shown in table II-14, *** U.S. producers reported that TCCSS produced in the United States, Japan, and nonsubject countries was always interchangeable. In contrast, the majority of responding importers and purchasers reported that domestically produced TCCSS and TCCSS imported from Japan and nonsubject countries were frequently or sometimes interchangeable. One purchaser, two purchaser/importers, and two importers reported limited to no availability of U.S. production capacity for specifications they required as the reason for limited interchangeability between U.S.- and foreign-produced TCCSS.

Table II-14
TCCSS: Count of firms reporting the interchangeability between product produced in the United States and in other countries, by country pair and firm type

Country pair	Firm type	Always	Frequently	Sometimes	Never
United States vs. Japan	U.S. producers	3	0	0	0
United States vs. Other	U.S. producers	3	0	0	0
Japan vs. Other	U.S. producers	2	0	0	0
United States vs. Japan	Importers	0	4	2	1
United States vs. Other	Importers	0	7	10	0
Japan vs. Other	Importers	0	5	4	0
United States vs. Japan	Purchasers	0	3	1	1
United States vs. Other	Purchasers	3	6	8	1
Japan vs. Other	Purchasers	0	3	2	0

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

Note: ***.

In addition, U.S. producers, importers, and purchasers were asked to assess how often differences other than price were significant in sales of TCCSS from the United States, Japan, or nonsubject countries. As seen in table II-15, U.S. producers reported that factors other than price are sometimes or never significant regarding the sales of their TCCSS, regardless of country-pair. Importers generally reported non-price factors as frequently or sometimes significant across all country-pairs, whereas a majority of purchasers reported them to be always or frequently significant for all country-pairs. Importers reported supply constraints in U.S. production, quality differences, and product range differences as significant factors other than price which affect their sales. Purchasers also included the same or similar explanations in their responses, namely rejection rates and the availability of product widths.

Table II-15
TCCSS: 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	Firm type	Always	Frequently	Sometimes	Never
United States vs. Japan	U.S. producers	0	0	2	1
United States vs. Other	U.S. producers	0	0	2	1
Japan vs. Other	U.S. producers	0	0	0	1
United States vs. Japan	Importers	1	4	1	1
United States vs. Other	Importers	4	8	7	0
Japan vs. Other	Importers	1	2	4	0
United States vs. Japan	Purchasers	2	2	1	0
United States vs. Other	Purchasers	10	4	3	1
Japan vs. Other	Purchasers	2	2	1	0

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

Elasticity estimates

This section discusses elasticity estimates; parties did not provide alternative elasticity estimates in their prehearing or posthearing briefs.

U.S. supply elasticity

The domestic supply elasticity for TCCSS measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price of TCCSS. The elasticity of domestic supply depends on several factors including the level of excess capacity, the ease with which producers can alter capacity, producers' ability to shift to production of other products, the existence of inventories, and the availability of alternate markets for U.S.-produced TCCSS. Analysis of these factors above indicates that the U.S. industry has the ability to somewhat increase or decrease shipments to the U.S. market; an estimate in the range of 4 to 6 is suggested. U.S. producer Cleveland-Cliffs indefinitely idled its facility in Weirton, West Virginia as of April 20, 2024.[26] This production location was responsible for *** percent of domestic production in 2023 (table I-8). Without a corresponding increase in capacity from other domestic producers to offset lost capacity from this event, there will likely be a decrease in the level of excess capacity and the ease with which producers can alter capacity, decreasing domestic producers' ability to respond to changes in the U.S. market price of TCCSS.

U.S. demand elasticity

The U.S. demand elasticity for TCCSS measures the sensitivity of the overall quantity demanded to a change in the U.S. market price of TCCSS. This estimate depends on factors discussed above such as the existence, availability, and commercial viability of substitute products, as well as the component share of the TCCSS in the production of any downstream products. Based on the available information, the aggregate demand for TCCSS is likely to be slightly inelastic; a range of -0.75 to -1.0 is suggested.

[26] *Cleveland Cliffs in Weirton Idled*, https://www.mariettatimes.com/news/local-news/2024/04/cleveland-cliffs-in-weirton-idled/, retrieved April 22, 2024.

Substitution elasticity

The elasticity of substitution depends upon the extent of product differentiation between the domestic and imported products.[27] Product differentiation, in turn, depends upon such factors as quality (e.g., chemistry, appearance, etc.) and conditions of sale (e.g., availability, sales terms/discounts/promotions, etc.). Based on available information, the elasticity of substitution between U.S.-produced and imported TCCSS is likely to be in the range of 2 to 4. The main factors limiting substitutability are available domestic capacity, and certain types of TCCSS only being available only from certain sources. For TCCSS products of the same type, substitutability is higher, as there is reportedly general interchangeability among TCCSS of similar quality and usage.

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

Part III: Condition of the U.S. industry

Overview

The information in this section of the report was compiled from responses to the Commission's questionnaires. The Commission received a questionnaire response from three firms, Cleveland-Cliffs, Ohio Coatings, and U.S. Steel, which accounted for all known U.S. production of TCCSS in 2023. Of these three producers, Cleveland-Cliffs and U.S. Steel accounted for approximately *** percent of U.S. production in 2023.

Industry events since the last five-year review

Table III-1 presents events in the U.S. industry since the last five-year review. As of April 20, 2024, there are only two operating TCCSS production facilities in the United States: Ohio Coatings' plant in Yorkville, Ohio[1] and U.S. Steels' Midwest plant in Portage, Indiana. Previously, U.S. Steel produced TCCSS at four different facilities: East Chicago Tin (East Chicago, Indiana), Gary Works (Gary, Indiana), Midwest (Portage, Indiana), and USS-UPI (Pittsburg, California). U.S. Steel's East Chicago plant was idled in 2019 and permanently closed in 2022. U.S. Steel's Gary Works and USS-UPI plants were indefinitely idled in late-2022 and late-2023, respectively. At present, U.S. Steel operates only two TCCSS production lines at its Midwest facility.[2] [3] On April 20, 2024, Cleveland-Cliffs indefinitely idled its TCCSS plant in Weirton, West Virginia.[4]

[1] Ohio Coatings is not a producer of tin mill black plate ("TMBP"), the steel substrate used in the manufacturing of TCCSS; rather the firm purchases the input from various sources to produce TCCSS at its Yorkville plant. Ohio Coatings reported that during the review period ***. Ohio Coatings' producer questionnaire at II-2c. U.S. Steel reported that ***. U.S. Steel's posthearing brief, exh. 1, pp 7–8, and exh. 11-A. Cleveland-Cliffs reported that ***. Cleveland-Cliffs' posthearing brief, exh. 1.

[2] Hearing transcript, p. 18 (Kopf); U.S. Steel's prehearing brief, pp. 11-12; U.S. Steel's posthearing brief, April 16, 2024, pp. 5 and 14, and exh.1, pp. 1-2.

[3] U.S. Steel noted that its Gary Works plant could be restarted quickly if market conditions and demand for U.S.-made TCCSS improves and reaches a 'critical mass'. Hearing transcript, pp. 19 and 42 (Kopf); U.S. Steel's posthearing brief, April 16, 2024, p. 6; exh. 1, pp. 1-2; and exh. 2 p. 1.

[4] Cleveland-Cliffs noted that it will preserve the assets of its Weirton facility in the hopes of an eventual restart. Hearing transcript, pp. 23-27 (Smith) and 44-45 (Smith); Cleveland-Cliffs' posthearing brief, April 16, 2024, p. 2 and exh. 1.

Table III-1
TCCSS: Developments in the U.S. industry since January 1, 2017

Item	Firm	Event
Resumed operations	U.S. Steel	April 2017— Completion of re-start at the Midwest facility in Portage, Indiana, after concluding repairs and extensive air and water testing in response to a process release of hexavalent chromium three days prior.
Expansion	U.S. Steel	August 2018— Announcement of $750 million in capital upgrades over five years to revitalize the Gary Works facility through installation of new, state-of-the-art production equipment and modernizing technology to boost the facility's corporate competitiveness, environmental compliance, and service to industrial customers (including container manufacturing industries).
Plant idling	U.S. Steel	June 2019— Announcement of the temporarily idling of one of four blast furnaces at the Gary Works facility to better align production to corporate order books, with current-quarter earnings forecasted below Wall Street estimates due to lower steel prices and softening market demand.
Layoffs	ArcelorMittal	August 2019— Announcement of layoffs of 100 employees at the ArcelorMittal Weirton tin mill facility in Weirton, West Virginia ("Weirton facility"). Demand for tin mill products unexpectedly declined over the prior six weeks, attributed by a local union leader to foreign currency manipulation, some foreign tinplate producers evading the section 232 steel tariffs, and lower demand by food canners due to poorer seasonal vegetable harvests afflicted by either flooding or droughts.
Plant idling and layoffs	U.S. Steel	August 2019— Announcement of an "indefinite" idling of the East Chicago, Indiana, tin mill operations by mid-November 2019, days after major food processor and distributor Del Monte Foods Inc. ("Del Monte") announced the closure of two tin canning facilities with layoffs of more than 800 workers. About one-half of the 297 employees will be offered positions at the other two U.S. Steel facilities, while the others will be laid off. U.S. Steel cited low tin mill capacity utilization due to continued high levels of low-priced imports which have captured about one-half of the domestic tin mill products market for its decision to consolidate tin mill production down from three to two facilities. Del Monte cited both the higher priced tin mill products attributable to the section 232 steel tariffs and the ongoing decline of canned food sales as younger consumers shift more toward fresh foods.
Acquisition	U.S. Steel	February 2020— U.S. Steel acquires sole ownership of the USS-POSCO Industries ("UPI") joint-venture rolling facility, located in Pittsburg, California, upon completing the buy-out of POSCO California Corp's. 50-percent ownership share.
Acquisition	Cleveland-Cliffs	December 2020— Completion of a $1.4 billion acquisition of the steelmaking and finishing facilities of ArcelorMittal, including the Weirton facility.

Table continued.

Table III-1 Continued
TCCSS: Developments in the U.S. industry since January 1, 2017

Item	Firm	Event
Environmental protection violations	UPI	August 2021— Four-million dollars civil settlement with the Contra Costa County District Attorney's Office to resolve allegations that UPI firm violated state and environmental regulations by improperly storing and illegally disposing of hazardous materials and wastes, dating back to 2017.
Closure	UPI	January 2022— Reported plans to close UPI by December 2023, with the shuttered facility to be sold in 2023 or 2024.
Plant closing	U.S. Steel	March 2022— U.S. Steel permanently closed its East Chicago Tin facility. The mill had been idled on an indefinite basis since fourth-quarter 2019. Tin mill operations shifted to the Midwest and Gary Works facilities.
Plant idling	U.S. Steel	August 2022— U.S. Steel idles Tin Line No. 5 at its Gary Works facility in response to current market conditions.
Plant closing	UPI	August 2022— Reported announcement that UPI will cease production in 2023 and sale of the property for warehouse space to Amazon.com Inc.
Plant idling	U.S. Steel	October 2022— Announcement of the idling of all tin mill products operations at the Gary Works facility, with former tin-mill workers shifted to other positions within the Gary Works facility.
New labor agreement	Cleveland-Cliffs	October 2022— USW membership overwhelmingly approves a new four-year labor contract (through September 2026) covering 12,000 members at 13 Cleveland-Cliffs facilities, including the Weirton facility. The new contract raises base wages by 20 percent, improves insurance benefits for both active and retired employees, raises pensions, improves vacation provisions, includes an additional holiday, and includes new provisions for parental paid leave and for employees who are victims of domestic violence.
New labor agreement	U.S. Steel	December 2022— Announcement of the ratification of a new successor four-year collective bargaining agreement by the approximately 11,000 USW-represented employees at the firm's domestic flat-rolled steel facilities, iron ore mining facilities, and tubular steel operations. The new contract provides a lump sum bonus, raises wages by more than 20 percent over its term, raises pensions, includes an additional holiday, improves healthcare benefits for both active and retired employees. This agreement is effective retroactively to September 1, 2022, through September 1, 2026.

Table continued.

Table III-1 Continued
TCCSS: Developments in the U.S. industry since January 1, 2017

Item	Firm	Event
Layoffs	U.S. Steel	December 2022— Indefinite idling of most tin mill operations at its Gary Works facility. The idling included tin line No. 5, which was previously temporarily idled in third-quarter 2022, and tin line No. 6. U.S. Steel also provided advanced notice of plans to lay off 244 tin-mill workers at its Gary Works facility by February 2023. In its Worker Adjustment and Retraining Notification ("WARN") to the Indiana Department of Workforce Development, U.S. Steel stated that the Tin Mill Division will be shut down 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." Although U.S. Steel is coordinating with the United Steelworkers ("USW") local union to identify available placement opportunities for impacted employees in open jobs across the firm, additional layoffs could be forthcoming if these market conditions continue.
Layoffs	Cleveland-Cliffs	May 2023— Announcement of layoffs of approximately 300 employees that manufacture tinplate for packaging products at the Weirton facility, citing unfair import competition. According to Lourenco Goncalves, Chairman, President, and Chief Executive Officer, "{O}nce again, unfair trade practices are harming good paying, union jobs."
Acquisition offers	U.S. Steel, Cleveland-Cliffs, Esmark	August 2023— U.S. Steel receives two unsolicited purchase offers from Cleveland-Cliffs for $7.3 billion and from Esmark Steel Group ("Esmark") for $7.8 billion.
Acquisition offer rejected	U.S. Steel, Cleveland-Cliffs	August 2023— U.S. Steel turns down Cleveland-Cliffs' $7.3 billion offer after the latter "…refused to engage in the necessary and customary process to assess valuation and certainty unless U.S. Steel agreed to the economic terms of the proposal in advance." The former will also conduct a strategic corporate planning review of the "multiple unsolicited proposals" received.
Acquisition offer withdrawn	Esmark	August 2023— Esmark withdraws its $7.8 billion offer to purchase U.S. Steel, citing its partnership with the USW in acquiring Wheeling Pittsburgh Steel (in November 2007) and acknowledging the USW's support for Cleveland-Cliffs' purchase offer.
Acquisition offer evaluation	U.S. Steel	August 2023— Announcement to shareholders that the firm is signing non-disclosure agreements with potential buyers ahead of sharing due diligence information with them, while it reviews its options for evaluating the multiple unsolicited offers for either selected or all of U.S. Steel's facilities and other assets.
Acquisition offer reported	ArcelorMittal, U.S. Steel	August 2023— ArcelorMittal SA (Luxembourg) reportedly confers with its investment bankers to finance a potential purchase offer for U.S. Steel. However, the USW reportedly will not endorse any buyers other than Cleveland-Cliffs.
Acquisition process disagreement	Cleveland-Cliffs, U.S. Steel	September 2023— Cleveland-Cliffs locked out from the ongoing due diligence and acquisition process after declining to sign U.S. Steel's non-disclosure agreement. The former also refused to sign a six-month standstill agreement that would prevent it from challenging the latter's board of directors, reportedly to keep its options open.

Table continued.

Table III-1 Continued
TCCSS: Developments in the U.S. industry since January 1, 2017

Item	Firm	Event
Acquisition offer	Stelco	September 2023— Canadian steelmaker Stelco Holdings Co. (“Stelco”) reportedly considered, with the backing of unnamed partners, a purchase offer for selected iron ore mine and steel facilities of U.S. Steel (not confirmed officially by either Stelco or any of its potential partners).
Acquisition offer	Nippon Steel	September 2023— Nippon Steel reportedly expressed willingness to offer $9.5 billion for U.S. Steel, including its integrated steelmaking facilities. (According to regulatory filings, Nippon Steel valued U.S. Steel’s modern electric-arc furnace steelmaking facilities in Arkansas and its iron ore mines in Minnesota at a combined $9.2 billion).
Acquisition offer	U.S. Steel, Nippon Steel	December 2023— U.S. Steel announces its agreement to be acquired by Japan’s largest steelmaker, Nippon Steel, in an all-cash transaction valued at $14.1 billion, plus assumption of U.S. Steel’s ($800 million) debt for a total equivalent buyout offer of $14.9 billion. Under this acquisition agreement, Nippon Steel will honor current U.S. Steel labor agreements and U.S. Steel will retain its current corporate name for its operations going forward. The acquisition offer was approved by the Boards of Directors of both firms but still needs U.S. Steel shareholder and official regulatory approvals. Both firms anticipate completing this transaction by second- or third-quarter 2024. None of Nippon Steel’s U.S. steel facilities currently produce tin mill products.
Acquisition offer	USW	December 2023— In opposition to Nippon Steel’s acquisition offer for U.S. Steel, USW International President David McCall states that: “{N}either U.S. Steel nor Nippon reached out to our union regarding the deal, which is in itself a violation of our partnership agreement that requires U.S. Steel to notify us of a change in control or business conditions. Based on this alone, the USW does not believe that Nippon understands the full breadth of the obligations of all our agreements, and we do not know whether it has the capacity to live up to our existing contract. This includes not just the day-to-day commitments of our labor agreement, but also significant obligations to fund pension and retiree insurance benefits that are the most extensive in the domestic steel industry.”
Plant idling	UPI	November 2023— Reported official idling announcement for UPI. Production operations conclude in December 2023 with remaining shipping operations anticipated to conclude by March 2024.
Labor grievance filing	USW	January 2024— The USW International and five locals representing U.S. Steel employees file grievances against the acquisition. They contend that provisions of the basic labor agreement were violated during the acquisition review process and request dispute resolution. According to the USW, information was not shared about the sale process and the union was neither consulted nor reassured that its collective bargaining agreements will be upheld after completion of the acquisition.
Acquisition financing	Nippon Steel	January 2024— Announcement of securing $16 billion in bridge loans from three major Japanese banks, to finance its acquisition of U.S. Steel, consisting of $6.5 billion from Sumitomo Mitsui Financial Group, $5.5 billion from Mitsubishi UFJ Financial Group, and $4 billion from Mizuho Financial Group.

Table continued.

Table III-1 Continued
TCCSS: Developments in the U.S. industry since January 1, 2017

Item	Firm	Event
Acquisition offer rescinded	Cleveland-Cliffs	February 2024— Announcement that the firm's offer of $54 per share in cash and stock is no longer available as a fallback option for U.S. Steel if Nippon Steel's $55 per share all-cash offer is not concluded.
Acquisition follow-up	Nippon Steel	February 2024— Announcement that Nippon Steel is on schedule to conclude its acquisition of U.S. Steel by September. Corporate representatives met with U.S. Congressional Members in January and plan to reach out to USW representatives.
Plant idling, layoffs	Cleveland-Cliffs	February 2024— Announcement of indefinite idling of the Weirton facility by April 2024 and issuance of a WARN to approximately 900 employees, who will be provided with either relocation opportunities to other Cleveland-Cliffs facilities or severance packages. The announcement cites the Commission's negative determinations on tin mill products originating in Canada, China, Germany, and terminated investigation on subject products originating in South Korea.
Labor contract negotiations	Nippon Steel, USW	February 2024— Nippon Steel and USW sign a nondisclosure agreement ahead of negotiating acceptance of existing labor agreements with U.S. Steel.
Labor contract negotiations	Nippon Steel, USW	March 2024— First negotiating meeting. Although Nippon Steel representatives reportedly reiterated their firm's intentions to abide by the existing collective labor agreements, the USW leaders characterized the meeting as failing to address specific union concerns about corporate financial transparency and agreement enforcement with the Nippon Steel North America subsidiary and the foreign parent firm.
Shareholders acquisition approval	U.S. Steel	April 2024— U.S. Steel's shareholders overwhelmingly voted to approve Nippon Steel's acquisition offer. After this special shareholders' meeting held on April 12, 2024, Takahiro Mori, Vice Chairman pledged his firm's commitments: (1) As a wholly owned subsidiary, U.S. steel will have access to Nippon Steel's products, operational and production technologies, and decarbonization technologies; (2) Retention of the U.S. Steel name and Pittsburgh headquarters, no transfers of jobs or production overseas, and continued existing relationships with suppliers, customers, and communities; (3) Recognition of the USW as the bargaining representative for represented employees, honoring all commitments under the Basic Labor Agreement ("BLA"), and accepting all agreements between U.S. Steel and the USW; and (4) Reiteration of prior commitments to no layoffs or plant closures, job and pension security, and new capital investments totaling at least $1.4 billion during 2024–26 at facilities covered by the BLA.
Plant idling, layoffs	Cleveland-Cliffs	April 2024— The USW will continue its opposition to Nippon Steel's acquisition of U.S. Steel after the shareholders vote, according to District 7 Director, Michael Millsap, and International President, David McCall, as the transaction is still subject to pending antitrust and national security reviews.

Table continued.

Table III-1 Continued
TCCSS: Developments in the U.S. industry since January 1, 2017

Item	Firm	Event
Plant idling, layoffs	Cleveland-Cliffs	April 2024— Cleveland-Cliffs and USW representatives clarified that the Weirton facility is not being shut down, but rather, operations for TCCSS, black plate, and other steel products are being indefinitely idled. The facility is not for sale, many employees chose to remain in the area, and the production equipment is being preserved for any eventual restarting of operations. The scheduled cessation of operations was moved back from April 15 to April 20 to resolve the remaining aspects of the employees' union contracts. All production operations ceased with this facility in an indefinitely idled status as of April 20, 2024.

Source: U.S. Steel, "U.S. Steel Issues Statement On Midwest Plant Restart," News release, April 18, 2017, https://www.ussteel.com/newsroom/-/blogs/u-s-steel-issues-statement-on-midwest-plant-restart;
U.S. Steel, "U.S. Steel Issues New Update On April 11 Midwest Plant Incident," News release, April 14, 2017, https://www.ussteel.com/newsroom/-/blogs/u-s-steel-issues-new-update-on-april-11-midwest-plant-incident;
U.S. Steel, "U.S. Steel Issues Update On April 11 Midwest Plant Incident," News release, April 13, 2017, https://www.ussteel.com/newsroom/-/blogs/u-s-steel-issues-update-on-april-11-midwest-plant-incident;
Ohio Coatings, "ISO 9001:2015 Certification," News, November 21, 2017, https://ohiocoatingscompany.com/news/;
Business Facilities, "U.S. Steel To Invest $750M In Indiana," August 16, 2018, https://businessfacilities.com/u-s-steel-invest-750m-gary-indiana/;
CNBC, "US Steel to Idle Three Blast Furnaces, Hurt by Lower Prices and Soft Demand," June 19, 2019, https://www.cnbc.com/2019/06/19/us-steel-to-idle-three-blast-furnaces-hurt-by-lower-prices-and-soft-demand.html;
Christopher Lawrence, "Poor Crops Result in Layoffs in Weirton," Metro News (Charleston, West Virginia), August 21, 2019, https://wvmetronews.com/2019/08/21/poor-crops-result-in-layoffs-in-weirton/;
Summer Wilkinson, "Weirton Business to Lay Off 100 Employees," WTOV-9, August 20, 2019, https://wtov9.com/news/local/weirton-business-to-lay-off-100-employees;
Justine Coyne, "US Steel to Idle East Chicago Tin Mill in Indiana," S&P Global Commodity Insights, August 23, 2019, https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/metals/082319-us-steel-to-idle-east-chicago-tin-mill-in-indiana;
Joseph S. Pete, "U.S. Steel to Idle East Chicago Tin, Lay Off Around 150 Workers; ArcelorMittal Laying Off Tin Workers in West Virginia," Indiana Economic Digest, August 26, 2019, https://indianaeconomicdigest.net/Content/Most-Recent/Quality-of-Life/Article/U-S-Steel-to-idle-East-Chicago-Tin-lay-off-around-150-workers-ArcelorMittal-laying-off-tin-workers-in-West-Virginia/31/352/97175;
Katherine Cox, "U.S. Steel Closing East Chicago Tin Plant Indefinitely, Up To 300 Workers Impacted," WRTV Indianapolis, September 2019, https://www.wrtv.com/u-s-steel-closing-east-chicago-tin-plant-indefinitely-up-to-300-workers-impacted;
Wesley Mills, "U.S. Steel Updates Layoff Notice to State," Inside Indiana Business, October 30, 2019, https://www.insideindianabusiness.com/articles/us-steel-updates-layoff-notice-to-state;
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;

Table continued.

Table III-1 Continued
TCCSS: Developments in the U.S. industry since January 1, 2017

Source: Globe Newswire, "U.S. Steel Acquires Remaining 50 Percent Ownership Interest in USS-POSCO Industries (UPI) From POSCO-California Corporation," News release, March 1, 2020, https://www.globenewswire.com/en/news-release/2020/03/01/1993067/0/en/U-S-Steel-Acquires-Remaining-50-Percent-Ownership-Interest-in-USS-POSCO-Industries-UPI-From-POSCO-California-Corporation.html;
UPI, "Tinplate" web page,©2023, https://www.ussupi.com/products/tinplate/, retrieved June 21, 2023;
IW Staff, "Cleveland-Cliffs Completes ArcelorMittal USA Purchase," Industry Week, December 10, 2020, https://www.industryweek.com/leadership/growth-strategies/article/21149986/clevelandcliffs-completes-arcelormittal-usa-purchase;
Weirton Daily Times Staff, "Cleveland Cliffs Takes Over ArcelorMittal's United States Assets, Including Weirton Tin Mill," December 10, 2020, https://www.weirtondailytimes.com/news/local-news/2020/12/cleveland-cliffs-takes-over-arcelormittals-united-states-assets-including-weirton-tin-mill/;
Cleveland-Cliffs, "Cleveland-Cliffs Inc. Completes Acquisition of ArcelorMittal USA," News release, December 9, 2020, https://www.clevelandcliffs.com/news/news-releases/detail/8/cleveland-cliffs-inc-completes-acquisition;
BusinessWire, "Cleveland-Cliffs Inc. to Acquire ArcelorMittal USA," September 28, 2020, https://www.businesswire.com/news/home/20200927005083/en/Cleveland-Cliffs-Inc.-to-Acquire-ArcelorMittal-USA;
Richard Hurd, "Pittsburg-based Steel Company Reaches $4 Million Settlement After Violating Environmental Regulations," The East Bay Times (Livermore, California), August 18, 2021, https://www.eastbaytimes.com/2021/08/18/pittsburg-based-steel-company-reaches-4-million-settlement-after-violating-environmental-regulations/;
Abby Verret, "US Steel to Close UPI, Sell Property in 2023," Fastmarkets, January 18, 2022, https://www.fastmarkets.com/insights/us-steel-to-close-upi-sell-property-in-2023#:~:text=US%20Steel%20Corp%20has%20informed,2023%2C%20several%20market%20participants%20said;
U.S. Steel, "About Us, Locations, East Chicago Tin," ©2023, https://www.ussteel.com/about-us/locations#:~:text=East%20Chicago%20Tin, retrieved April 12, 2024;
U.S. Steel, "U.S. Steel 2022 Form 10-K Report," February 3, 2023, pp. 9, 49 (as filed), https://investors.ussteel.com/sec-filings/all-sec-filings?page=10##document-3683-0001163302-23-000016-2;
U.S. Steel, "U.S. Steel's 2019 Form 10-K Report," February 14, 2020, pp. 34, 74 (as filed), https://investors.ussteel.com/sec-filings/all-sec-filings?page=41##document-1638-0001163302-20-000012-2;
Nichole Bastin, "UPI Closure to Have Limited Impact on Steel Prices," Metal Miner, August 22, 2022, https://agmetalminer.com/2022/08/22/upi-closure-to-have-limited-impact-on-steel-prices/;
Wesley Mills, "U.S. Steel Tin Mill Future Remains Uncertain," Inside Indiana Business, October 13, 2022, https://www.insideindianabusiness.com/articles/u-s-steel-tin-mill-future-remains-uncertain;
Cleveland-Cliffs, "Cleveland-Cliffs and the United Steelworkers Reach Tentative Labor Agreement," News release, August 27, 2022, https://www.clevelandcliffs.com/news/news-releases/detail/555/cleveland-cliffs-and-the-united-steelworkers-reach;
Cleveland-Cliffs, "Cleveland-Cliffs Announces Ratification of New Labor Agreement with the USW Covering 12,000 Union Members" News release, October 12, 2022, https://www.clevelandcliffs.com/news/news-releases/detail/559/cleveland-cliffs-announces-ratification-of-new-labor;

Table continued.

Table III-1 Continued
TCCSS: Developments in the U.S. industry since January 1, 2017

Source: Reuters, "Union, Cleveland-Cliffs Ratify New Labor Agreement," October 12, 2022, https://www.reuters.com/world/us/usw-union-cleveland-cliffs-ratify-new-labor-agreement-2022-10-12/;
U.S. Steel, "U. S. Steel Announces Ratification of New Collective Bargaining Agreements by United Steelworkers," News release, December 20, 2022, https://investors.ussteel.com/news-events/news-releases/detail/7/u-s-steel-announces-ratification-of-new-collective;
USW, "Steelworkers Ratify Historic Agreement with Cleveland-Cliffs Steel," News release, October 12, 2022, https://m.usw.org/news/media-center/releases/2022/steelworkers-ratify-historic-agreement-with-cleveland-cliffs-steel;
USW, "Steelworkers Ratify Four-Year Contract with U.S. Steel," News release, December 20, 2022, https://m.usw.org/news/media-center/releases/2022/steelworkers-ratify-four-year-contract-with-u-s-steel;
Joseph S. Pete, "U.S. Steel to Lay Off 244 Workers When It Idles Tin Operations at Gary Works," The Times of Northwest Indiana (Muncie, Indiana), December 29, 2022, https://www.nwitimes.com/news/local/u-s-steel-to-lay-off-244-workers-when-it-idles-tin-operations-at-gary/article_697b1039-c566-5cd4-b2f8-e07800784625.html;
Heather Pfundstein, "U.S. Steel to Lay Off 244 Employees at Gary Works," Northwest Indiana Business Magazine, December 31, 2022, https://nwindianabusiness.com/community/business-news/u-s-steel-to-lay-off-244-employees-at-gary-works/52912/;
Alexander Brown, "U.S. Steel Details Layoffs at Gary Works," Inside Indiana Business, December 29, 2022, https://www.insideindianabusiness.com/articles/u-s-steel-details-layoffs-at-gary-works;
Weirton Daily Times Staff, "Layoffs Coming to Cleveland-Cliffs in Weirton," May 13, 2023, https://www.weirtondailytimes.com/news/local-news/2023/05/layoffs-coming-to-cleveland-cliffs-in-weirton/;
William Steinbacht, "300 Steelworkers in Weirton to be Laid Off in June," WTOV-9, May 9, 2023, https://wtov9.com/news/local/300-steelworkers-in-weirton-to-be-laid-off-in-june-usw-weirton-mark-glyptis;
Edward DiorioSun, "Officials Meet Following Steel Plant Layoff to Alert Those in Need of Possible Benefits," WTOV-9, May 21, 2023, https://wtov9.com/news/local/officials-meet-following-steel-plant-layoff-to-alert-those-in-need-of-possible-benefits;
Association for Iron & Steel Technology ("AIST"), "Multiple Offers on Table: for U.S. Steel," Steel News, August 17, 2023, https://www.aist.org/news/steel-news/2023/august/14-18-august/multiple-offers-on-table-for-u-s-steel;
U.S. Steel, "U.S. Steel Confirms Receipt of Unsolicited Proposals from Cleveland-Cliffs and Multiple Other Parties; Reaffirms Competitive Strategic Review Process to Maximize Stockholder Value," News release, August 13, 2023, https://investors.ussteel.com/news-events/news-releases/detail/641/u-s-steel-confirms-receipt-of-unsolicited-proposals-from;
AIST, "Esmark Ends Effort to Acquire U.S. Steel," Steel News, August 23, 2023, https://www.aist.org/news/steel-news/2023/august/21-25-august/esmark-ends-effort-to-acquire-u-s-steel;
Katie Reagan, "Esmark Inc. Respects History, Working Relationship and Position of USW. Therefore, Will Not Make a Bid for U.S. Steel," BusinessWire, August 23, 2023, https://www.businesswire.com/news/home/20230823390935/en/Esmark-Inc.-Respects-History-Working-Relationship-and-Position-of-USW.-Therefore-Will-Not-Make-a-Bid-for-U.S.-Steel;
David B. Burritt (President), David S. Sutherland (Chairman), "Stockholder Update Letter," U.S. Steel, August 29, 2023, https://d1io3yog0oux5.cloudfront.net/_60f25a8c4f072661bb0ee8d88891f612/ussteel/db/3199/30186/pdf/U.+S.+Steel+-+Stockholder+Update+Letter+8.29.23.pdf;
Gregory Roumeliotis and Emma-Victoria Farr, "ArcelorMittal Weighs Possible Bid for US Steel," Reuters, August 16, 2023, https://www.reuters.com/markets/deals/arcelormittal-weighs-possible-bid-us-steel-sources-2023-08-16/;
Bianca Flowers, "Steel Union Head Calls ArcelorMittal Bid for US Steel 'Foolish,'" Reuters, August 16, 2023, https://www.reuters.com/markets/deals/steel-union-head-calls-arcelormittal-bid-us-steel-foolish-2023-08-16/;

Table continued.

Table III-1 Continued
TCCSS: Developments in the U.S. industry since January 1, 2017

Source: Gregory Roumeliotis, Anirban Sen, David Carnevali, "Cleveland-Cliffs Clashes with U.S. Steel as Sale Process Gets Underway— Sources," Reuters, September 20, 2023, https://finance.yahoo.com/news/cleveland-cliffs-clashes-u-steel-214504560.html?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce_referrer_sig=AQAAAF30GAZbe6-C2vk40ajrjTv9WjJdfeTb886tFZAuTCq-e6G5TIwqw5-TO_Cpf4CYT2xdpTjT2tTbxAA7ZD4pTO5qNArWp7NRSmMbjgzURq0w6uiVbTZgy92qrWN3t0OffZ1tby8wo6cjdA3aBDIHg4xCqrnj5xnKlf7WyojqSKOA;
Andrew Willis, "Stelco Wants All, or Some, of U.S. Steel. But It's Complicated," The Globe and Mail (Toronto, Ontario), September 22, 2023, https://www.theglobeandmail.com/business/article-stelco-wants-all-or-some-of-us-steel-but-its-complicated/;
Evan Robinson-Johnson, "U.S. Steel's Dealmaking Horse Race—and the Surprise Ending," Pittsburgh Post-Gazette, January 27, 2024, https://www.post-gazette.com/business/powersource/2024/01/26/us-steel-nippon-sale-bid/stories/202401250108;
CBS News Bay Area, "East Bay Lawmakers Push to Keep USS-Posco Steel Mill in Pittsburg Open," November 10, 2023, https://www.cbsnews.com/sanfrancisco/news/pittsburg-members-of-congress-push-to-keep-uss-posco-industries-steel-mill-open/;
U.S. Steel, "Nippon Steel Corporation (NSC) to Acquire U.S. Steel, Moving Forward Together as the 'Best Steelmaker with World-Leading Capabilities,'" News release, December 18, 2023, https://www.businesswire.com/news/home/20231218603022/en/;
U.S. Steel, "Acquisition of United States Steel Corp. by Nippon Steel Corp.," Schedule 14A Proxy Statement, Final Transcript of Joint Call and Webcast, December 18, 2023, https://www.nipponsteel.com/common/secure/en/ir/library/pdf/20231218_500.pdf;
Nippon Steel and U.S. Steel, "Nippon Steel Corporation to Acquire U.S. Steel, Moving Forward Together as the 'Best Steelmaker with World-Leading Capabilities,'" Nippon Steel-U.S. Steel transaction investor presentation, December 18, 2023, https://assets-global.website-files.com/657e2ba174351fdd7e22a128/65803f14dd25c3dcb0eb0dd1_USS%20-%20NSC%20Investor%20Presentation.pdf;
Nippon Steel, "Acquisition of United States Steel Corporation," Press release, December 18, 2023 (English translation), https://www.nipponsteel.com/common/secure/en/ir/library/pdf/20231218_100.pdf;
Nippon Steel, "Acquisition of U.S. Steel," Nippon Steel Investor and Shareholder Presentation, December 18, 2023, https://www.nipponsteel.com/common/secure/en/ir/library/pdf/20231218_200.pdf;
Robert Tita and River Davis, "Nippon Steel to Acquire U.S. Steel for $14.1 Billion," Wall Street Journal, December 18, 2023, https://www.wsj.com/business/deals/nippon-steel-to-acquire-u-s-steel-for-55-shr-854c6f73;
Yuka Obayashi, "Nippon Steel Confident of Completing US Steel Acquisition," Reuters, January 5, 2024, https://www.reuters.com/markets/deals/nippon-steel-confident-completing-us-steel-acquisition-2024-01-05/;
USW, "USW Slams Nippon Plan to Acquire USS," News release, December 18, 2023, https://www.usw.org/news/media-center/releases/2023/usw-slams-nippon-plan-to-acquire-us;
Anya Litvak, "'Talk is Cheap,' Says Union After Filing Grievances Against U.S. Steel Over Its Sale to Nippon," Pittsburgh Post-Gazette, January 13, 2024, https://www.post-gazette.com/business/pittsburgh-company-news/2024/01/13/us-steel-nippon-steel-corp-united-steel-workers/stories/202401130068;
Strategic Research Institute ("SRI"), "Decline in Steel: USS-UPI Shutdown Looms," Steel Guru Business News, November 1, 2023, https://www.steelguru.com/steel/decline-in-steel-uss-upi-shutdown-looms;
Judith Prieve, "End of a Bay Area Era? Pittsburg's Steel Mill Idles Amid Sale to Japanese Company," The Mercury News (San Jose, CA), January 20, 2024, https://www.mercurynews.com/2024/01/20/end-of-a-bay-area-era-pittsburgs-steel-mill-idles-amid-sale-to-japanese-company/;

Table continued.

Table III-1 Continued
TCCSS: Developments in the U.S. industry since January 1, 2017

Source: AIST, "Goncalves: Cleveland-Cliffs Won't Backstop U.S. Steel Sale," Steel News, January 5, 2024, https://www.aist.org/news/steel-news/2024/february/5-9-february-2024/goncalves-cleveland-cliffs-won%e2%80%99t-backstop-u-s-stee;
Joseph Deaux, "Cliffs CEO Says His US Steel Bid Is 'Absolutely Gone,'" Yahoo Finance, February 1, 2024, https://finance.yahoo.com/news/cliffs-ceo-says-us-steel-202650531.html;
Reuters, "Nippon Steel Says Japan's 3 Megabanks Plan $16 Bln Loan for U.S. Steel Acquisition," January 30, 2024, https://www.reuters.com/markets/deals/japans-3-megabanks-loan-nippon-steel-16-bln-us-steel-acquisition-bloomberg-2024-01-30/;
Aaron J. Brown, "The Steelworkers Strike Back; Cleveland-Cliffs Stands to Gain," Minnesota Reformer (St. Paul, Minnesota), February 6, 2024, https://minnesotareformer.com/2024/02/06/the-steelworkers-strike-back-cleveland-cliffs-stands-to-gain/;
Yuka Obayashi and Katya Golubkova, "Nippon Steel Says on Track to Close U.S. Steel Deal by September," Japan Times, February 7, 2024, https://www.japantimes.co.jp/business/2024/02/07/companies/nippon-steel-deal-september/;
Cleveland-Cliffs, "Cleveland-Cliffs to Idle Weirton Tinplate Facility Following Unfavorable ITC Ruling," News release, February 15, 2024, https://www.clevelandcliffs.com/news/news-releases/detail/622/cleveland-cliffs-to-idle-weirton-tinplate-facility;
USITC, "Tin Mill Products from Canada, China, and Germany Do Not Injure U.S. Industry, Says USITC," News release 24-013, February 6, 2024, https://www.usitc.gov/press_room/news_release/2024/er0206_64836.htm;
Joseph Deaux, "United Steelworkers Union Signs NDA With Nippon Steel to Advance Talks," Yahoo! Finance, February 26, 2024, https://finance.yahoo.com/news/united-steelworkers-union-signs-nda-210556615.html;
Shuhei Ochiai, "Nippon Steel Executive to Negotiate with Union on U.S. Steel Deal," Nikkei Asia, March 5, 2024, https://asia.nikkei.com/Business/Business-deals/Nippon-Steel-executive-to-negotiate-with-union-on-U.S.-Steel-deal;
Michael Millsap and David McCall, "Meeting with Nippon Yields No Progress," March 7, 2024, https://m.usw.org/union/mission/industries/metals/resources/bargaining-with-uss/meeting-with-nippon-yields-no-progress;
Michael Millsap and David McCall, "Smoke and Mirrors USS/Nippon Style," February 26, 2024, https://m.usw.org/union/mission/industries/metals/resources/bargaining-with-uss/smoke-and-mirrors-uss-nippon-style;
U.S. Steel, "U.S. Steel Stockholders Approve Transaction with Nippon Steel Corporation (NSC)," News release, April 12, 2024, https://investors.ussteel.com/news-events/news-releases/detail/673/u-s-steel-stockholders-approve-transaction-with-nippon;
Nippon Steel, "Nippon Steel's Acquisition of U.S. Steel Approved by U.S. Steel Stockholders," News release, April 13, 2024, https://www.nipponsteel.com/common/secure/en/news/20240413_100.pdf;
Craig Howell, "Cleveland Cliffs in Weirton idled," The Marietta Times (Marietta, Ohio), April 22, 2024, https://www.mariettatimes.com/news/local-news/2024/04/cleveland-cliffs-in-weirton-idled/;
Joseph S. Pete, "USW Says U.S. Steel Board Vote for Nippon Acquisition 'Isn't End of Story,'" The Times of Northwest Indiana, April 15, 2024, https://www.nwitimes.com/news/local/usw-says-u-s-steel-board-vote-for-nippon-acqusition-isnt-end-of-story/article_76c74e74-fb45-11ee-8533-875ffd877136.html;
Mark Glyptis, "Weirton Tin Mill Has a Future," Letter to the Editor, The Intelligencer/Wheeling News-Register, April 13, 2024, https://www.theintelligencer.net/opinion/letters-to-the-editor/2024/03/weirton-tin-mill-has-a-future/;
Craig Howell, "Weirton Plant Won't be Dismantled as Part of Idling," Weirton Daily Times, April 5, 2024, https://www.weirtondailytimes.com/news/local-news/2024/04/weirton-plant-wont-be-dismantled-as-part-of-idling/;

Table continued.

Table III-1 Continued
TCCSS: Developments in the U.S. industry since January 1, 2017

Source: Cleveland-Cliffs, response to NOI, July 3, 2023, p. 1, exh. 2;
U.S. Steel, response to NOI, July 3, 2023, pp. 17–18, 21, exhs. 7, 8, 9;
*** questionnaire response, Attachment A;
Cleveland-Cliffs, prehearing brief, March 28, 2024, pp. 1–2, exh. 1, 4;
U.S. Steel, prehearing brief, March 28, 2024, pp, 11–12, exh. 1;
Japanese respondents' prehearing brief, March 28, 2024, p. 9, exh. 6;
Hearing transcript, April 9, 2024, pp. 18–19 (Kopf), 23, 25–27, 44–45 (Smith), 36 (Glyptis);
Cleveland-Cliffs' posthearing brief, April 16, 2024, exh. 1: Declaration of Gordon O'Neill, paras. 5, 10, 11;
U.S. Steel's posthearing brief, April 16, 2024, pp. 5–6, 14; exh. 1, pp. 18–19.

Changes experienced by the industry

In this proceeding, U.S. producers were asked to report any change in the character of their operations or organization relating to the production of TCCSS since the last five-year review in 2017. Table III-2 presents reported changes identified by the domestic producers. Since the last review, there have been new entrants into the U.S. TCCSS market (Cleveland-Cliff's acquisition of ArcelorMittal's tin mill production facility in Weirton, West Virginia) but also industry consolidation (U.S. Steel's acquisition of USS-UPI). U.S. producers also reported idling and closures (at U.S. Steel's plants in East Chicago, Gary Works, and USS-UPI), production curtailments (***), and planned layoffs (at Cleveland-Cliffs' plant in Weirton).

Table III-2
TCCSS: U.S. producers' reported changes in operations since January 1, 2017, by type of change and firm

Type of change	Firm name and narrative on changes in operations
Plant closings	***
Prolonged shutdowns	***
Prolonged shutdowns	***
Production curtailments	***
Acquisitions	***

Table continued.

Table III-2 Continued
TCCSS: U.S. producers' reported changes in operations since January 1, 2017, by type of change and firm

Type of change	Firm name and narrative on changes in operations
Acquisitions	***
Other	***
Other	***

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

Anticipated changes in operations

In this proceeding, the Commission asked U.S. producers if the COVID-19 pandemic had an impact on their operations relating to TCCSS. Two firms, ***, responded to the question by stating that the TCCSS industry was deemed a critical industry at the beginning of the pandemic and that TCCSS producers/workers were considered essential. The firms noted that demand for tin products actually increased at the onset of the COVID-19 pandemic due to food availability and security concerns. However, starting in late 2022, U.S. producers reported a decrease in demand for domestically produced TCCSS and, ***, a shift towards imports of TCCSS.

In December 2023, U.S. Steel announced its agreement to be acquired by Japan's largest steelmaker, Nippon Steel, in an all-cash transaction valued at $14.1 billion. The sale is currently pending U.S. regulatory approval. In February 2024, Cleveland-Cliffs announced that it will indefinitely idle its Weirton, West Virginia plant in April 2024.

U.S. production, capacity, and capacity utilization

Table III-3 presents U.S. producers' installed and practical capacity and production on the same equipment. Consistent with the closure and idling of several TCCSS production plants since 2017 (as noted above), capacity and production decreased across all metrics during 2021 through 2023. Practical overall capacity and practical TCCSS capacity were the same in each period, as U.S. producers noted that they do not produce alternative products on the equipment used to produce TCCSS. Practical overall capacity declined year-over-year, decreasing by *** percent from *** short tons in 2021 to *** short tons in 2023. Practical overall production also declined year-over-year, decreasing by *** percent from *** short tons in 2021 to *** short tons in 2023.

Table III-3
TCCSS: U.S. producers' installed and practical capacity, production, and utilization on the same equipment as in-scope production, by measure and period

Capacity and production in short tons; utilization in percent

Item	Measure	2021	2022	2023
Installed overall	Capacity	***	***	***
Installed overall	Production	***	***	***
Installed overall	Utilization	***	***	***
Practical overall	Capacity	***	***	***
Practical overall	Production	***	***	***
Practical overall	Utilization	***	***	***
Practical TCCSS	Capacity	***	***	***
Practical TCCSS	Production	***	***	***
Practical TCCSS	Utilization	***	***	***

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 "---".

Constraints on capacity

Table III-4 presents U.S. producers' reported narratives regarding practical capacity constraints. U.S. producers list material inputs and labor as production constraints. In terms of "other constraints," U.S. producers identified a combination of production bottlenecks, available labor force, raw material supplies, and demand/order volume as TCCSS capacity constraints.

Table III-4
TCCSS: U.S. producers' reported capacity constraints, by type of constraint and firm

Type of constraint	Firm name and narrative on constraints to practical overall capacity
Production bottlenecks	***
Existing labor force	***
Supply of material inputs	***
Other constraints	***
Other constraints	***
Other constraints	***

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

Operations data

Table III-5 and figure III-1 present U.S. producers' capacity, production, and capacity utilization. Practical TCCSS capacity, production, and capacity utilization declined in each year during 2021-23. Practical TCCSS capacity decreased by *** percent from *** short tons in 2021 to *** short tons in 2023. Production decreased by *** percent from *** short tons in 2021 to *** short tons in 2023.[5] Capacity utilization decreased by *** percentage points from *** percent in 2021 to *** percent in 2023.

Table III-5
TCCSS: U.S. producers' output, by firm and period

Practical capacity

Capacity in short tons

Firm	2021	2022	2023
Cleveland-Cliffs	***	***	***
Ohio Coatings	***	***	***
U.S. Steel	***	***	***
All firms	***	***	***

Table continued.

Table III-5 Continued
TCCSS: U.S. producers' output, by firm and period

Production

Production in short tons

Firm	2021	2022	2023
Cleveland-Cliffs	***	***	***
Ohio Coatings	***	***	***
U.S. Steel	***	***	***
All firms	***	***	***

Table continued.

[5] ***. The firm's production increased by *** percent during 2021-22 but then decreased by *** percent during 2022-23, reflecting a total decrease of *** percent during 2021-23. *** noted that ***. *** U.S. producer questionnaire at II-2b.

Table III-5 Continued
TCCSS: U.S. producers' output, by firm and period

Capacity utilization

Capacity utilization in percent

Firm	2021	2022	2023
Cleveland-Cliffs	***	***	***
Ohio Coatings	***	***	***
U.S. Steel	***	***	***
All firms	***	***	***

Table continued.

Table III-5 Continued
TCCSS: U.S. producers' output, by firm and period

Share of production

Share in percent

Firm	2021	2022	2023
Cleveland-Cliffs	***	***	***
Ohio Coatings	***	***	***
U.S. Steel	***	***	***
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 "---".

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

* * * * * * *

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

Alternative products

None of the U.S. producers reported production of out-of-scope products on the same equipment and machinery used to produce TCCSS.

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

Table III-6 presents U.S. producers' U.S. shipments, export shipments, and total shipments. The vast majority of U.S. producers' shipments were U.S. commercial shipments.[6] Producers' U.S. shipments, by quantity, declined in each period, decreasing by *** percent from *** short tons in 2021 to *** short tons in 2023. Exports, by quantity, accounted for a small share of total shipments (only *** percent in each year during 2021-23).[7] Total shipments, consequently, followed the trend of U.S. producers' U.S. shipments and declined year-over-year during 2021-23.

Table III-6
TCCSS: U.S. producers' total 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	2021	2022	2023
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	***	***	***
U.S. shipments	Share of value	***	***	***
Export shipments	Share of value	***	***	***
Total shipments	Share of value	***	***	***

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

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

[6] *** reported internal consumption. *** reported transfers to related firms.

[7] *** reported exports. These exports were to ***.

U.S. producers' inventories

Table III-7 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. End-of-period inventories increased irregularly by *** percent during 2021-23. In 2021, inventories were *** short tons, then increased to *** short tons in 2022,[8] before decreasing to *** short tons in 2023. As a result of increased inventories, but declining production and shipments (as noted above), the ratio of inventories to production, to U.S. shipments, and to total shipments increased from 2021 to 2023.[9]

Table III-7
TCCSS: U.S. producers' inventories and their ratio to select items, by period

Quantity in short tons; ratio in percent

Item	Measure	2021	2022	2023
End-of-period inventory	Quantity	***	***	***
Inventory to U.S. production	Ratio	***	***	***
Inventory to U.S. shipments	Ratio	***	***	***
Inventory to total shipments	Ratio	***	***	***

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

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

[8] End-of-period inventories increased by *** percent during 2021-22. *** accounted for the vast majority of end-of-period inventories in 2022. The firm reported that ***. Additionally, *** reported that ***.

[9] As reported above, U.S. Steel permanently idled its USS-UPI plant in Pittsburg, California at the end of 2023. U.S. Steel reports that "***." U.S. Steel's posthearing brief, April 16, 2024, exh. 13, pp. 1-2.

In addition, in December 2023, U.S. Steel announced its agreement to be acquired by Japan's largest steelmaker, Nippon Steel, in an all-cash transaction valued at $14.1 billion. The sale is currently pending U.S. regulatory approval.

U.S. producers' imports from Japan

In this proceeding, ***.[10] Table III-8 presents *** during 2021-23.

Table III-8
TCCSS: *'s U.S. production, imports from ***, and ratio of imports to production, by source and by period**

Quantity in short tons; ratios in percent

Item	Measure	2021	2022	2023
U.S. production	Quantity	***	***	***
Imports from Japan	Quantity	***	***	***
Imports from Japan to U.S. production	Ratio	***	***	***

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

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

[10] ***. Emails from *** on February 29, 2024 and April 15, 2024.

U.S. employment, wages, and productivity

In 2022, as previously noted, Cleveland-Cliffs and U.S. Steel ratified new labor agreements with the United Steelworkers union. These agreements raised employees' wages, provided bonuses, and increased retirement/pension contributions. However, plant closures and idling starting in 2022 into 2023 are reflected in the U.S. producers' employment-related data (table III-9).[11] Production and related workers' (PRWs') hourly wages increased from 2021 to 2022 and further into 2023, increasing by *** percent during 2021-23. However, production and total hours worked decreased during 2021-23. In addition, productivity declined sharply after 2021. The combination of higher wage rates and lower productivity are reflected in the rising unit labor costs to produce TCCSS between 2021 and 2023.

Table III-9
TCCSS: U.S. producers' employment related information, by period

Item	2021	2022	2023
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.

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 "---".

[11] On April 20, 2024, Cleveland-Cliff's permanently idled its TCCSS plant in Weirton, West Virginia. Cleveland-Cliffs reported that its 900 employees at the plant will be laid off starting April 2024. However, some employees have been offered and taken positions at other Cleveland-Cliffs facilities. Cleveland-Cliff's witness testimony brief, April 9, 2024, pp. 7-8 (Glyptis); Hearing transcript, pp. 33-37 (Glyptis).

Financial experience of U.S. producers

Background[12]

Three U.S. producers (Cleveland-Cliffs, Ohio Coatings, and U.S. Steel) reported financial results and related information on their U.S. TCCSS 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.

With respect to their overall operations, publicly traded Cleveland-Cliffs and U.S. Steel are both vertically integrated,[13] while Ohio Coatings, a privately held company, is not. In addition to the level of integration and underlying production operations, U.S. producers differ to some extent in terms of product mix.[14]

In 2020, Cleveland-Cliffs and U.S. Steel both engaged in acquisition-related activity involving TCCSS operations. Cleveland-Cliffs purchased the assets of ArcelorMittal USA (December 2020), inclusive of the Weirton facility, and U.S. Steel acquired the remaining equity interest in USS-UPI (March 2020).[15] After the purchase of ArcelorMittal USA and as a result of what Cleveland-Cliffs characterized as sustained underinvestment by the predecessor company, Cleveland-Cliffs made capital expenditures and upgrades to the Weirton facility, as well as

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[12] The following abbreviations are 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 ("R&D"), and return on assets ("ROA").

[13] TCCSS operations take place within the Steelmaking segment of Cleveland-Cliffs and the North American Flat-Rolled segment of U.S. Steel. Cleveland-Cliffs 2023 10-K, p. 6., and U.S. Steel 2023 10-K, p. 4. Note: Steelmaking is Cleveland-Cliffs' reportable segment and reflects all primary operations. As it relates to the level of integration in general, Cleveland-Cliffs states "We have a vertically integrated portfolio, which begins at the mining stage and goes all the way through the manufacturing of steel products, including stamping, tooling and tubing. We have the unique advantage as a steel producer of being fully or partially self-sufficient with our production of raw materials for steel manufacturing, which includes iron ore pellets, HBI, scrap and coking coal." Cleveland-Cliffs 2023 10-K, p. 6. Referencing its non-mini mill steelmaking operations, U.S. Steel states "As a predominately integrated producer . . . primary raw materials are iron units in the form of iron ore pellets and sinter ore, carbon units in the form of coal and coke (which is produced from coking coal) and steel scrap". U.S. Steel 2023 10-K, p. 16.

[14] Tin-and-Chromium-Coated Steel Sheet from Japan, Inv. No. 731-TA-860 (Third Review), USITC Publication 4795, June 2018, p. III-13. Tin Mill Products from Canada, China, Germany, and South Korea, Inv. Nos. 701-TA-685 and 731-TA-1599-1601 and 1603 (Final), USITC Publication 5492, February 2024, p. VI-1.

[15] Tin Mill Products from Canada, China, Germany, and South Korea, Inv. Nos. 701-TA-685 and 731-TA-1599-1601 and 1603 (Final), USITC Publication 5492, February 2024, p. VI-2.

increased employment.[16] Since 2020 U.S. Steel idled various operations related to its TCCSS operations.[17] Changes in operations noted by Ohio Coatings were the ***.[18]

Figure III-2 presents each responding firm's share of the total reported net sales quantity in 2023.

Figure III-2
TCCSS: U.S. producers' share of net sales quantity in 2023, by firm

* * * * * * *

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

[16] Ibid.

[17] Tin Mill Products from Canada, China, Germany, and South Korea, Inv. Nos. 701-TA-685 and 731-TA-1599-1601 and 1603 (Final), USITC Publication 5492, February 2024, p. VI-2. U.S. Steel reported that USS-UPI was indefinitely idled in December 2023. U.S. Steel 2023 10-K, p. 14.

[18] *** U.S. producer questionnaires response, section II-2a. ***. Ibid. ***. *** U.S. producer questionnaires response, section III-9d. With respect to Weirton's sale of black plate, Cleveland-Cliffs' CEO stated "When we have fewer orders of tin plate for our tinning facility at Weirton, we will always give priority to our own facilities. So, instead of having surplus of tin mill black plate that I can sell to others, I have a shortage of orders of tin mill products out of Weirton. So I was using all my tin mill black plate to supply the fewer orders that I had to Weirton and to also force the clients to put orders with us and not with Ohio Coatings." Tin Mill Products from Canada, China, Germany, and South Korea, Inv. Nos. 701-TA-685 and 731-TA-1599-1601 and 1603 (Final), USITC Publication 5492, February 2024, p. VI-2, fn. 10.

Operations on TCCSS

Table III-10 and table III-11 present income-and-loss data for the U.S. producers' TCCSS operations and corresponding changes in AUVs, respectively. Table III-12 presents a variance analysis of the financial results.[19] Appendix E presents selected company-specific financial information.

Table III-10
TCCSS: U.S. producers' results of operations, by item and period

Quantity in short tons; Value in 1,000 dollars

Item	Measure	2021	2022	2023
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 included above	Value	***	***	***
Estimated cash flow from operations	Value	***	***	***

Table continued.

[19] 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. As indicated below, however, ***, reported that its average sales value was impacted by changes in product mix and market conditions/demand.

Table III-10 Continued
TCCSS: U.S. producers' results of operations, 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	2021	2022	2023
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	***	***	***

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 III-11
TCCSS: Changes in AUVs between comparison periods

Changes in percent

Item	2021-23	2021-22	2022-23
Total net sales	***	***	***
COGS: Raw materials	***	***	***
COGS: Direct labor	***	***	***
COGS: Other factory costs	***	***	***
COGS: Total	***	***	***

Table continued.

Table III-11 Continued
TCCSS: Changes in AUVs between comparison periods

Changes in dollars per short ton

Item	2021-23	2021-22	2022-23
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: Period changes preceded by a "▲" represent an increase, while period changes preceded by a "▼" represent a decrease.

Table III-12
TCCSS: Variance analysis on the operations of the U.S. producers between comparison periods

Value in 1,000 dollars

Item	2021-23	2021-22	2022-23
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 TCCSS sales reported. Given the ***, a single line item for sales is presented in the relevant tables above.[20]

Quantity

On a company-specific basis, U.S. producers reported a mixed directional pattern in 2022: *** reporting modestly higher sales quantity, while *** reported lower sales quantities (see table E-1). As noted previously, ***.[21] In 2023, U.S. producers were directionally uniform with all reporting lower sales quantity.

Value

A large share of TCCSS sales reflects fixed prices agreed to in annual sales contracts negotiated during the fall of the preceding year.[22] While average sales value and raw material cost were directionally the same, TCCSS sales value does not include a direct or formulaic pass through of primary raw material costs.[23]

The U.S. industry's total TCCSS sales value increased to its highest level in 2022 and then declined to its lowest level in 2023. The sales section of the variance analysis (table III-12)

[20] ***. Email with attachment from ***, February 20, 2024.

[21] ***. Ibid.

[22] Tin-and-Chromium-Coated Steel Sheet from Japan, Inv. No. 731-TA-860 (Third Review), USITC Publication 4795, June 2018, p. IV-14, p. V-1. Tin Mill Products from Canada, China, Germany, and South Korea, Inv. Nos. 701-TA-685 and 731-TA-1599-1601 and 1603 (Final), USITC Publication 5492, February 2024, p. VI-8.

[23] Ibid.

shows that the increase in total sales value in 2022 reflects an overall positive price variance that more than offset the corresponding negative sales volume variance. In contrast, the decline in total sales value in 2023 reflects a negative sales volume variance, the primary factor, as well as a somewhat smaller negative price variance.

*** U.S. producers reported increasing average sales values in 2022 but diverged somewhat in 2023: *** reported declines in average sales value; *** reported a modest increase. *** attributed the pattern of average sales value to changes in demand and underlying sales value, as opposed to changes in product mix.[24] In contrast, *** indicated that the pattern of its average sales value reflects a combination of changes in product mix, ***, as well as demand and market conditions.[25] While *** alternated in terms of which reported the highest company-specific average sales value, *** reported the lowest average sales value in 2021, 2022, and 2023 (see table E-1).

Cost of goods sold and gross profit or loss

Raw materials

In addition to tin and/or chromium coating materials, which would be reported by all U.S. producers, the total raw material costs reported in table III-10 reflect a combination of primary steel-making inputs, as well as purchased black plate. TCCSS sales, as noted previously,

[24] ***. Email with attachment from ***, February 27, 2024. ***. Email with attachment from ***, February 20, 2024.

[25] Email with attachment from ***, February 20, 2024.

do not include a direct or formulaic passthrough of raw material costs. As it relates to input costs in general, U.S. producers enter into various contracts to limit volatility.[26]

On an overall basis total raw material costs ranged from a low of *** percent of total COGS (2023) to a high of *** percent (2022).[27] With regard to the steel component specifically, non-integrated producer Ohio Coatings reported that it *** consumed ***, accounting for *** percent of its total 2023 raw material cost,[28] while the two integrated producers, in addition to tin and chromium coating materials, consumed either hot-rolled steel only (***)[29] or a combination of hot-rolled steel and black plate (***).[30] While the form of steel ultimately consumed to produce TCCSS by Cleveland-Cliffs and U.S. Steel is black plate, the reported total raw material costs in table III-10, in addition to tin

[26] Tin Mill Products from Canada, China, Germany, and South Korea, Inv. Nos. 701-TA-685 and 731-TA-1599-1601 and 1603 (Final), USITC Publication 5492, February 2024, p. VI-12. Cleveland-Cliffs 2022 10-K, pp. 52-53. Email with attachment from ***, February 20, 2024. U.S. Steel 2023 10-K, p. 93. U.S. Steel 2023 10-K, p. 17.

[27] *** was the *** U.S. producer to separately report inputs purchased from related suppliers. According to the company, related supplier inputs were reported when the entities supplying material inputs were legally distinct from the consuming entities. Email with attachment from ***, February 27, 2024. The related supplier inputs reported by *** were ***, generally recorded at the related supplier's cost. Ibid. *** U.S. producer questionnaire response, sections III-5-III-7b. *** considered all entities supplying and consuming material inputs to be legally the same and therefore did not separately report purchases from related suppliers. Email with attachment from ***, February 20, 2024.

[28] *** U.S. producer questionnaire responses, section III-9c. ***. *** U.S. producer questionnaire responses, section III-9d.

[29] ***. *** U.S. producer questionnaire responses, section III-9d. ***. USITC auditor notes (prehearing).

[30] ***. *** U.S. producer questionnaire responses, section III-16. ***. *** U.S. producer questionnaire responses, section III-9d. ***. USITC auditor notes (prehearing).

and chromium coating materials, reflect underlying steelmaking inputs; i.e., not the discrete cost of consumed black plate.

The U.S. industry's average per short ton raw material cost increased notably in 2022 and then declined somewhat in 2023. Like average sales value, changes in average raw material cost were generally attributed to underlying input prices/costs, as opposed to changes in product mix.[31] *** consistently reported the lowest company-specific average raw material cost. ***, whose average raw material cost primarily reflects ***, reported the highest average raw material cost (see table E-1).

Direct labor cost and other factory costs

The U.S. industry's direct labor cost, the smallest primary component of total COGS, declined irregularly as a share of total COGS, ranging from a low of *** percent of total COGS (2023) to a high of *** percent (2021). Other factory costs, the second largest primary component of COGS, increased irregularly as a share of total COGS, ranging from *** percent (2022) to *** percent (2023). Consistent with the manner in which material cost was reported, the direct labor and other factory costs reported by *** reflect ***.[32]

[31] *** indicated that the pattern of average raw material cost reflects increases in underlying costs, as opposed to changes in product mix. Email with attachment from ***, February 27, 2024. With regard to the pattern of its average raw material cost, *** stated ***. Email with attachment from ***, February 20, 2024. In contrast, *** indicated that average raw material cost reflect changes in both product mix (***) and underlying input costs. ***. Email with attachment from ***, February 20, 2024.

[32] ***. *** U.S. producer questionnaire, section III-8. Email with attachment from ***, February 27, 2024. *** U.S. producer questionnaire, section III-8. Email with attachment from ***, February 20, 2024.

On a company-specific basis average per short ton direct labor cost and other factory costs reflect relatively wide ranges (see table E-1): *** reporting the lowest average direct labor cost and lowest average other factory costs; *** reporting the highest average direct labor cost and, for most part, the highest average other factory costs; *** reporting average direct labor cost and average other factory costs between those of ***.

Given the capital intensive nature of manufacturing TCCSS, the level of capacity utilization and corresponding fixed cost absorption are important determinants of average COGS, in particular the other factory costs component.[33] ***.[34] *** also emphasized the importance of capacity utilization with regard to COGS and financial results in general.[35]

[33] Tin Mill Products from Canada, China, Germany, and South Korea, Inv. Nos. 701-TA-685 and 731-TA-1599-1601 and 1603 (Final), USITC Publication 5492, February 2024, p. VI-13.

[34] Email with attachment from ***, February 20, 2024. ***. *** U.S. producer questionnaire, section III-11. U.S. Steel presents asset impairment charges, ***, as a separate line item in the operating expenses section of its consolidated income statement. U.S. Steel 2023 10-K, p. 67.

[35] ***. Email with attachment from ***, February 27, 2024. ***. Email with attachment from ***, February 20, 2024.

As a group, U.S. producers reported progressively higher average COGS with *** and *** reporting the lowest and highest company-specific average COGS, respectively (see table E-1).[36]

Gross profit or loss

The U.S. industry reported gross profit in 2021, reflecting a gross profit ratio (total gross profit or loss divided by total net sales value) that was somewhat above breakeven. In 2022, notwithstanding a decline in total sales quantity, the U.S. industry reported substantially higher total gross profit and corresponding gross profit ratio. To the extent that all U.S. producers reported higher average COGS in 2022, the notable improvement in gross results in that year was generally a function of higher average sales value; the expansion in gross profit ratio reflecting a percentage increase in average sales value that was somewhat less than twice the corresponding percentage increase in average COGS (see table III-11).

As noted previously, fixed prices for TCCSS are negotiated with customers in the fall of each year and subsequently recognized in the following year's sales values. With regard to prospective average sales value and profitability in 2022, Cleveland-Cliffs' CEO stated during the company's third quarter 2021 earnings call that "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."[37]

While still positive in 2023, the U.S. industry's total gross profit was lower compared with 2022. In conjunction with a continued decline in sales quantity, the reduction in gross

[36] ***. Email with attachment from ***, February 27, 2024. *** higher average direct labor and other factory costs generally explains why its average COGS was highest on a company-specific basis; i.e., the other component of COGS, raw material costs, was the lowest on a company-specific basis (see table E-1). ***. USITC auditor notes (prehearing).

[37] Transcript of Cleveland-Cliffs Q3 2021 earnings call, p. 17.

profit in 2023 reflects the combined negative impact of lower average sales value and higher average COGS. As noted previously, the increase in average COGS, in part, reflects lower throughput and a reduction in corresponding fixed cost absorption. While company-specific directional patterns were mixed, *** U.S. producers reported lower gross results in 2023 compared with 2022 (see table E-1).

SG&A expenses and operating income or loss

The U.S. industry's total SG&A expenses were at their highest level in 2021 and declined in 2022 and 2023.[38] On a company-specific basis SG&A expense ratios (total SG&A expenses divided by total net sales value) varied and generally occupied distinct ranges: *** SG&A expense ratio exhibiting the least amount of variability; *** at its highest level in 2021 and then declining; *** remaining at relatively lows in 2021, 2022, and 2023 (see table E-1).

While the U.S. industry's gross results were positive in 2021, they did not exceed corresponding SG&A expenses in that year, yielding an overall operating loss. In 2022, the expansion in gross profit (on an absolute basis and as a ratio to net sales), combined with a modest decline in total SG&A expenses, yielded operating income. The subsequent contraction in total gross profit in 2023, offset partially by a continued decline in SG&A expenses, yielded lower but still positive total operating results.

On a company-specific basis, U.S. producers were directionally uniform in terms of reporting relative improvements in their operating results in 2022, followed by declines in 2023. While magnitudes varied, *** reported operating income throughout the period. In contrast, *** reported operating losses of varying magnitudes.

[38] *** accounted for the substantial majority of the U.S. industry's reported SG&A expenses and therefore largely determined the overall pattern (see table E-1). ***. Email with attachment from ***, February 20, 2024.

All other expenses and net income or loss

The absolute differences between the U.S. industry's operating and net results are generally explained by the presence of interest expense (2021 and 2022) and the combination of interest expense and other income (2023) (see table III-10). Other expenses, while present, generally had a limited impact.[39] [40]

Overall operating and net results were directionally the same (both improving in 2022 and then lower in 2023). Reflecting a relatively large increase in other income in that year, 2023 was the only year when the U.S. industry's net results exceeded corresponding operating results.

Capital expenditures and research and development expenses

Table III-13 and table III-15 present U.S. producers' capital expenditures and R&D expenses related to their TCCSS operations, respectively, by firm. Table III-14 and table III-16 present corresponding narrative descriptions.

Table III-13
TCCSS: U.S. producers' capital expenditures, by firm and period

Value in 1,000 dollars

Firm	2021	2022	2023
Cleveland-Cliffs	***	***	***
Ohio Coatings	***	***	***
U.S. Steel	***	***	***
All firms	***	***	***

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

[39] With the exception of 2021, *** of the U.S. industry's total other income. USITC auditor notes (prehearing). As presented in table III-12 and in contrast with the amounts presented for the years overlapping the Commission's recently-completed TCCSS investigations (2021 and 2022), the sign convention for *** other income is positive and therefore additive, as opposed to negative and subtractive, to net results. Ibid.

[40] *** reported no non-recurring items during the period. *** U.S. producer questionnaire, sections III-10a-b. *** other income was reported as a non-recurring item. According to ***, items that it would routinely consider non-recurring are recorded at a higher reporting level and therefore not included in its TCCSS financial results. *** U.S. producer questionnaire, section III-11. See footnote 34.

Table III-14

TCCSS: U.S. producers' narrative descriptions of their capital expenditures, by firm

Firm	Narrative on capital expenditures
Cleveland-Cliffs	***
Ohio Coatings	***
U.S. Steel	***

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

Table III-15
TCCSS: U.S. producers' R&D expenses, by firm and period

1,000 dollars

Firm	2021	2022	2023
Cleveland-Cliffs	***	***	***
Ohio Coatings	***	***	***
U.S. Steel	***	***	***
All firms	***	***	***

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

Table III-16
TCCSS: U.S. producers' narrative descriptions of their R&D expenses, by firm

Firm	Narrative on R&D expenses
Cleveland-Cliffs	***
Ohio Coatings	***
U.S. Steel	***

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

*** accounted for *** percent of the U.S. industry's total capital expenditures, followed by *** (*** percent), and *** (*** percent). As shown in table III-13, the directional pattern of capital expenditures varied by company: *** capital expenditures were at their highest level in 2022; *** capital expenditures were at their highest level in 2021 and subsequently declined; *** capital expenditures were relatively low and limited to 2021 and 2023.

In 2017 U.S. Steel initiated large capital investment projects related to its tin mill operations, which were largely completed prior to 2021.[41] Capital expenditure projects undertaken by Cleveland-Cliffs, initiated in the fall of 2020 and largely completed by the end of 2022, reportedly impacted, to some extent, ongoing operations at the Weirton facility.[42] [43]

[41] Tin-and-Chromium-Coated Steel Sheet from Japan, Inv. No. 731-TA-860 (Third Review), USITC Publication 4795, June 2018, p. III-18. Tin Mill Products from Canada, China, Germany, and South Korea, Inv. Nos. 701-TA-685 and 731-TA-1599-1601 and 1603 (Final), USITC Publication 5492, February 2024, pp. VI-19-20.

[42] Tin Mill Products from Canada, China, Germany, and South Korea, Inv. Nos. 701-TA-685 and 731-TA-1599-1601 and 1603 (Final), USITC Publication 5492, February 2024, p. VI-19.

[43] As described by the CEO of Cleveland-Cliffs, ". . . Weirton had been subject to systematic disinvestment by ArcelorMittal for years. In the three years leading up to our acquisition {in December 2020}, 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." Tin Mill Products from Canada, China, Germany, and South Korea, Inv. Nos. 701-TA-

(*continued*...)

Assets and return on assets

Table III-17 presents data on the U.S. producers' total assets and table III-18 presents corresponding ROA.[44] Table III-19 presents U.S. producers' narrative information regarding aspects of reported asset information.

Table III-17
TCCSS: U.S. producers' total net assets, by firm and period

Value in 1,000 dollars

Firm	2021	2022	2023
Cleveland-Cliffs	***	***	***
Ohio Coatings	***	***	***
U.S. Steel	***	***	***
All firms	***	***	***

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

Table III-18
TCCSS: U.S. producers' ROA, by firm and period

Firm	2021	2022	2023
Cleveland-Cliffs	***	***	***
Ohio Coatings	***	***	***
U.S. Steel	***	***	***
All firms	***	***	***

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

685 and 731-TA-1599-1601 and 1603 (Final), USITC Publication 5492, February 2024, pp. VI-19-20, fn. 46. Regarding specific capital expenditures, the CEO of Cleveland-Cliffs also stated "We installed a tension leveler on the No. 4 line at Weirton to improve the shape of the products we make. We spent 10 million dollars to rebuild the No. 6 line at Weirton. We also hired approximately 200 additional workers needed to operate Weirton efficiently and safely." Ibid.

[44] 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 III-19
TCCSS: U.S. producers' narrative descriptions of their total net assets, by firm

Firm	Narrative on total assets
Cleveland-Cliffs	***
Ohio Coatings	***
U.S. Steel	***

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

As shown in table III-17, U.S. producers' total net assets increased to their highest level in 2022 and then declined to their lowest level in 2023. In contrast with ***, *** total net assets ended the period somewhat higher compared with 2021. As indicated in table III-19, *** attributed this pattern to higher levels of ***.

Part IV: U.S. imports and the foreign industries

U.S. imports

Overview

The Commission issued an importer questionnaire to 29 firms believed to be U.S. importers of TCCSS.[1] The Commission received 21 questionnaire responses from firms which import TCCSS into the United States, as well as five questionnaire responses from firms which import excluded tin mill products.[2] The responding firms' imports accounted for the vast majority of TCCSS imports from Japan and all other sources in 2023.[3] [4] In light of the data coverage by the Commission questionnaires, import data in this report are based on questionnaire responses.

[1] TCCSS is currently imported under 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, 7225.99.0090, and 7226.99.0180. However, HTS statistical numbers 7212.50.0000, 7225.99.0090, and 7226.99.0180 are believed to include only limited amounts of subject merchandise.

[2] For more information on the U.S. importers, the location of their headquarters, and the share of their reported imports in 2023, firm-by-firm, see the "U.S. importers" section in Part I of this report.

[3] According to official Commerce statistics for HTS statistical reporting numbers 7210.11.0000, 7210.12.0000, 7210.50.0000, 7210.50.0020, 7210.50.0090, and 7212.10.0000, the primary HTS numbers for TCCSS, U.S. imports of TCCSS from Japan equaled 66,493 short tons in 2023. The volume of TCCSS imports from Japan presented in official Commerce statistics is likely overstated and reflects mostly imports of out-of-scope excluded tin mill products (see "The subject merchandise" section of Part I for information on excluded merchandise). Data from subject foreign producer/exporter questionnaires show that *** short tons of TCCSS was exported from Japan to the United States in 2023. *** reported importing *** short tons of TCCSS from Japan in 2023. Accordingly, *** imports accounted for *** percent of U.S. imports of TCCSS from Japan in 2023.

[4] According to official Commerce statistics for HTS statistical reporting numbers 7210.11.0000, 7210.12.0000, 7210.50.0000, 7210.50.0020, 7210.50.0090, and 7212.10.0000, the primary HTS numbers for TCCSS, U.S. imports of TCCSS from all other sources equaled 990,604 short tons in 2023. Importers responding to the Commission's questionnaire reported importing *** short tons TCCSS from all other sources in 2023. Accordingly, these importers accounted for *** percent of TCCSS imports from all other sources in 2023. Staff believe that questionnaire responses account for the vast majority of TCCSS imports from subject and all other sources in 2023.

Imports from subject and nonsubject countries

Table IV-1 and figure IV-1 present information on U.S. imports of TCCSS from Japan and all other sources during 2021 through 2023 and table IV-2 presents data on the changes in import quantity, value, and unit value between comparison periods.

As a share of imports, imports from Japan accounted a fraction of total imports during 2021-23.[5] There were *** imports of TCCSS from Japan in 2021, *** short tons in 2022, and *** short tons in 2023. Imports from all other sources accounted for the vast majority of U.S. TCCSS imports during 2021-23.[6] Imports from all other sources decreased irregularly by *** percent during 2021-23. They increased by *** percent during 2021-22 from *** short tons in 2021 to *** short tons in 2022.[7] They decreased, however, by *** percent during 2022-23 from *** short tons in 2022 to *** short tons in 2023.[8]

The average unit value of TCCSS imports from Japan as compared with the average unit value of TCCSS imports from all other sources was *** in 2021 and lower in both 2022 and 2023. However, the average unit value of U.S. importers' U.S shipments of imports from Japan compared with the average unit value of U.S. importers' U.S. shipments of imports from all sources was *** in 2021 and higher in both 2022 and 2023.

[5] *** reported imports of TCCSS from Japan. *** reported that ***. *** noted that ***.

[6] *** accounted for the vast majority of TCCSS imports from all other sources during 2021-23. In 2023, they accounted for *** percent of TCCSS imports from all other sources. The importers report importing TCCSS ***.

[7] *** reported that in 2021 and 2022 there was an increase in demand for TCCSS to produce canned foods and aerosols due to health and safety concerns following the onset of the COVID-19 pandemic. Importers also reported that U.S. can manufacturers ***.

[8] As discussed in Part I of this report, U.S. imports of TCCSS from Canada, China, Germany, the Netherlands, South Korea, Taiwan, Turkey, and the United Kingdom were subject to antidumping duty (and in the case of China, countervailing duty) investigations throughout 2023.

Table IV-1
TCCSS: U.S. imports by source and by period

Quantity in short tons; value in 1,000 dollars; unit value in dollars per short; share and ratio in percent

Source	Measure	2021	2022	2023
Japan	Quantity	***	***	***
Nonsubject sources	Quantity	***	***	***
All import sources	Quantity	***	***	***
Japan	Value	***	***	***
Nonsubject sources	Value	***	***	***
All import sources	Value	***	***	***
Japan	Unit value	***	***	***
Nonsubject sources	Unit value	***	***	***
All import sources	Unit value	***	***	***
Japan	Share of quantity	***	***	***
Nonsubject sources	Share of quantity	***	***	***
All import sources	Share of quantity	***	***	***
Japan	Share of value	***	***	***
Nonsubject sources	Share of value	***	***	***
All import sources	Share of value	***	***	***
Japan	Ratio	***	***	***
Nonsubject sources	Ratio	***	***	***
All import sources	Ratio	***	***	***

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

Note: Ratios represent U.S. imports to U.S. producers' production.

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 IV-2
TCCSS: Changes in import quantity and values between comparison periods

Changes in percent

Source	Measure	2021-23	2021-22	2022-23
Japan	%Δ Quantity	▲***	▲***	▲***
Nonsubject sources	%Δ Quantity	▼***	▲***	▼***
All import sources	%Δ Quantity	▼***	▲***	▼***
Japan	%Δ Value	▲***	▲***	▲***
Nonsubject sources	%Δ Value	▲***	▲***	▼***
All import sources	%Δ Value	▲***	▲***	▼***
Japan	%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: 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
TCCSS: U.S. import quantities and average unit values, by source and by period

* * * * * * *

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

U.S. shipments by coating type and width

In this proceeding, U.S. producers and importers were asked to report on their U.S. shipments, and subject foreign producers were asked to report on their total shipments, of TCCSS by coating type (i.e., D&I tin plate vs other tin plate vs tin-free plate) and width (i.e., less than 41 inches wide vs greater than or equal to 41 inches wide) during 2023. Table IV-3 and figure IV-2 present firms' shipments by coating type and table IV-4 and figure IV-3 present firms' shipments by width.

U.S. importers' U.S. shipments of TCCSS from Japan and all other sources consisted primarily of D&I tin plate, accounting for *** percent and *** percent, respectively, of their total U.S. shipments in 2023. Conversely, U.S. producers' U.S. shipments consist primarily of other tin plate, which accounted for *** percent of their total U.S. shipments in 2023. Similarly, foreign producers primarily shipped other tin plate. In 2023, other tin plate accounted for *** percent of subject foreign producers' total shipments.

In terms of width, U.S. producers' U.S. shipments and U.S. importers' U.S. shipments from both Japan and all other sources consisted primarily of TCCSS which had a length of less than 41 inches. Subject foreign producers also shipped primarily TCCSS which had a length of less than 41 inches. In 2023, TCCSS of less than 41 inches wide accounted for *** percent of subject foreign producers' total shipments.

Table IV-3
TCCSS: U.S. producers' and U.S. importers' U.S. shipments and subject foreign producers' total shipments, by source and coating type, 2023

Quantity in short tons

Source	Tin plate: D&I	Tin plate: Other	Tin-free plate	All coating types
U.S. market: U.S. producers	***	***	***	***
U.S. market: Japan	***	***	***	***
U.S. market: nonsubject sources	***	***	***	***
U.S. market: all import sources	***	***	***	***
U.S. market: all sources	***	***	***	***
Foreign industry: Japan	***	***	***	***

Table continued.

Table IV-3 Continued
TCCSS: U.S. producers' and U.S. importers' U.S. shipments and subject foreign producers' total shipments, by source and coating type, 2023

Share across in percent

Source	Tin plate: D&I	Tin plate: Other	Tin-free plate	All coating types
U.S. market: U.S. producers	***	***	***	100.0
U.S. market: Japan	***	***	***	100.0
U.S. market: nonsubject sources	***	***	***	100.0
U.S. market: all import sources	***	***	***	100.0
U.S. market: all sources	***	***	***	100.0
Foreign industry: Japan	***	***	***	100.0

Table continued.

Table IV-3 Continued
TCCSS: U.S. producers' and U.S. importers' U.S. shipments and subject foreign producers' total shipments, by source and coating type, 2023

Share down in percent

Source	Tin plate: D&I	Tin plate: Other	Tin-free plate	All coating types
U.S. market: U.S. producers	***	***	***	***
U.S. market: Japan	***	***	***	***
U.S. market: nonsubject sources	***	***	***	***
U.S. market: all import sources	***	***	***	***
U.S. market: all sources	100.0	100.0	100.0	100.0

Source: Compiled from data submitted in response to Commission questionnaires. U.S. market data is from U.S. shipments, and foreign industry data is based on total shipments.

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 "---".

Figure IV-2
TCCSS: U.S. producers' and U.S. importers' U.S. shipments and subject foreign producers' total shipments, by source and coating type, 2023

* * * * * * *

Source: Compiled from data submitted in response to Commission questionnaires. U.S. market data is from U.S. shipments, and foreign industry data is based on total shipments.

Table IV-4
TCCSS: U.S. producers' and U.S. importers' U.S. shipments and subject foreign producers' total shipments, by source and width, 2023

Quantity in short ton

Source	<41 inches	≥41 inches	All widths
U.S. market: U.S. producers	***	***	***
U.S. market: Japan	***	***	***
U.S. market: nonsubject sources	***	***	***
U.S. market: all import sources	***	***	***
U.S. market: all sources	***	***	***
Foreign industry: Japan	***	***	***

Table continued.

Table IV-4 Continued
TCCSS: U.S. producers' and U.S. importers' U.S. shipments and subject foreign producers' total shipments, by source and width, 2023

Share across in percent

Source	<41 inches	≥41 inches	All widths
U.S. market: U.S. producers	***	***	100.0
U.S. market: Japan	***	***	100.0
U.S. market: nonsubject sources	***	***	100.0
U.S. market: all import sources	***	***	100.0
U.S. market: all sources	***	***	100.0
Foreign industry: Japan	***	***	100.0

Table continued.

Table IV-4 Continued
TCCSS: U.S. producers' and U.S. importers' U.S. shipments and subject foreign producers' total shipments, by source and width, 2023

Share down in percent

Source	<41 inches	≥41 inches	All widths
U.S. market: U.S. producers	***	***	***
U.S. market: Japan	***	***	***
U.S. market: nonsubject sources	***	***	***
U.S. market: all import sources	***	***	***
U.S. market: all sources	100.0	100.0	100.0

Source: Compiled from data submitted in response to Commission questionnaires. U.S. market data is from U.S. shipments, and foreign industry data is based on total shipments.

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 "---".

Figure IV-3
TCCSS: U.S. producers' and U.S. importers' U.S. shipments and subject foreign producers' total shipments, by source and width, 2023

* * * * * * *

Source: Compiled from data submitted in response to Commission questionnaires. U.S. market data is from U.S. shipments, and foreign industry data is based on total shipments.

U.S. inventories of imported merchandise

Table IV-5 presents data on the inventories held by U.S. importers of TCCSS from Japan and all other sources. U.S. importers' inventories of TCCSS from Japan *** during 2021-23.[9] Importers' inventories of TCCSS from all other sources increased irregularly by *** percent during 2021-23, increasing from *** short tons in 2021 to *** short tons in 2022 and then decreasing to *** short tons in 2023.[10] Similarly, the ratio of inventories from all other sources to total U.S. shipments increased irregularly by *** percentage points during 2021-23, increasing from *** percent in 2021 to *** percent in 2022 and then decreasing to *** percent in 2023.

Table IV-5
TCCSS: U.S. importers' end-of-period inventories of imports, by source and period

Quantity in short tons; ratios in percent

Measure	Source	2021	2022	2023
Inventories quantity	Japan	***	***	***
Ratio to imports	Japan	***	***	***
Ratio to U.S. shipments of imports	Japan	***	***	***
Ratio to total shipments of imports	Japan	***	***	***
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 "---".

[9] *** reported that ***.

[10] *** accounted for the majority of held imports from all other sources during 2021-23. In 2023, *** accounted for *** percent of inventories from all other sources. *** reported that ***.

U.S. importers' imports subsequent to December 31, 2023

The Commission requested importers to indicate whether they had imported or arranged for the importation of TCCSS for delivery after December 31, 2023; such imports are presented in table IV-6. *** reported that it had arranged for the importation of *** short tons of TCCSS from Japan ***, accounting for all arranged imports of subject merchandise for delivery after December 31, 2023.

Fourteen firms reported arranged imports of TCCSS from all other sources for delivery after December 31, 2023. The leading importer of arranged imports from all other sources, ***, accounted for *** percent of all arranged imports. *** reported that it imports TCCSS from ***.

Table IV-6
TCCSS: Arranged imports, by source and projected quarter

Quantity in short tons

Source	Jan-Mar 2024	Apr-Jun 2024	Jul-Sep 2024	Oct-Dec 2024	Total
Japan	***	***	***	***	***
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 "---".

U.S. imports of excluded tin mill products

As previously noted, the HTSUS numbers under which TCCSS is imported contain out-of-scope tin mill products. As a result, in this proceeding, importers were asked to report their imports and arranged imports of excluded tin mill products (table IV-7 and table IV-8, respectively).[11] Imports of excluded tin mill products from Japan accounted for the majority of all imports of excluded tin mill products. The share of these imports was *** in each year during 2021-23. Arranged imports of excluded tin mill products from Japan for delivery after December 31, 2023 equaled *** shorts, accounting for *** percent of all arranged imports of excluded tin mill products.

[11] Nine firms reported imports and/or arranged imports of excluded tin mill products. ***.

Table IV-7
Excluded tin mill products: U.S. importers' imports of out-of-scope excluded tin mill products under the primary HTS, by source and period

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

Source	Measure	2021	2022	2023
Japan	Quantity	***	***	***
All other sources	Quantity	***	***	***
All import sources	Quantity	***	***	***
Japan	Value	***	***	***
All other sources	Value	***	***	***
All import sources	Value	***	***	***
Japan	Unit value	***	***	***
All other sources	Unit value	***	***	***
All import sources	Unit value	***	***	***
Japan	Share of quantity	***	***	***
All other sources	Share of quantity	***	***	***
All import sources	Share of quantity	***	***	***
Japan	Share of value	***	***	***
All other sources	Share of value	***	***	***
All import sources	Share of value	***	***	***

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

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

Table IV-8
Excluded tin mill products: Arranged imports, by source and projected quarter

Quantity in short tons

Source	Jan-Mar 2024	Apr-Jun 2024	Jul-Sep 2024	Oct-Dec 2024	Total
Japan	***	***	***	***	***
Nonsubect 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 "---".

The industry in Japan

Overview

During the final phase of the original investigation, the Commission received foreign producer/exporter questionnaires from four firms, which accounted for approximately 100 percent of production of TCCSS in Japan during 1999.[12] [13] During the first, second, and third five-year reviews, the Commission received foreign producer/exporter questionnaires from three firms, which accounted for all production of TCCSS in Japan during 2005, 2011, and 2016, respectively.[14]

In this current five-year review, the Commission issued a foreign producers/exporters questionnaire to three firms believed to produce and/or export TCCSS in Japan. The Commission received a response from all three firms: JFE Steel Corporation ("JFE Steel"); Nippon Steel Corporation ("Nippon Steel"); and Toyo Kohan Co., Ltd. ("Toyo Kohan"). These three firms accounted for all production of TCCSS in Japan during 2023 and all exports of TCCSS from Japan to the United States in 2023. Table IV-9 presents information on the TCCSS operations of these responding producers and exporters in Japan.

Table IV-9
TCCSS: Summary data for producers in Japan, 2023

Quantity in short tons

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)
JFE Steel	***	***	***	***	***	***
Nippon Steel	***	***	***	***	***	***
Toyo Kohan	***	***	***	***	***	***
All firms	***	***	***	***	***	***

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

[12] Original publication, p. VII-1.

[13] In 1999, four firms produced TCCSS in Japan, specifically Kawasaki Steel Corp., Nippon Steel Corp., NKK Corp., and Toyo Kohan Co., Ltd. In 2002, Kawasaki Steel Corp. and NKK Corp. merged to establish JFE Holdings Co. and in 2003 JFE Holding Co. established JFE Steel Corp., a producer of TCCSS in Japan. First review publication, p. IV-6; second review publication, p. I-13; third review publication, p. I-14.

[14] First review publication, p. IV-6; second review publication, pp. I-12 and IV-6; and third review publication, pp. I-12 and IV-5.

Comparative data

Table IV-10 presents a comparative summary of operational data for producers of TCCSS in Japan during the original investigation, subsequent full five-year reviews, and the current proceeding. Foreign producers' capacity and production decreased by *** percent and *** percent, respectively, from 1999 to 2023. Despite decreasing capacity and production, capacity utilization remained above *** percent during each period examined. Foreign producers' exports of TCCSS to the United States decreased from 331,161 short tons in 1999 to zero in 2005, remained at zero in 2011 and 2016, and were *** short tons in 2023.

Table IV-10
TCCSS: Comparative data on Japan producers' TCCSS operations from the original investigation and subsequent reviews, by period

Quantity in short tons; value in 1,000 dollars; ratio in percent: NA is not applicable

Item	Measure	1999	2005	2011	2016	2023
Capacity	Quantity	3,244,873	1,933,348	1,821,137	1,735,539	***
Production	Quantity	2,870,629	1,513,084	1,511,188	1,583,677	***
Capacity utilization	Ratio	88.5	78.3	83.0	91.2	***
Exports to the United States	Quantity	331,161	---	---	---	***
Exports to the United States	Value	NA	---	---	---	***

Source: For the years 1999, 2005, 2011, and 2016 data are compiled using data submitted in the Commission's original investigation and subsequent five-year reviews. For the year 2023, data are compiled from data submitted in response to Commission questionnaires.

Note: TCCSS capacity in 1999 may be overstated as responding Japanese producers included excluded tin mill products in their capacity calculations during the original investigation. Original publication, p. VII-1, fn. 2.

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

Developments in the Japanese industry since the previous review

Table IV-11 presents events in the Japanese TCCSS industry since the last five-year review.

Table IV-11
TCCSS: Developments in the Japanese industry since 2017

Item	Firm	Event
Corporate name change	Nippon Steel	May 2018— Announcement of a corporate name change from former Nippon Steel & Sumitomo Metal Corp. ("NSSMC") to "Nippon Steel Corp., effective April 1, 2019.
Closure	Nippon Steel	November 2019— Announcement of business lines reorganization with the closure of the tin mill products line at its Setouchi Works facility in Hirohata by the end of Fiscal Year ("FY") 2020, which will reduce the firm's annual TCCSS capacity by 140,000 metric tons (154,000 short tons), to the 1,060,000 metric tons (1,168,000 short tons) of existing annual TCCSS production capacity at its Yawata Works and Nagoya Works facilities. TCCSS production capabilities will be further constrained by closure of several integrated facilities, which will reduce the firm's annual steelmaking capacity by approximately 10 million short tons, that produce flat-rolled steel.
Expansion	Nippon Steel	February 2020— Announcement of ¥49-billion (approximately $391-million) capital investments to reline the No. 3 blast furnace followed by installation of advanced information and production control technologies to stabilize production and achieve higher productivity levels at its Nagoya integrated facility. The relining and upgrades are anticipated to expand the blast furnace capacity by 4,414 cubic feet to 156,267 cubic feet, to be completed by first-half 2022. The Nagoya facility is also the main integrated production base to provide high-grade steel sheet to other Nippon Steel facilities producing downstream steel mill products, including tin mill steel products.
Closure	JFE Steel	March 2020— Announcement that an electrolytic tin line will be shut down at the Chiba facility, with additional tinplate lines to be shuttered starting in FY2022, to consolidate tin mill products operations at the Fukuyama facility in response to weak market demand conditions and rising raw materials costs to enhance corporate competitiveness.
Closure	JFE Steel	March 2020— Announcement of plans to shut down the upstream production processes and hot-rolling equipment at its East Japan Works facility in Keihin by the end of FY2023 (ending March 2024). This closure, representing 4 million tons (13 percent) of the firm's annual crude steel production capacity, will also reduce the amount of steel sheet available for producing TCCSS.

Table continued.

Table IV-11 Continued
TCCSS: Developments in the Japanese industry since 2017

Item	Firm	Event
Closure	JFE Steel	November 2020— Rescheduling of the planned shutdown of the upstream production processes and hot-rolling equipment at its East Japan Works facility in Keihin from March 2024 to September 2023.
Upgrade	JFE Steel	November 2020— Announcement of earlier than planned ¥43-billion (about $412-million) revamping of the No. 6 blast furnace at the East Japan Works facility in Chiba from FY2023 to fourth-quarter 2022. The anticipated gains from an earlier "blow-in" (restart) date of December 2022 is accelerating profitability improvements from the ongoing corporate structural reforms.
New products	Nippon Steel	October 2021— Announcement of initial commercial production of its newly developed EZP™ chromate-free tinplate that substitutes a zirconium treatment process for the existing hexavalent-chromate treatment process. This readily recyclable tinplate offers corrosion resistance, lacquer adhesion, weldability, an attractive outer appearance, and contents safety as an environmentally benign material for food containers. Nippon Steel's news release further mentioned that it "…has been developing, manufacturing, and supplying various types of tinplate in accordance with environmental regulations around the world." The European Union ("EU") will ban hexavalent chromium in the chromate treatment process for tinplate under its Registration, Evaluation, Authorisation, and Restriction of Chemicals ("REACH") Regulations that will enter into force in April 2024. EZP™ chromate-free tinplate received official certification as a Food Contact Substance by the U.S. Food and Drug Administration ("FDA") and the EU, and approval is pending by the South American members of the Common Market of the Southern Cone ("MERCOSOR").
Closure	Toyo Kohan	April 2022— Reduction of annual production capacity to *** short tons after shutting down one tin mill products line with annual production capacity of *** short tons at its Kudamatsu facility.
Restart	Nippon Steel	August 2022— Announcement that the No. 3 blast furnace at the Nagoya facility, that was relined, upgraded, and expanded during January–June 2022, will be restarted by late-August 2022. The Nagoya facility provides high-grade steel sheet to other Nippon Steel facilities producing downstream steel mill products, including tin mill steel products.
Closure	JFE Steel	Third-quarter 2022— Shut down of the tin mill products lines at the Chiba facility to consolidate tinplate production at the Fukuyama facility in FY2023 onward.
Restart	JFE Steel	January 2023— After completing the planned revamping, begun in September 2022, restart of the No. 6 blast furnace at the East Japan Works facility (Chiba Area). Although not expanding the furnace's capacity, the revamping process also installed data-science technology to improve the accuracy of positioning material charging and controlling furnace heat to stabilize furnace operations. Adjacent equipment was also updated to improve workability and extend the operating life of the furnace body. TCCSS are produced at the East Japan Works facility (Chiba Area) and the West Japan Works (Fukuyama Area).

Table continued.

Table IV-11 Continued
TCCSS: Developments in the Japanese industry since 2017

Item	Firm	Event
Acquisition offer	Nippon Steel	September 2023— Nippon Steel reportedly expressed willingness to offer $9.5 billion for U.S. Steel, including its integrated steelmaking facilities. (According to regulatory filings, Nippon Steel valued U.S. Steel's modern electric-arc furnace steelmaking facilities in Arkansas and its iron ore mines in Minnesota at a combined $9.2 billion).
Acquisition offer	U.S. Steel, Nippon Steel	December 2023— U.S. Steel announces its agreement to be acquired by Japan's largest steelmaker, Nippon Steel, in an all-cash transaction valued at $14.1 billion, plus assumption of U.S. Steel's debts ($800 million) for a total equivalent buyout offer of $14.9 billion. Under this acquisition agreement, Nippon Steel will honor current U.S. Steel labor agreements and U.S. Steel will retain its current corporate name for its operations going forward. The acquisition offer was approved by the Boards of Directors of both firms but still needs U.S. Steel shareholder and official regulatory approvals. Both firms anticipate completing this transaction by second- or third-quarter 2024. None of Nippon Steel's U.S. steel facilities currently produce tin mill products.
Acquisition financing	Nippon Steel	January 2024— Announcement of securing $16 billion in bridge loans from three major Japanese banks, to finance its acquisition of U.S. Steel, consisting of $6.5 billion from Sumitomo Mitsui Financial Group, $5.5 billion from Mitsubishi UFJ Financial Group, and $4 billion from Mizuho Financial Group.
Acquisition follow-up	Nippon Steel	February 2024— Announcement that Nippon Steel is on schedule to conclude its acquisition of U.S. Steel by September. Corporate representatives met with U.S. Congressional Members last month and plan to reach out to USW representatives.
Labor contract negotiations	Nippon Steel, USW	February 2024— Nippon Steel and USW sign a nondisclosure agreement ahead of negotiating acceptance of existing labor agreements with U.S. Steel.
Labor contract negotiations	Nippon Steel, USW	March 2024— First negotiating meeting. Although Nippon Steel representatives reportedly reiterated their firm's intentions to abide by the existing collective labor agreements, the USW leaders characterized the meeting as failing to address specific union concerns about corporate financial transparency and agreement enforcement with the Nippon Steel North America subsidiary and the foreign parent firm.
Shareholders acquisition approval	U.S. Steel	April 2024— After U.S. Steel's shareholders overwhelmingly voted to approve Nippon Steel's acquisition offer (on April 12, 2024), Takahiro Mori, Vice Chairman pledged his firm's commitments: (1) As a wholly owned subsidiary, U.S. steel will have access to Nippon Steel's products, operational and production technologies, and decarbonization technologies; (2) Retention of the U.S. Steel name and Pittsburgh headquarters, no transfers of jobs or production overseas, and continued existing relationships with suppliers, customers, and communities; and (3) Recognition of the USW as the bargaining representative for represented employees, honoring all commitments under the Basic Labor Agreement ("BLA"), and accepting all agreements between U. S. Steel and the USW. Reiteration of prior commitments to no layoffs or plant closures, job and pension security, and new capital investments totaling at least $1.4 billion during 2024–26 at facilities covered by the BLA.

Table continued.

Table IV-11 Continued
TCCSS: Developments in the Japanese industry since 2017

Source: NSSMC, "Notice Regarding Changes of the Trade Names of Nippon Steel & Sumitomo Metal Corporation ("NSSMC") and Consolidated Subsidiaries, and an Amendment to the Articles of Incorporation of NSSMC," May 16, 2018, https://www.nipponsteel.com/common/secure/en/news/20180516_200.pdf;
Nippon Steel, "Nippon Steel to Integrate and Reorganize Steelworks," News release, November 1, 2019, https://www.nipponsteel.com/common/secure/en/news/20191101_100.pdf;
Nippon Steel, Nippon Steel Group Medium- to Long-Term Management Plan, March 5, 2021, pp. 7–8, 16, 17–19, 43, https://www.nipponsteel.com/en/ir/library/pdf/20210305_200.pdf;
Nippon Steel, Nippon Steel Second Quarter FY2019 Earnings Summary, November 1, 2019, pp. 12, 15, 17, 18, https://www.nipponsteel.com/en/ir/library/pdf/20191101_400.pdf;
Nippon Steel, "Nippon Steel Decides to Line the No. 3 Blast Furnace of Its Nagoya Works," News release, June 5, 2020, https://www.nipponsteel.com/en/news/20200605_100.html;
JFE Steel, "JFE Steel to Optimize Domestic Production Operations Through Structural Reforms," News release, March 27, 2020, https://www.jfe-steel.co.jp/en/release/2020/200327.pdf;
JFE Steel, "JFE Group Revision of Financial Results Forecasts in FY2019 Ended March 31, 2020 Etc.," March 27, 2020, https://www.jfe-holdings.co.jp/en/investor/zaimu/g-data/2019/March2020-200327-release04.pdf;
International Tin Association ("ITA"), "JFE Steel to Consolidate Tinplate Lines," February 17, 2020, https://www.internationaltin.org/jfe-steel-to-consolidate-tinplate-lines/;
Azusa Kawakami and Tsukasa Morikuni, "Japan's JFE Shuts Blast Furnace as Outlook Dims," Nikkei Asia, March 28, 2020, https://asia.nikkei.com/Business/Business-trends/Japan-s-JFE-shuts-blast-furnace-as-outlook-dims;
Shanghai Metals Market ("SMM"), "Japanese Steelmaker JFE to Shut a Blast Furnace to Optimise Domestic Operations," March 29, 2020, https://news.metal.com/newscontent/101050722/japanese-steelmaker-jfe-to-shut-a-blast-furnace-to-optimise-domestic-operations;
JFE Steel, "JFE Steel to Shutter Keihin's Upstream Processes and Hot Rolling by Sept. 2023," News release, November 9, 2020, https://www.jfe-steel.co.jp/en/release/2020/201109_01.html;
JFE Steel, "No. 6 Blast Furnace at East Japan Works (Chiba) to be Revamped," News release, November 9, 2020, https://www.jfe-steel.co.jp/en/release/2020/201109_02.html;
U.S. Federal Reserve Board (FRB), "Foreign Exchange Rates - G.5 Monthly," release date: December 1, 2020, https://www.federalreserve.gov/releases/g5/20201201/.
Nippon Steel, "Nippon Steel Has Begun the Full Commercial Production of Chromate-free Tinplate (EZP™)," News release, October 20, 2021, https://www.nipponsteel.com/en/news/20211020_200.html;
Toyo Kohan, "Kudamatsu Plant" web page, no date, https://www.toyokohan.co.jp/en/profile/factory.html, retrieved July 7, 2023;
Nippon Steel, "Resume Operations of the No. 3 Blast Furnace at Nagoya Works," News release, August 16, 2022, https://www.nipponsteel.com/common/secure/en/news/20220816_100.pdf;
Susan Ni, "Japan's JFE to Permanently Close East Japan Works' Tin Plate Production Line in 2022," Yieh Corp., Steel News, May 27, 2020, https://www.yieh.com/en/NewsItem/117131;
JFE Steel, "JFE Steel Resumes Operating No. 6 Blast Furnace at East Japan Works (Chiba)," News release, January 16, 2023, https://www.jfe-steel.co.jp/en/release/2023/230116.html;
Katsumi Kojima, "Typical Products and Manufacturing Processes of Can Materials in JFE Steel," JFE Steel Technical Report No. 23, March 2018, p. 2, https://www.jfe-steel.co.jp/en/research/report/023/pdf/023-02.pdf;

Table continued.

Table IV-11 Continued
TCCSS: Developments in the Japanese industry since 2017

Source: Evan Robinson-Johnson, "U.S. Steel's Dealmaking Horse Race—and the Surprise Ending," Pittsburgh Post-Gazette, January 27, 2024, https://www.post-gazette.com/business/powersource/2024/01/26/us-steel-nippon-sale-bid/stories/202401250108;
U.S. Steel, "Nippon Steel Corporation (NSC) to Acquire U. S. Steel, Moving Forward Together as the 'Best Steelmaker with World-Leading Capabilities,'" News release, December 18, 2023, https://www.businesswire.com/news/home/20231218603022/en/;
U.S. Steel, "Acquisition of United States Steel Corp. by Nippon Steel Corp.," Schedule 14A Proxy Statement, Final Transcript of Joint Call and Webcast, December 18, 2023, https://www.nipponsteel.com/common/secure/en/ir/library/pdf/20231218_500.pdf;
Nippon Steel and U.S. Steel, "Nippon Steel Corporation to Acquire U. S. Steel, Moving Forward Together as the 'Best Steelmaker with World-Leading Capabilities,'" Nippon Steel-U.S. Steel transaction investor presentation, December 18, 2023, https://assets-global.website-files.com/657e2ba174351fdd7e22a128/65803f14dd25c3dcb0eb0dd1_USS%20-%20NSC%20Investor%20Presentation.pdf;
Nippon Steel, "Acquisition of United States Steel Corporation," Press release, December 18, 2023 (English translation), https://www.nipponsteel.com/common/secure/en/ir/library/pdf/20231218_100.pdf;
Nippon Steel, "Acquisition of U.S. Steel," Nippon Steel investor and shareholder presentation, December 18, 2023, https://www.nipponsteel.com/common/secure/en/ir/library/pdf/20231218_200.pdf;
Robert Tita and River Davis, "Nippon Steel to Acquire U.S. Steel for $14.1 Billion," Wall Street Journal, December 18, 2023, https://www.wsj.com/business/deals/nippon-steel-to-acquire-u-s-steel-for-55-shr-854c6f73;
Yuka Obayashi, "Nippon Steel Confident of Completing US Steel Acquisition," Reuters, January 5, 2024, https://www.reuters.com/markets/deals/nippon-steel-confident-completing-us-steel-acquisition-2024-01-05/;
Reuters, "Nippon Steel Says Japan's 3 Megabanks Plan $16 Bln Loan for U.S. Steel Acquisition," January 30, 2024, https://www.reuters.com/markets/deals/japans-3-megabanks-loan-nippon-steel-16-bln-us-steel-acquisition-bloomberg-2024-01-30/;
Yuka Obayashi and Katya Golubkova, "Nippon Steel Says on Track to Close U.S. Steel Deal by September," Japan Times, February 7, 2024, https://www.japantimes.co.jp/business/2024/02/07/companies/nippon-steel-deal-september/;
Nippon Steel, "Nippon Steel's Acquisition of U. S. Steel Approved by U. S. Steel Stockholders," News release, April 13, 2024, https://www.nipponsteel.com/common/secure/en/news/20240413_100.pdf;
Cleveland-Cliffs' response to the notice of institution, July 3, 2023, pp. 22–23, exh. 5;
U.S. Steel's response to the notice of institution, July 5, 2023, pp. 9–10, exhs. 3, 4;
JFE Steel's response to the notice of institution, June 30, 2023, pp. 2, 6;
Nippon Steel's response to the notice of institution, July 3, 2023, pp. 4–5, exhs. 2, 3, 4, 5; and
Toyo Kohan's response to the notice of institution, July 3, 2023, p. 2.
Japanese respondents' prehearing brief, March 28, 2024, pp. 6–7, exhs. 1, 3, 4.

Note: U.S. dollar values were calculated by USITC staff from the U.S. Federal Reserve Board's ("FRB") monthly average yen per dollar rate for the date of the Japanese producer's capital-investment announcement. FRB, "Foreign Exchange Rates - G.5 Monthly," release date: March 2, 2020, https://www.federalreserve.gov/releases/g5/20200302/.

Note: More information about Nippon Steel's acquisition offer for U.S. Steel in December 2023 is included in table III-1.

Changes in operations

Producers in Japan were asked to report any change in the character of their operations or organization relating to the production of TCCSS since January 1, 2017. Table IV-12 presents the changes identified by the producers.

Table IV-12
TCCSS: Reported changes in operations in Japan, since January 1, 2017, by firm

Item	Firm name and narrative on changes in operations
Plant closings	***
Plant closings	***
Production curtailments	***
Other	***

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

Nippon Steel reported that ***.[15] Nippon Steel further reported that ***.[16]

JFE Steel reported that ***.[17] JFE Steel further reported that ***.[18]

Toyo Kohan reported ***.[19]

[15] Nippon Steel's foreign producer questionnaire at I-2, II-3a and II-3c.
[16] Nippon Steel's foreign producer questionnaire at III-4.
[17] JFE Steel's foreign producer questionnaire at II-3f.
[18] JFE Steel's foreign producer questionnaire at II-4b.
[19] Toyo Kohan's foreign producer questionnaire at II-2a and II-3c.

Operations on TCCSS

Table IV-13 presents data on subject foreign producers' capacity and production on the same equipment and machinery used to produce TCCSS. Following the closure of several TCCSS production lines since 2017, capacity and production decreased across all metrics during 2021-23. Practical overall capacity, which closely mirrored practical TCCSS capacity during the periods examined, decreased by *** percent from *** short tons in 2021 to *** short tons in 2023. Practical overall production decreased by *** percent from *** short tons in 2021 to *** short tons in 2023.

Table IV-13
TCCSS: Producers' in Japan installed and practical capacity, production, and utilization, by measure and period

Capacity and production in short tons; utilization in percent

Item	Measure	2021	2022	2023
Installed overall	Capacity	***	***	***
Installed overall	Production	***	***	***
Installed overall	Utilization	***	***	***
Practical overall	Capacity	***	***	***
Practical overall	Production	***	***	***
Practical overall	Utilization	***	***	***
Practical TCCSS	Capacity	***	***	***
Practical TCCSS	Production	***	***	***
Practical TCCSS	Utilization	***	***	***

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 IV-14 presents subject foreign producers' reported narratives regarding practical capacity constraints.

Table IV-14
TCCSS: Producers' in Japan reported capacity constraints

Item	Firm name and narrative on constraints to practical overall capacity
Production bottlenecks	***
Production bottlenecks	***
Production bottlenecks	***
Other constraints	***

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

Table IV-15 presents data on the TCCSS industry in Japan. As previously noted, *** reported the closure of multiple TCCSS production lines during 2021-23. TCCSS capacity consequently declined by *** percent from *** short tons in 2021 to *** short tons in 2023. Similarly, production declined by *** percent from *** short tons in 2021 to *** short tons in 2023. Even though capacity and production decreased during 2021-23, capacity utilization was higher in 2023 (*** percent) and 2022 (*** percent) as comparted with 2021 (*** percent).

Japanese producers' total shipments decreased by *** percent during 2021-23, from *** short tons in 2021 to *** short tons in 2023.[20] [21] Japanese producers' exports accounted for the largest share of total shipments in each year,[22] whereas their home market shipments ranged between *** percent (in 2021) and *** percent (in 2022).[23]

End-of-period inventories decreased by *** percent during 2021-23. However, the inventories to production ratio, as well as the inventories to total shipments ratio, were both higher in 2023 than in 2021 or 2022.

[20] *** reported internal consumption. *** reported transfers to a related firm.

[21] *** notes that demand for TCCSS peaked in 2021 during the height of the COVID-19 pandemic but has weakened in 2022 and 2023 as the marked is returning to pre-pandemic levels. *** foreign producer questionnaire at II-2b. Moreover, subject foreign producers note that the TCCSS market has shrunk as customers shift to alternative products. See the "Alternative products" section below for more information.

[22] See the "Reported exports" section below for more information on export shipments.

[23] *** reports that home market shipments of TCCSS generally ship to beverage can manufacturers, whereas TCCSS exports ship to food can manufacturers. *** foreign producer questionnaire at III-11 and III-13.

Table IV-15
TCCSS: Data on industry in Japan, by period

Quantity in short tons; value in 1,000 dollars; unit value in dollars per short ton; ratio and share in percent

Item	Measure	2021	2022	2023
Capacity	Quantity	***	***	***
Production	Quantity	***	***	***
End-of-period inventories	Quantity	***	***	***
Internal consumption and transfers	Quantity	***	***	***
Commercial home market shipments	Quantity	***	***	***
Home market shipments	Quantity	***	***	***
Export shipments	Quantity	***	***	***
Total shipments	Quantity	***	***	***
Internal consumption and transfers	Value	***	***	***
Commercial home market shipments	Value	***	***	***
Home market shipments	Value	***	***	***
Export shipments	Value	***	***	***
Total shipments	Value	***	***	***
Internal consumption and transfers	Unit value	***	***	***
Commercial home market shipments	Unit value	***	***	***
Home market shipments	Unit value	***	***	***
Export shipments	Unit value	***	***	***
Total shipments	Unit value	***	***	***
Capacity utilization ratio	Ratio	***	***	***
Inventory ratio to production	Ratio	***	***	***
Inventory ratio to total shipments	Ratio	***	***	***
Internal consumption and transfers	Share	***	***	***
Commercial home market shipments	Share	***	***	***
Home market shipments	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 “---“.

Reported exports

Table IV-16 presents subject foreign producers reported exports of TCCSS. Subject foreign producers' exports to the United States were *** short tons in 2021, *** short tons in 2022, and *** short tons in 2023.[24] *** reported that its exports of TCCSS to the United States were ***.[25]

Foreign producers' exports to all destination markets decreased by *** percent during 2021-23 from *** short tons in 2021 to *** short tons in 2023.[26] During 2021-23, the majority of foreign producers' exports were to *** and "other" export destinations.[27]

[24] During 2021-23, Nippon Steel reported that ***, JFE Steel reported that ***, and Toyo Kohan reported that ***.

[25] *** reported that since the imposition of the antidumping duty order on TCCSS from Japan in 2000, it has shifted its TCCSS exports to ***. *** reported that Section 232 duties and tariff rate quotas on tin plate and tin-free plate ***. *** foreign producer questionnaire at I-7, II-11, and III-17.

[26] Nippon Steel and Toyo Kohan reported *** and JFE Steel reported ***. Nippon Steel's, Toyo Kohan's, and JFE Steel's foreign producer questionnaires at II-10, respectively. Subject foreign producers also noted that trade actions such as safeguards and quotas on TCCSS in the European Union and the United Kingdom ***. Nippon Steel's, Toyo Kohan's, and JFE Steel's foreign producer questionnaires at II-9, respectively.

[27] Foreign producers listed "other" destination markets as: ***.

Table IV-16
TCCSS: Producers' reported exports from Japan, by destination market and period

Quantity in short tons; value in 1,000 dollars

Destination market	Measure	2021	2022	2023
United States	Quantity	***	***	***
Canada	Quantity	***	***	***
Mexico	Quantity	***	***	***
European Union	Quantity	***	***	***
Asia	Quantity	***	***	***
All other destination markets	Quantity	***	***	***
Non-U.S. destination markets	Quantity	***	***	***
All destination markets	Quantity	***	***	***
United States	Value	***	***	***
Canada	Value	***	***	***
Mexico	Value	***	***	***
European Union	Value	***	***	***
Asia	Value	***	***	***
All other destination markets	Value	***	***	***
Non-U.S. destination markets	Value	***	***	***
All destination markets	Value	***	***	***

Table continued.

Table IV-16 Continued
TCCSS: Producers' exports from Japan, by destination market and period

Unit values in dollars per short ton; shares and ratios in percent

Destination market	Measure	2021	2022	2023
United States	Unit value	***	***	***
Canada	Unit value	***	***	***
Mexico	Unit value	***	***	***
European Union	Unit value	***	***	***
Asia	Unit value	***	***	***
All other destination markets	Unit value	***	***	***
Non-U.S. destination markets	Unit value	***	***	***
All destination markets	Unit value	***	***	***
United States	Share of quantity	***	***	***
Canada	Share of quantity	***	***	***
Mexico	Share of quantity	***	***	***
European Union	Share of quantity	***	***	***
Asia	Share of quantity	***	***	***
All other destination markets	Share of quantity	***	***	***
Non-U.S. destination markets	Share of quantity	***	***	***
All destination markets	Share of quantity	***	***	***
United States	Ratio	***	***	***
Canada	Ratio	***	***	***
Mexico	Ratio	***	***	***
European Union	Ratio	***	***	***
Asia	Ratio	***	***	***
All other destination markets	Ratio	***	***	***
Non-U.S. destination markets	Ratio	***	***	***
All destination markets	Ratio	***	***	***

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as “---“. Ratios represent the portion of the foreign producers' total shipments.

Alternative products

*** reported production of excluded tin mill products and/or other out-of-scope merchandise on the same equipment and machinery used to produce TCCSS (table IV-17).[28] In terms of excluded tin mill products, *** reported production of laminated tin-free steel.[29] *** reported production of other products. ***.

During 2021-23, production of all out-of-scope products declined by *** percent. However, as TCCSS production also declined, the share of all out-of-scope production to total production remained stable, ranging between *** percent (in 2023) and *** percent (in 2022).

Table IV-17
TCCSS: Producers' in Japan overall production on the same equipment as in-scope production, by period

Quantity in short tons; share in percent

Product type	Measure	2021	2022	2023
TCCSS	Quantity	***	***	***
Excluded tin mill products	Quantity	***	***	***
Other products	Quantity	***	***	***
All out-of-scope products	Quantity	***	***	***
All products	Quantity	***	***	***
TCCSS	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 "---".

[28] For more information and a definition of excluded tin mill products, see the "The subject merchandise" section of Part I of this report.

[29] *** reported prioritizing production of laminated tin-free steel. *** foreign producer questionnaire at II-3d and II-11; *** foreign producer questionnaire at I-7 and II-4. *** notes that can manufacturers have started to shift towards use of laminated steel as it is considered a safer and more environmentally friendly alternative to TCCSS. *** foreign producer questionnaire at II-18.

Foreign producers' operations on excluded tin mill products

As noted above, *** produce excluded tin mill products on the same equipment and machinery used to produce TCCSS. Table IV-18 presents data on their excluded tin mill products operations. During 2021-23, capacity and production of excluded tin mill products deceased by *** percent and *** percent, respectively. Capacity utilization also decreased from *** percent in 2021 to *** percent in 2023.

Exports accounted for the largest share of total shipments of excluded tin mill products, ranging between *** percent (in 2023) and *** percent (in 2021). Exports of tin mill products to the United States ranged between *** percent (in 2023) and *** percent (in 2022). During 2021-23, exports of excluded tin mill products to the United States decreased by *** percent from *** short tons in 2021 to *** short tons in 2023.

Table IV-18
Excluded tin mill products: Foreign producers' production and shipments of out-of-scope excluded tin mill products, by source and period

Quantity in short tons; share in percent

Item	Measure	2021	2022	2023
Capacity	Quantity	***	***	***
Production	Quantity	***	***	***
Internal consumption or transfers	Quantity	***	***	***
Commercial shipments in home market	Quantity	***	***	***
Exports to the U.S.	Quantity	***	***	***
Exports to all markets except the U.S.	Quantity	***	***	***
Export shipments	Quantity	***	***	***
Total shipments	Quantity	***	***	***
Capacity utilization	Share of quantity	***	***	***
Internal consumption or transfers	Share of quantity	***	***	***
Commercial shipments in home market	Share of quantity	***	***	***
Exports to the U.S.	Share of quantity	***	***	***
Exports to all markets except the U.S.	Share of quantity	***	***	***
Export shipments	Share of quantity	***	***	***
Total shipments	Share of quantity	***	***	***

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

Exports

According to the Global Trade Atlas ("GTA"), the leading export market destinations for TCCSS from Japan are Mexico and the Philippines (table IV-19). In 2023, Mexico was the top export market destination for TCCSS from Japan, accounting for 30.9 percent of exports by quantity, followed by the Philippines, accounting for 16.0 percent. During 2021–23, Japan exports to the United States did not exceed 3,222 short tons; they were 213 short tons in 2023, representing less than 0.05 percent of Japan's total exports.

Table IV-19
TCCSS: Exports from Japan, by destination market and period

Quantity in short tons; value in 1,000 dollars

Destination market	Measure	2021	2022	2023
United States	Quantity	3,222	276	213
Mexico	Quantity	188,121	179,044	179,520
Philippines	Quantity	131,189	141,462	92,764
Peru	Quantity	51,321	42,802	40,049
Indonesia	Quantity	32,912	21,925	34,129
Brazil	Quantity	37,981	30,525	33,640
India	Quantity	26,221	28,081	30,393
Saudi Arabia	Quantity	29,381	19,028	18,751
United Arab Emirates	Quantity	17,395	18,706	18,405
All other destination markets	Quantity	247,949	174,956	132,659
All destination markets	Quantity	765,692	656,805	580,523
United States	Value	5,051	654	374
Mexico	Value	177,703	251,189	189,706
Philippines	Value	149,577	207,579	112,725
Peru	Value	48,911	69,938	50,218
Indonesia	Value	35,824	30,788	35,058
Brazil	Value	34,770	41,610	36,238
India	Value	18,946	21,654	18,502
Saudi Arabia	Value	29,683	30,599	17,148
United Arab Emirates	Value	20,225	28,054	17,623
All other destination markets	Value	251,278	251,746	138,429
All destination markets	Value	771,966	933,811	616,020

Table continued.

Table IV-19 Continued
TCCSS: Exports from Japan, by destination market and period

Unit value in dollars per short ton; share in percent

Destination market	Measure	2021	2022	2023
United States	Unit value	1,568	2,370	1,756
Mexico	Unit value	945	1,403	1,057
Philippines	Unit value	1,140	1,467	1,215
Peru	Unit value	953	1,634	1,254
Indonesia	Unit value	1,088	1,404	1,027
Brazil	Unit value	915	1,363	1,077
India	Unit value	723	771	609
Saudi Arabia	Unit value	1,010	1,608	915
United Arab Emirates	Unit value	1,163	1,500	957
All other destination markets	Unit value	1,013	1,439	1,043
All destination markets	Unit value	1,008	1,422	1,061
United States	Share of quantity	0.4	0.0	0.0
Mexico	Share of quantity	24.6	27.3	30.9
Philippines	Share of quantity	17.1	21.5	16.0
Peru	Share of quantity	6.7	6.5	6.9
Indonesia	Share of quantity	4.3	3.3	5.9
Brazil	Share of quantity	5.0	4.6	5.8
India	Share of quantity	3.4	4.3	5.2
Saudi Arabia	Share of quantity	3.8	2.9	3.2
United Arab Emirates	Share of quantity	2.3	2.8	3.2
All other destination markets	Share of quantity	32.4	26.6	22.9
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 Suite database, accessed April 17, 2024.

Note: Data presented in the table may be overstated as HS subheadings 7210.11, 7210.12, 7210.50, and 7212.10 contain excluded tin mill products.

Note: These data do not include HS subheadings 7212.50, 7225.99, and 7226.99 as they are believed to contain a large share of products outside the scope of this proceeding.

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. United States is shown at the top, all remaining top export destinations shown in descending order of 2023 data.

Third-country trade actions

There have been several safeguard and antidumping duty ("AD") actions in third-country markets on tin mill products, including TCCSS, originating in Japan. These proceedings are summarized table IV-20.

Table IV-20
Tin mill products: Third-country trade actions

Authority	Subject products	Actions and effective dates
European Union ("EU")	Certain steel mill products, including TCCSS, from certain trade partners including Japan.	February 2, 2019— The European Commission ("EC") imposed safeguard measures on EU steel imports from 37 trade partners, including Japan, for three years, effective July 19, 2018, through June 30, 2021. Steel imports classifiable in 26 product categories were subject to annual tariff rate quotas ("TRQs") based on historical import levels for each product category. For each category, import volumes within the TRQ levels entered free of additional duty but further imports were subject to an additional duty of 25 percent ad valorem.
EU	Certain steel mill products, including TCCSS, from certain trade partners including Japan.	June 10, 2021— After completing the scheduled reviews, the EC extended the safeguard measures on EU steel imports for another three years, effective July 1, 2021, through June 30, 2024.
EU	Certain steel mill products, including TCCSS, from certain trade partners including Japan.	June 2, 2023— After completing a review to determine whether, based on the circumstances at that time, the EC reached a determination not to terminate the extended safeguard measures on EU steel imports a year earlier than scheduled, by June 30, 2023.
India	Coated or plated tin mill flat-rolled steel products, including TCCSS, from the EU, Japan, South Korea, and the United States.	June 17, 2020— AD duties recommended for publication in the Gazette of India Extraordinary, with final rates of "nil" per metric ton for Nippon Steel and $222 per metric ton ($201 per short ton) for all other Japanese producers, for five years.
India	Coated or plated tin mill flat-rolled steel products, including TCCSS, from the EU, Japan, South Korea, and the United States.	November 20, 2020— AD investigation terminated without imposition of duties.
United Kingdom ("UK")	Certain steel mill products, including TCCSS, from certain trade partners including Japan.	May 21, 2021— The UK Trade Remedies Investigations Directorate ("TRID") reached a preliminary determination finding of "…serious injury or threat thereof caused by increased imports to the domestic industry producing certain steel products" for the UK Secretary of State for International Trade to reach a final determination whether to extend the safeguard measures on UK steel imports.
UK	Certain steel mill products, including TCCSS, from certain trade partners including Japan.	June 30, 2022— The UK Secretary of State for International Trade announced extension of safeguard measures on UK imports of five categories of steel mill products, including tin mill products, for two more years, effective July 1, 2022, through June 30, 2024.

Table continued.

Table IV-20 Continued
Tin mill products: Third-country trade actions

Source: Global Trade Alert, "EU: Extension of Definitive Safeguard Measure on Imports of Steel Products," Intervention 61213, June 19, 2018, https://www.globaltradealert.org/intervention/61213/safeguard/eu-extension-of-definitive-safeguard-measure-on-imports-of-steel-products, retrieved July 14, 2023;
EC, "Case No. Safe009: Commission Implementing Regulation (EU) 2019/159 of 31 January 2019," Official Journal of the European Union, February 1, 2019, pp. L 31/27–L 31/74, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R0159&from=EN;
EC, "Commission Implementing Regulation 2021/1029 of 24 June 2021, Amending Commission Implementing Regulation (EU) 2019/159 to Prolong the Safeguard Measure on Imports of Certain Steel Products," Official Journal of the European Union, June 25, 2021, pp. L 225 1/1–L 225 1/42, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32021R1029&from=EN;
EC, "Commission Implementing Regulation (EU) 2022/978 of 23 June 2022, Amending Implementing Regulation (EU) 2019/159 Imposing a Definitive Safeguard Measure on Imports of Certain Steel Products," C/2022/4172, EUR-Lex document No. 32022R0978, Official Journal of the European Union, June 24, 2022, pp. L 167/58–L 167/87, https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32022R0978&qid=1691166158703;
World Trade Organization ("WTO"), Committee on Safeguards, "Notification Under Article 12.1(B) of the WTO Agreement on Safeguards: European Union," G/SG/N/8/EU/1/Suppl.2#G/SG/N/10/EU/1/Suppl.11#G/SG/N/11/EU/1/Suppl.8, June 11, 2021, https://docs.wto.org/dol2fe/Pages/FE_Search/FE_S_S009-DP.aspx?language=E&CatalogueIdList=274749,274694,271405,269335,267942,265019,264887,264057,262911,260639&CurrentCatalogueIdIndex=1&FullTextHash=&HasEnglishRecord=True&HasFrenchRecord=True&HasSpanishRecord=True;
WTO, Committee on Safeguards, "Notification Under Article 12.1(B) of the WTO Agreement on Safeguards: European Union," G/SG/N/8/EU/1/Suppl.3#G/SG/N/10/EU/1/Suppl.17#G/SG/N/11/EU/1/Suppl.11, June 2, 2023, https://docs.wto.org/dol2fe/Pages/FE_Search/FE_S_S009-DP.aspx?language=E&CatalogueIdList=294981,294799,291265,290125,290075,284953,283593,283230,283175,279712&CurrentCatalogueIdIndex=1&FullTextHash=&HasEnglishRecord=True&HasFrenchRecord=True&HasSpanishRecord=True;
Global Trade Alert, "India: Initiation of Antidumping Investigation on Imports of Certain Tin Mill Flat-rolled Steel Products from the European Union, Japan, the United States and the Republic of Korea," Intervention 37715, June 28, 2019, https://www.globaltradealert.org/state-act/37715/india-initiation-of-antidumping-investigation-on-imports-of-certain-tin-mill-flat-rolled-steel-products-from-the-european-union-japan-the-united-states-and-the-republic-of-korea;
Government of India, Ministry of Commerce and Industry, Department of Commerce, Directorate General of Trade Remedies, "Final Findings in Anti-dumping Investigation Concerning Imports of Coated/Plated Tin Mill Flat Rolled Steel Products originating in or exported from the European Union, Japan, USA and Korea RP," File No. 6/9/2019-DGTR, June 17, 2020, https://www.dgtr.gov.in/sites/default/files/NCV%20Final%20Findings.pdf;
Government of India, Ministry of Commerce and Industry, Department of Commerce, Directorate General of Trade Remedies, "Coated/Plated Tin Mill Flat Rolled Steel Products originating in or exported from the European Union, Japan, USA and Korea RP," November 27, 2020, https://www.dgtr.gov.in/anti-dumping-cases/coatedplated-tin-mill-flat-rolled-steel-products-originating-or-exported-european;
WTO, Committee on Anti-Dumping Practices, "Semi-Annual Report Under Article l6.4 of the WTO Antidumping Agreement: India," G/ADP/N/350/IND/Rev.1, April 26, 2021, https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/G/ADP/N350INDR1.pdf&Open=True;

Table continued.

Table IV-20 Continued
Tin mill products: Third-country trade actions

Source: WTO, Committee on Safeguards, "Notification Under Article 12.1(B) of the WTO Agreement on Safeguards: Great Britain," G/SG/N/8/GBR/1/Suppl.1#G/SG/N/10/GBR/1#G/SG/N/11/GBR/1, June 11, 2021, https://docs.wto.org/dol2fe/Pages/FE_Search/FE_S_S009-DP.aspx?language=E&CatalogueIdList=275202,274695,274155,267168,265761,261849,261850,260999,260998,260997&CurrentCatalogueIdIndex=1&FullTextHash=&HasEnglishRecord=True&HasFrenchRecord=True&HasSpanishRecord=True;
Steel Orbis, "UK Extends Safeguard Measures, Suspends Measure on Ukraine Imports," June 30, 2022, https://www.steelorbis.com/steel-news/latest-news/uk-extends-steel-safeguard-measures-suspends-measure-on-ukrainian-imports-1250630.htm.

Note: The United Kingdom ("UK") officially withdrew its membership from the EU on January 31, 2020. Under the Withdrawal Agreement, the UK remained a member of the EU Single Market and the EU Customs Union, and EU law continued to apply in the UK until the end of the transition period, January 31, 2021. EC, "Agreement on the Withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community," Official Journal of the European Union, January 31, 2020, L 29/7–L 29/187, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:12020W/TXT; EC, "The EU-UK Withdrawal Agreement," no date, https://commission.europa.eu/strategy-and-policy/relations-non-eu-countries/relations-united-kingdom/eu-uk-withdrawal-agreement_en, retrieved August 3, 2023; EC, "Questions and Answers on the United Kingdom's withdrawal from the European Union on 31 January 2020," press release, January 24, 2020, https://ec.europa.eu/commission/presscorner/detail/en/qanda_20_104.

Global market

Global exports

Table IV-21 presents global export data for TCCSS by source in descending order of quantity for 2023. China is the world's largest exporter, accounting for 29.8 percent, followed by Germany at 14.5 percent of the total for 2023. As the third largest exporter, Japan accounted for 8.9 percent of the global total. By contrast, the United States accounted for 1.7 percent in that year.

Table IV-21
TCCSS: Quantity of global exports by country and period

Quantity in short tons; value in 1,000 dollars

Exporting country	Measure	2021	2022	2023
United States	Quantity	102,727	116,915	113,584
Japan	Quantity	765,692	656,805	580,522
China	Quantity	1,864,448	2,362,215	1,932,944
Germany	Quantity	980,023	919,995	939,884
Netherlands	Quantity	714,184	655,748	529,127
South Korea	Quantity	467,967	457,936	495,121
Slovakia	Quantity	459,758	421,832	308,291
Canada	Quantity	255,649	294,239	234,484
France	Quantity	387,816	359,914	191,318
Belgium	Quantity	171,712	175,335	190,956
Taiwan	Quantity	197,162	177,676	147,038
Spain	Quantity	263,355	210,234	135,937
All other exporters	Quantity	997,653	946,851	696,265
All reporting exporters	Quantity	7,628,145	7,755,694	6,495,474
United States	Value	92,168	129,056	107,861
Japan	Value	771,966	933,811	616,020
China	Value	2,040,241	2,979,438	1,831,494
Germany	Value	944,041	1,471,228	1,368,586
Netherlands	Value	759,660	1,053,511	820,748
South Korea	Value	538,161	694,446	573,126
Slovakia	Value	482,891	641,951	426,215
Canada	Value	289,309	474,807	418,269
France	Value	391,020	526,667	269,360
Belgium	Value	169,552	236,659	233,522
Taiwan	Value	220,558	252,933	154,636
Spain	Value	261,898	307,873	198,729
All other exporters	Value	1,133,422	1,375,494	844,748
All reporting exporters	Value	8,094,887	11,077,872	7,863,314

Table continued.

Table IV-21 Continued
TCCSS: Quantity of global exports by country and period

Unit value in dollars per short ton; share in percent

Exporting country	Measure	2021	2022	2023
United States	Unit value	897	1,104	950
Japan	Unit value	1,008	1,422	1,061
China	Unit value	1,094	1,261	948
Germany	Unit value	963	1,599	1,456
Netherlands	Unit value	1,064	1,607	1,551
South Korea	Unit value	1,150	1,516	1,158
Slovakia	Unit value	1,050	1,522	1,383
Canada	Unit value	1,132	1,614	1,784
France	Unit value	1,008	1,463	1,408
Belgium	Unit value	987	1,350	1,223
Taiwan	Unit value	1,119	1,424	1,052
Spain	Unit value	994	1,464	1,462
All other exporters	Unit value	1,136	1,453	1,213
All reporting exporters	Unit value	1,061	1,428	1,211
United States	Share of quantity	1.3	1.5	1.7
Japan	Share of quantity	10.0	8.5	8.9
China	Share of quantity	24.4	30.5	29.8
Germany	Share of quantity	12.8	11.9	14.5
Netherlands	Share of quantity	9.4	8.5	8.1
South Korea	Share of quantity	6.1	5.9	7.6
Slovakia	Share of quantity	6.0	5.4	4.7
Canada	Share of quantity	3.4	3.8	3.6
France	Share of quantity	5.1	4.6	2.9
Belgium	Share of quantity	2.3	2.3	2.9
Taiwan	Share of quantity	2.6	2.3	2.3
Spain	Share of quantity	3.5	2.7	2.1
All other exporters	Share of quantity	13.1	12.2	10.7
All reporting exporters	Share of quantity	100.0	100.0	100.0

Source: Official exports statistics under HS subheadings 7210.11, 7210.12, 7210.50, 7212.10 as reported by various national statistical authorities in the Global Trade Atlas Suite database, accessed April 17, 2024.

Note: Data presented in the table may be overstated as HS subheadings 7210.11, 7210.12, 7210.50, and 7212.10 contain excluded tin mill products.

Note: These data do not include HS subheadings 7212.50, 7225.99, and 7226.99 as they are believed to contain a large share of products outside the scope of this proceeding.

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

Note: Chile reported its data in kilograms, and this was converted to short tons. United States is shown at the top followed by Japan, all remaining top exporting countries in descending order of 2023 data.

Global imports

Table IV-22 presents global import data for TCCSS by market in descending order of quantity for 2023. The United States is the world's largest importer, accounting for 17.9 percent, followed by Italy for 13.1 percent and Mexico for 5.0 percent of the total that year.[30]

Table IV-22
Tin and chromium-coated steel sheet: Global imports, by reporting country and by period

Quantity in short tons; value in 1,000 dollars

Importing country	Measure	2021	2022	2023
United States	Quantity	1,207,718	1,466,361	1,066,794
Japan	Quantity	25,675	22,347	25,527
Italy	Quantity	825,508	968,030	778,380
Mexico	Quantity	322,549	409,908	299,999
Spain	Quantity	193,908	195,137	261,119
Philippines	Quantity	292,424	312,423	232,687
Thailand	Quantity	310,590	244,808	232,429
Belgium	Quantity	135,059	199,094	231,982
France	Quantity	209,605	204,790	214,523
Netherlands	Quantity	213,951	204,862	178,757
Germany	Quantity	204,623	234,234	177,065
Indonesia	Quantity	193,932	203,675	173,276
All other importers	Quantity	3,406,729	2,937,132	2,076,593
All reporting importers	Quantity	7,542,270	7,602,801	5,949,130

Table continued.

[30] Mexico's imports of TCCSS in 2023 declined by 109,908 short tons or by 26.8 percent from the prior year's level, despite the closure of the Altos Hornos de México S.A. ("AMHSA") flat-rolled steel facility located in Monclova, Coahuila, since late-November 2022. Rye Druzin, "Ahmsa Closure in Mexico Squeezes US Steel Market," Argus Media, January 19, 2023, https://www.argusmedia.com/en/news-and-insights/latest-market-news/2411196-ahmsa-closure-in-mexico-squeezes-us-steel-market; Global Energy Monitor ("GEM") Wiki, "Altos Hornos de Mexico S.A. (AHMSA) Steel Plant," April 11, 2024, https://www.gem.wiki/Altos_Hornos_De_Mexico_S.A._(AHMSA)_steel_plant.

Table IV-22 Continued
Tin and chromium-coated steel sheet: Global imports, by reporting country and by period

Quantity in short tons; value in 1,000 dollars

Importing country	Measure	2021	2022	2023
United States	Value	1,217,718	2,398,415	1,693,886
Japan	Value	23,151	21,819	27,726
Italy	Value	836,326	1,401,187	1,012,763
Mexico	Value	359,422	653,586	371,145
Spain	Value	204,933	291,223	350,271
Philippines	Value	297,806	412,901	241,856
Thailand	Value	333,343	325,257	243,109
Belgium	Value	118,792	252,483	239,299
France	Value	225,433	332,505	323,889
Netherlands	Value	233,892	275,885	241,859
Germany	Value	213,559	338,978	246,403
Indonesia	Value	221,331	292,501	175,483
All other importers	Value	3,727,417	4,439,293	2,698,931
All reporting importers	Value	8,013,123	11,436,033	7,866,621
United States	Unit value	1,008	1,636	1,588
Japan	Unit value	902	976	1,086
Italy	Unit value	1,013	1,447	1,301
Mexico	Unit value	1,114	1,594	1,237
Spain	Unit value	1,057	1,492	1,341
Philippines	Unit value	1,018	1,322	1,039
Thailand	Unit value	1,073	1,329	1,046
Belgium	Unit value	880	1,268	1,032
France	Unit value	1,076	1,624	1,510
Netherlands	Unit value	1,093	1,347	1,353
Germany	Unit value	1,044	1,447	1,392
Indonesia	Unit value	1,141	1,436	1,013
All other importers	Unit value	1,094	1,511	1,300
All reporting importers	Unit value	1,062	1,504	1,322

Table continued.

Table IV-22 Continued
Tin and chromium-coated steel sheet: Global imports, by reporting country and by period

Unit values in dollars per short ton; shares in percent

Importing country	Measure	2021	2022	2023
United States	Share of quantity	16.0	19.3	17.9
Japan	Share of quantity	0.3	0.3	0.4
Italy	Share of quantity	10.9	12.7	13.1
Mexico	Share of quantity	4.3	5.4	5.0
Spain	Share of quantity	2.6	2.6	4.4
Philippines	Share of quantity	3.9	4.1	3.9
Thailand	Share of quantity	4.1	3.2	3.9
Belgium	Share of quantity	1.8	2.6	3.9
France	Share of quantity	2.8	2.7	3.6
Netherlands	Share of quantity	2.8	2.7	3.0
Germany	Share of quantity	2.7	3.1	3.0
Indonesia	Share of quantity	2.6	2.7	2.9
All other importers	Share of quantity	45.2	38.6	34.9
All reporting importers	Share of quantity	100.0	100.0	100.0

Source: Official exports statistics under HS subheadings 7210.11, 7210.12, 7210.50, 7212.10 as reported by various national statistical authorities in the Global Trade Atlas Suite database, accessed April 22, 2024.

Note: Data presented in the table may be overstated as HS subheadings 7210.11, 7210.12, 7210.50, and 7212.10 contain excluded tin mill products.

Note: These data do not include HS subheadings 7212.50, 7225.99, and 7226.99 as they are believed to contain a large share of products outside the scope of this proceeding.

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

Note: Chile reported its data in kilograms, and this was converted to short tons. United States is shown at the top followed by Japan, all remaining top exporting countries in descending order of 2023 data.

Prices in the U.S. market compared to non-U.S. markets

Two U.S. producers and five importers reported that they were aware of TCCSS prices in non-U.S. markets. Firms that were aware of pricing in other markets were asked to compare such prices to those in the U.S. market. All responding firms reported that TCCSS prices in the United States were higher than prices in other markets. U.S. producer *** stated that prices for flat-rolled products, including TCCSS, tend to be higher in the United States than in other markets. Importer *** reported that U.S. market prices are 25 to 40 percent higher than prices in other markets. Importer *** reported that U.S. market prices for TCCSS have been 10 to 30 percent above prices in Europe since at least 2018. Purchasers providing testimony at the Commission hearing also reported that U.S. tin plate price is 30 percent higher than the European price and that the United States has the highest price for tin plate.[31]

Foreign producers were also asked to compare market prices of TCCSS in the Japanese home market, the United States, and third-country markets. Responding firms reported that they did not have enough information on TCCSS prices in the U.S. market to provide a comparison. Two foreign producers reported that TCCSS prices in Japan tend to be relatively high because of quality requirements by customers in Japan and small order sizes.

[31] Hearing transcript, pp. 163-164 (Arena), 164 (Dietrich), and 165 (Hughes).

Part V: Pricing data

Factors affecting prices

Raw material costs

U.S. producers' raw material costs increased as a share of cost of goods sold from *** percent in 2021 to *** percent in 2022 before decreasing to *** percent in 2023. The cost of steel, rather than tin or chromium, is the single largest raw material cost in producing TCCSS. Prices for cold-rolled coil (in particular, tin mill black plate) and hot-rolled coil (used to produce tin mill black plate) increased rapidly from January 2021 through September 2021, declined irregularly through the end of 2022, then fluctuated and partially recovered over the course of 2023 (figure V-1 and table V-1). Hot-rolled coil prices were modestly lower in December 2023 than in January 2021 and cold-rolled coil prices were modestly higher.

Figure V-1
Raw materials: Hot-rolled and cold-rolled coil, monthly average prices, 2021-23

* * * * * * *

Source: ***, retrieved February 20, 2024.

Table V-1
Raw materials: Hot-rolled and cold-rolled coil, monthly average prices, 2021-23

Prices in dollars per short ton

Period	Hot-rolled coil	Cold-rolled coil
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	***	***
January 2023	***	***
February 2023	***	***
March 2023	***	***
April 2023	***	***
May 2023	***	***
June 2023	***	***
July 2023	***	***
August 2023	***	***
September 2023	***	***
October 2023	***	***
November 2023	***	***
December 2023	***	***

Source: ***, retrieved February 20, 2024.

All three U.S. producers and most responding importers reported that raw material prices increased from 2017 to 2020. Most importers and one U.S. producer reported that raw material prices increased from 2021 to 2023 but the other two U.S. producers reported that raw material prices decreased from 2021 to 2023.[1] Responses were mixed regarding anticipated prices of raw materials. Two U.S. producers anticipated an increase and one anticipated a decrease in raw material prices. Importers' responses were nearly evenly divided between increase, no change, and decrease. U.S. producer *** reported that since annual contracts for TCCSS do not have an adjustment for raw materials costs, changes in raw material prices did not directly impact its sales prices for TCCSS.

Fourteen of 22 purchasers reported being familiar with TCCSS's raw material costs and 10 of 18 purchasers reported that raw materials affect contract prices. Purchasers reported that raw material prices are one factor in determining TCCSS prices but other factors such as other input costs and supply and demand for TCCSS also influence pricing. Purchaser *** reported, "Tinplate is a unique product that often does not correlate well with upstream inputs." Purchasers *** and *** reported that TCCSS price increases during periods when hot-rolled steel prices increased were not matched by commensurate TCCSS price decreases when hot-rolled steel prices decreased. Purchaser *** stated that price increases for TCCSS have been much higher than price increases for raw materials.

Transportation costs to the U.S. market

Transportation costs for TCCSS shipped from Japan to the United States averaged 9.7 percent during 2023. These estimates were derived from official Commerce import data and represent the transportation and other charges on imports.[2]

U.S. inland transportation costs

All three responding U.S. producers and 15 of 18 importers reported that they typically arrange transportation to their customers. U.S. producers reported that their U.S. inland transportation costs ranged from 2 to 3 percent while responding importers reported costs of 4 to 10 percent.

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[1] Most firms reported that raw material prices fluctuated up or down rather than steadily increasing or decreasing.

[2] The estimated transportation costs were obtained by subtracting the customs value from the c.i.f. value of the imports for 2023 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, and 7212.10.0000.

Pricing practices

Pricing methods

U.S. producers and importers reported setting prices using both transaction-by-transaction negotiations and contracts, although most U.S. producers' sales were on a contract basis (table V-2).

Table V-2
TCCSS: Count of U.S. producers' and importers' reported price setting methods

Method	U.S. producers	Importers
Transaction-by-transaction	2	10
Contract	3	12
Set price list	0	2
Other	0	1
Responding firms	3	18

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

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

U.S. producers reported selling most of their TCCSS under annual contracts (table V-3).[3] ***.[4] Twenty-one of 22 purchasers reported that their purchases involve negotiations. Purchaser *** reported that its negotiations of annual contracts occur during the fourth quarter for the following year. Similarly, purchaser *** reported that it issues an annual Request for Pricing (RFP) based on the expected products and demand forecasted for the following year, and that negotiations begin in September and are finalized by December/early January. All three U.S. producers reported that their annual contracts fix prices, specify a range for quantities, are not indexed to raw material prices, and that prices are not re-negotiable during the contract period; however,

[3] ***.

[4] TCCSS imports in general tend to be sold via annual contracts. In the recent tin mill products final investigations, more than three quarter of sales of imports from subject countries were on an annual contract basis. *Tin Mill Products from Canada, China, Germany, and South Korea*, Inv. Nos. 701-TA-685 and 731-TA-1599-1601, 1603 (Final), USITC Publication 5492, February 2024, p. V-6.

U.S. producer *** reported that prices are subject to renegotiation during the course of the contract "whe{nev}er foreign offers are aggressively low."[5]

Table V-3
TCCSS: U.S. producers' and subject importers' shares of commercial U.S. shipments by type of sale, 2023

Share in percent

Type of sale	U.S. producers	Subject importers
Long-term contracts	***	***
Annual contracts	***	***
Short-term contracts	***	***
Spot sales	***	***
Total	100.0	100.0

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

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

Responding Japanese producers reported that most of their TCCSS sales were on a spot or short-term contract basis. Spot sales comprised *** percent of their sales to the U.S. market in 2023. For sales to other export markets, *** percent were on a short-term contract basis and *** percent were spot sales, with the remainder annual contracts. Sales to the Japanese home market were more evenly split among long-term contracts (***), spot sales (*** percent), and short-term contracts (*** percent).

Eight of 22 purchasers reported that they purchase TCCSS monthly, five purchase weekly, two purchase daily, two purchase quarterly, two purchase annually; and six reported other purchasing frequencies. Most purchasers contact between 1 and 5 suppliers before making a purchase, although four purchasers reported contacting a range that contained 10 or more suppliers.

[5] U.S. Steel stated contract "negotiations generally begin in the third quarter of the year prior to the calendar year contract period. We rely on the annual contracts to establish an Annual Operating Plan, or AOP, for our tin mill production equipment and to secure raw materials, such as tin coating metal." Hearing transcript, p. 20 (Kopf).

Sales terms and discounts

All three U.S. producers typically quote prices on an f.o.b. basis. Four importers reported quoting prices on a delivered basis and two reported quoting prices on an f.o.b. basis.

*** reported not offering discounts, and *** discounts. Seventeen of 18 responding importers reported having no discount policy. One importer reported offering loyalty discounts and one reported no discount policy except payment terms discounts.

Price leadership

Half of the responding purchasers (11 of 22) named one or more firms as price leaders in the U.S. TCCSS market. All 11 purchasers reported that U.S. Steel was a price leader, three purchasers reported that Cleveland-Cliffs was a price leader, and one purchaser reported that ThyssenKrup Steel was a price leader. Several purchasers reported that U.S. Steel was the first supplier to establish a price for upcoming contracts. For example, *** reported, “Typically, negotiations with other potential suppliers do not even begin until after U.S. Steel indicates which products, at what volume and at what prices they will supply for the upcoming year.” One purchaser, ***, reported that U.S. Steel provides pricing in the fall during annual contract negotiations. One purchaser, ***, reported that Cleveland-Cliffs became the price leader in 2022 *** a take-it or leave-it offer, while another purchaser, ***, reported that Cleveland-Cliffs recently offered prices independent of U.S. Steel.

Price data

The Commission requested U.S. producers[6] and importers to provide quarterly data for the total quantity and f.o.b. value of the following TCCSS products shipped to unrelated U.S. customers during January 2021–December 2023.[7]

Product 1.-- Single reduced, electrolytic tinplate with base box weights of 75–95 lbs. inclusive and less than 41 inches in width, in coils.

Product 2.-- Double reduced, electrolytic tinplate with base box weights of 55–65 lbs. inclusive and less than 41 inches in width, in coils.

Product 3.-- Single reduced, electrolytic chromium-coated steel with base box weights of 65–80 lbs. inclusive and less than 41 inches in width, in coils.

Product 4.-- Double reduced, electrolytic chromium-coated steel with base box weights of 55–65 lbs. inclusive and less than 41 inches in width, in coils.

All three U.S. producers and one importer (***) provided usable pricing data for sales of four requested products, although not all firms reported pricing for all products for all quarters.[8] Pricing data reported by these firms accounted for *** percent of U.S. producers' U.S. shipments of TCCSS and *** percent of U.S. shipments of subject imports from Japan in 2023.[9]

Price data for products 1-4 are presented in tables V-4 to V-7 and figures V-2 to V-5.

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[6] As a part of its analysis, staff used data from *** questionnaire response on February 9, 2024, which covered both "prime" and "second" commercial shipments. On February 20, 2024, the producer provided an unsolicited revision to pricing data that comprised only "prime" commercial shipments. However, because the questionnaires in this proceeding make no such distinction, staff has continued to rely on the data from the initial submission to maintain consistency in reporting.

[7] The definitions for the four pricing products differ from those in the third review. *Tin- and Chromium-Coated Steel Sheet from Japan*, Inv. No. 731-TA-860 (Third Review), USITC Publication 4795, June 2018 ("Third review publication"), pp. V-3-4. The price items in the fourth review have been modified by the phrase "less than 41 inches in width" consistent with the price items included in the final phase of the Commission's investigation. *Tin Mill Products from Canada, China, Germany, and South Korea*, Investigation Nos. 701-TA-685 and 731-TA-1599-1601 and 1603 (Final).

[8] 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.

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

Table V-4
TCCSS: 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	Japan price	Japan quantity	Japan margin
2021 Q1	***	***	***	***	***
2021 Q2	***	***	***	***	***
2021 Q3	***	***	***	***	***
2021 Q4	***	***	***	***	***
2022 Q1	***	***	***	***	***
2022 Q2	***	***	***	***	***
2022 Q3	***	***	***	***	***
2022 Q4	***	***	***	***	***
2023 Q1	***	***	***	***	***
2023 Q2	***	***	***	***	***
2023 Q3	***	***	***	***	***
2023 Q4	***	***	***	***	***

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 and less than 41 inches in width, in coils.

Table V-5
TCCSS: 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	Japan price	Japan quantity	Japan margin
2021 Q1	***	***	***	***	***
2021 Q2	***	***	***	***	***
2021 Q3	***	***	***	***	***
2021 Q4	***	***	***	***	***
2022 Q1	***	***	***	***	***
2022 Q2	***	***	***	***	***
2022 Q3	***	***	***	***	***
2022 Q4	***	***	***	***	***
2023 Q1	***	***	***	***	***
2023 Q2	***	***	***	***	***
2023 Q3	***	***	***	***	***
2023 Q4	***	***	***	***	***

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 and less than 41 inches in width, in coils.

Table V-6
TCCSS: 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	Japan price	Japan quantity	Japan margin
2021 Q1	***	***	***	***	***
2021 Q2	***	***	***	***	***
2021 Q3	***	***	***	***	***
2021 Q4	***	***	***	***	***
2022 Q1	***	***	***	***	***
2022 Q2	***	***	***	***	***
2022 Q3	***	***	***	***	***
2022 Q4	***	***	***	***	***
2023 Q1	***	***	***	***	***
2023 Q2	***	***	***	***	***
2023 Q3	***	***	***	***	***
2023 Q4	***	***	***	***	***

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 and less than 41 inches in width, in coils. ***.

Table V-7
TCCSS: 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	Japan price	Japan quantity	Japan margin
2021 Q1	***	***	***	***	***
2021 Q2	***	***	***	***	***
2021 Q3	***	***	***	***	***
2021 Q4	***	***	***	***	***
2022 Q1	***	***	***	***	***
2022 Q2	***	***	***	***	***
2022 Q3	***	***	***	***	***
2022 Q4	***	***	***	***	***
2023 Q1	***	***	***	***	***
2023 Q2	***	***	***	***	***
2023 Q3	***	***	***	***	***
2023 Q4	***	***	***	***	***

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 and less than 41 inches in width, in coils. ***.

Figure V-2
TCCSS: Weighted-average 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 and less than 41 inches in width, in coils.

Figure V-3
TCCSS: Weighted-average 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 and less than 41 inches in width, in coils.

Figure V-4
TCCSS: Weighted-average 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 and less than 41 inches in width, in coils. ***.

Figure V-5
TCCSS: Weighted-average 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 and less than 41 inches in width, in coils. ***.

Price trends

Domestic prices increased overall during 2021 to 2023. Prices experienced large increases in 2022, with pricing products 1 to 3 reaching period highs in the third quarter of 2022 and product 4 reaching a period high in the fourth quarter of 2022. Prices declined somewhat in 2023 but remained well above 2021 prices. Table V-8 summarizes the price trends, by country and by product. As shown in the table, domestic price increases exceeded 50 percent for each of the pricing products during 2021-23.

Table V-8
TCCSS: Summary of price data, by product and source

Quantity in short tons, price in dollars per short ton

Product	Source	Number of quarters	Quantity	Low price	High price	First quarter price	Last quarter price	Change over period
Product 1	United States	12	***	***	***	***	***	***
Product 1	Japan	2	***	***	***	***	***	***
Product 2	United States	12	***	***	***	***	***	***
Product 2	Japan	2	***	***	***	***	***	***
Product 3	United States	12	***	***	***	***	***	***
Product 3	Japan	0	0	0	0	0	0	0
Product 4	United States	12	***	***	***	***	***	***
Product 4	Japan	0	0	0	0	0	0	0

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

Note: Percent change column is percentage change from the first quarter in 2021 to the last quarter in 2023.

Price comparisons[10]

As shown in table V-9, prices for TCCSS imported from Japan were higher than those for U.S.-produced product in the four instances for which data were reported. As discussed above, subject imports of TCCSS from Japan were available in very limited quantities sold on a spot basis.

Table V-9
TCCSS: Instances of underselling and overselling and the range and average of margins, by product

Quantity in short tons; margin in percent

Item	Type	Number of quarters	Quantity	Average margin	Minimum margin	Maximum margin
Product 1	Underselling	***	***	***	***	***
Product 2	Underselling	***	***	***	***	***
Product 3	Underselling	***	***	***	***	***
Product 4	Underselling	***	***	***	***	***
All products	Underselling	---	***	***	***	***
Product 1	Overselling	***	***	***	***	***
Product 2	Overselling	***	***	***	***	***
Product 3	Overselling	***	***	***	***	***
Product 4	Overselling	***	***	***	***	***
All products	Overselling	4	***	***	***	***

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

Note: These data include only quarters in which there is a comparison between the U.S. and subject product.

[10] In the original investigations prices were collected based on bid data. One or more of the final Japanese bids were below all U.S. bids in 45 instances; Japanese bids were within the range of all U.S. bids in 21 instances; and Japanese bids were above U.S. bids in 6 instances. In 9 instances there were no comparable U.S. final bids and in 10 instances there were initial Japanese bids but no final Japanese bids. In the second remand, the Commission looked at 51 bid comparisons. In these it reported 21 instances in which the Japanese bids were below all the U.S. bids. In 16 instances, the Japanese bids were within the range of all U.S. bids. In no instances were Japanese prices above all U.S. bids. In six instances, there were Japanese bids but no comparable U.S. bids, and in eight instances, there were initial Japanese bids but no final Japanese bids. *Tin- and Chromium-Coated Steel Sheet from Japan*, Inv. No. 731-TA-860 (Third Review), USITC Publication 4795, June 2018 ("Third review publication"), p. V-6.

In the first review, there were seven instances where subject price data could be compared to domestic data; in all seven instances subject import prices were above comparable domestic prices, and margins of overselling ranged from 6.6 to 28.4 percent. In the second and third reviews, there were no price comparisons available. *Tin- and Chromium-Coated Steel Sheet from Japan*, Inv. No. 731-TA-860 (Third Review), USITC Publication 4795, June 2018 ("Third review publication"), p. V-6.

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 35832, June 1, 2023	*Initiation of Five-Year (Sunset) Reviews*	https://www.govinfo.gov/content/pkg/FR-2023-06-01/pdf/2023-11680.pdf
88 FR 35920, June 1, 2023	*Tin- and Chromium-Coated Steel Sheet From Japan; Institution of a Five-Year Review*	https://www.govinfo.gov/content/pkg/FR-2023-06-01/pdf/2023-11465.pdf
88 FR 64464, September 19, 2023	*Tin- and Chromium-Coated Steel Sheet From Japan; Notice of Commission Determination To Conduct a Full Five-Year Review*	https://www.govinfo.gov/content/pkg/FR-2023-09-19/pdf/2023-20183.pdf
88 FR 69133, October 5, 2023	*Certain Tin Mill Products From Japan: Final Results of the Expedited Fourth Sunset Review of the Antidumping Duty Order*	https://www.govinfo.gov/content/pkg/FR-2023-10-05/pdf/2023-22127.pdf
88 FR 74209, October 30, 2023	*Tin- and Chromium-Coated Steel Sheet From Japan; Scheduling of a Full Five-Year Review*	https://www.govinfo.gov/content/pkg/FR-2023-10-30/pdf/2023-23887.pdf

APPENDIX B

LIST OF HEARING WITNESSES

CALENDAR OF PUBLIC HEARING

Those listed below appeared in the United States International Trade Commission's hearing:

Subject: Tin- and Chromium-Coated Steel Sheet from Japan

Inv. No.: 731-TA-860 (Fourth Review)

Date and Time: April 9, 2024 - 9:30 a.m.

Sessions were held in connection with this review in the Main Hearing Room (Room 101), 500 E Street, SW., Washington, DC.

OPENING REMARKS:

In Support of the Continuation (**Nicole Brunda**, Cassidy Levy Kent (USA) LLP)
In Opposition to the Continuation (**Yujin K. McNamara**, Akin Gump Strauss Hauer & Feld LLP)

In Support of the Continuation of the Antidumping Duty Order:

King & Spalding LLP
Washington, DC
on behalf of

Cleveland-Cliffs Inc. ("Cleveland-Cliffs")

Clifford T. Smith, Executive Vice President & President, Cleveland-Cliffs Steel, Cleveland-Cliffs

Gordon O'Neill, Senior Director, Demand Management & Commercial Strategy, Cleveland-Cliffs

Stephen P. Vaughn) – OF COUNSEL

In Support of the Continuation of the
Antidumping Duty Order (continued):

Cassidy Levy Kent (USA) LLP
Washington, DC
on behalf of

United States Steel Corporation ("U. S. Steel")

Robert Y. Kopf, Vice President – Sales and Marketing, U. S. Steel

Thomas M. Beline)
Mary Jane Alves)
) – OF CONSEL
Nicole Brunda)
Margaret E. Monday)

NON-PARTY IN SUPPORT OF CONTINUATION:

Schagrin Associates
Washington, DC
on behalf of

United Steel, Paper and Forestry, Rubber, Manufacturing, Energy,
Allied Industrial and Service Workers International Union ("USW")

Mark Glyptis, President, United Steelworkers Local 2911

Elizabeth J. Drake) – OF COUNSEL

In Opposition to the Continuation of the
Antidumping Duty Order:

Akin Gump Strauss Hauer & Feld LLP
Washington, DC
on behalf of

JFE Steel Corporation
Nippon Steel Corporation
Toyo Kohan Co., Ltd.
("Japanese Respondents")

Daniel Dietrich, Vice President of Procurement & Supply Chain,
Trivium Packaging USA Inc.

Thomas Hughes, Director of Metal Sourcing, Crown Cork and Seal USA Inc.

Tom Madrecki, Vice President of Campaigns and Special Projects,
Consumer Brands Association

Yujin K. McNamara)
Julia K. Eppard) – OF COUNSEL
Sydney L. Stringer)

Curtis, Mallet-Prevost, Colt & Mosle LLP
Washington, DC
on behalf of

Silgan Containers Manufacturing Corporation ("Silgan")

Mike Arena, Vice President of Logistics and Operational Support, Silgan

Daniel L. Porter)
) – OF COUNSEL
James C. Beaty)

REBUTTAL/CLOSING REMARKS:

In Support of the Continuation (**Thomas M. Beline**, Cassidy Levy Kent (USA) LLP)
In Opposition to the Continuation (**Yujin K. McNamara**, Akin Gump Strauss Hauer & Feld LLP)

APPENDIX C

SUMMARY DATA

Contents **Page**

Table C-1
TCCSS: 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			Period changes		
	Calendar year			Calendar year		
	2021	2022	2023	2021-23	2021-22	2022-23
U.S. consumption quantity:						
Amount	2,494,413	2,322,143	1,889,860	▼(24.2)	▼(6.9)	▼(18.6)
Producers' share (fn1)	***	***	***	▼***	▼***	▼***
Importers' share (fn1):						
Japan	***	***	***	▲***	▲***	▲***
Nonsubject sources	***	***	***	▲***	▲***	▲***
All import sources	***	***	***	▲***	▲***	▲***
U.S. consumption value:						
Amount	2,907,642	4,705,717	3,478,681	▲19.6	▲61.8	▼(26.1)
Producers' share (fn1)	***	***	***	▼***	▼***	▼***
Importers' share (fn1):						
Japan	***	***	***	▲***	▲***	▲***
Nonsubject sources	***	***	***	▲***	▲***	▲***
All import sources	***	***	***	▲***	▲***	▲***
U.S. importers' U.S. shipments of imports from:						
Japan:						
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':						
Practical capacity quantity	***	***	***	▼***	▼***	▼***
Production quantity	***	***	***	▼***	▼***	▼***
Capacity utilization (fn1)	***	***	***	▼***	▼***	▼***
U.S. shipments:						
Quantity	***	***	***	▼***	▼***	▼***
Value	***	***	***	▼***	▲***	▼***
Unit value	***	***	***	▲***	▲***	▼***
Export shipments:						
Quantity	***	***	***	▼***	▼***	▼***
Value	***	***	***	▲***	▲***	▲***
Unit value	***	***	***	▲***	▲***	▲***

Table continued.

Table C-1 Continued
TCCSS: 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			Period changes		
	Calendar year			Calendar year		
	2021	2022	2023	2021-23	2021-22	2022-23
U.S. producers': Continued						
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	***	***	***	▲***	▲***	▲***
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	***	***	***	▲***	▲***	▲***
Total assets	***	***	***	▼***	▲***	▼***

Source: Compiled from data submitted in response to Commission questionnaires. 508 compliant tables containing these data are contained in Parts I, III, and IV 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.

HISTORICAL SUMMARY DATA

FROM THE ORIGINAL INVESTIGATION AND SUBSEQUENT FULL FIVE-YEAR REVIEWS

Table C-1 TCCSS: Summary data concerning the U.S. market, 1997-99, January-March 1999, and January-March 2000

(Quantity=short tons, value=1,000 dollars, unit values, unit labor costs, and unit expenses are per short ton; period changes=percent, except where noted)

Item	Reported data			January-March		Period changes			
	1997	1998	1999	1999	2000	1997-99	1997-98	1998-99	Jan.-Mar. 1999-00
U.S. consumption quantity:									
Amount						-2.1	-5.1	3.2	-0.4
Producers' share (1)						-6.5	-2.3	-4.1	-2.7
Importers' share (1):									
Japan						3.9	1.8	2.0	1.3
Other sources						2.6	0.5	2.1	1.4
Total imports						6.5	2.3	4.1	2.7
U.S. consumption value:									
Amount						-7.0	-6.1	-1.0	-0.5
Producers' share (1)						-6.1	-2.4	-3.7	-2.5
Importers' share (1):									
Japan						3.6	1.8	1.9	1.1
Other sources						2.5	0.7	1.8	1.4
Total imports						6.1	2.4	3.7	2.5
U.S. shipments of imports from:									
Japan:									
Quantity	182,157	242,081	329,645	84,737	96,783	81.0	32.9	36.2	14.2
Value	120,997	154,488	196,185	51,165	57,153	62.1	27.7	27.0	11.7
Unit value	$664.25	$638.25	$595.14	$603.81	$590.53	-10.4	-3.9	-6.8	-2.2
Ending inventory quantity	634	4,425	11,741	11,114	13,812	1751.9	597.9	165.3	24.3
Other sources:									
Quantity						35.7	2.3	32.7	16.7
Value						27.8	3.2	23.8	17.2
Unit value						-5.9	0.8	-6.7	0.4
Ending inventory quantity						-7.1	-27.5	28.1	-2.3
All sources:									
Quantity						54.0	14.7	34.3	15.4
Value						42.3	13.5	25.3	14.3
Unit value						-7.6	-1.0	-6.7	-1.0
Ending inventory quantity						76.1	2.1	72.5	10.9
U.S. producers':									
Average capacity quantity	4,855,145	4,869,145	4,607,145	1,148,436	1,040,444	-5.1	0.3	-5.4	-9.4
Production quantity	3,728,441	3,425,572	3,433,592	854,816	849,362	-7.9	-8.1	0.2	-0.6
Capacity utilization (1)	76.8	70.4	74.5	74.4	81.6	-2.3	-6.4	4.2	7.2
U.S. shipments:									
Quantity	3,554,766	3,283,424	3,227,134	805,995	776,793	-9.2	-7.6	-1.7	-3.6
Value	2,192,160	2,003,321	1,898,063	476,447	459,860	-13.4	-8.6	-5.3	-3.5
Unit value	$616.68	$610.13	$588.16	$591.13	$592.00	-4.6	-1.1	-3.6	0.1
Export shipments:									
Quantity	186,510	194,999	247,485	45,372	64,498	32.7	4.6	26.9	42.2
Value	115,979	117,585	140,563	27,247	38,339	21.2	1.4	19.5	40.7
Unit value	$621.84	$603.00	$567.97	$600.52	$594.42	-8.7	-3.0	-5.8	-1.0
Ending inventory quantity	360,768	354,047	346,375	368,836	356,343	-4.0	-1.9	-2.2	-3.4
Inventories/total shipments (1)	9.6	10.2	10.0	10.8	10.6	0.3	0.5	-0.2	-0.2
Production workers	6,922	6,224	6,004	5,860	5,677	-13.3	-10.1	-3.5	-3.1
Hours worked (1,000s)	15,287	13,654	13,297	3,235	3,152	-13.0	-10.7	-2.6	-2.6
Wages paid ($1,000s)	380,470	346,345	344,320	77,628	81,988	-9.5	-9.0	-0.6	5.6
Hourly wages	$24.89	$25.37	$25.89	$24.00	$26.01	4.0	1.9	2.1	8.4
Productivity (tons per 1,000 hours)	243.9	250.9	258.2	264.2	269.5	5.9	2.9	2.9	2.0
Unit labor costs	$102.05	$101.11	$100.28	$90.81	$96.53	-1.7	-0.9	-0.8	6.3
Net sales:									
Quantity	3,742,829	3,476,048	3,472,054	849,241	838,184	-7.2	-7.1	-0.1	-1.3
Value	2,308,486	2,120,926	2,034,967	501,805	495,966	-11.8	-8.1	-4.1	-1.2
Unit value	$616.78	$610.15	$586.10	$590.89	$591.71	-5.0	-1.1	-3.9	0.1
Cost of goods sold (COGS)	2,224,570	2,075,245	2,061,471	505,980	483,880	-7.3	-6.7	-0.7	-4.4
Gross profit or (loss)	83,916	45,681	(26,504)	(4,175)	12,086	-131.6	-45.6	-158.0	-389.5
SG&A expenses	104,893	109,806	105,980	27,773	21,726	1.0	4.7	-3.5	-21.8
Operating income or (loss)	(20,977)	(64,125)	(132,484)	(31,948)	(9,640)	-531.6	-205.7	-106.6	-69.8
Capital expenditures	91,501	71,747	105,066	24,089	14,579	14.8	-21.6	46.4	-39.5
Unit COGS	$594.36	$597.01	$593.73	$595.80	$577.30	-0.1	0.4	-0.5	-3.1
Unit SG&A expenses	$28.03	$31.59	$30.52	$32.70	$25.92	8.9	12.7	-3.4	-20.7
Unit operating income or (loss)	($5.60)	($18.45)	($38.16)	($37.62)	($11.50)	580.8	229.2	106.8	-69.4
COGS/sales (1)	96.4	97.8	101.3	100.8	97.6	4.9	1.5	3.5	-3.3
Operating income or (loss)/ sales (1)	(0.9)	(3.0)	(6.5)	(6.4)	(1.9)	-5.6	-2.1	-3.5	4.4

(1) "Reported data" are in percent and "period changes" are in percentage points.

Note.--Financial data are reported on a fiscal year basis and may not necessarily be comparable to data reported on a calendar year basis. Because of rounding, figures may not add to the totals shown. Unit values and shares are calculated from the unrounded figures.

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

Table C-1
TCCSS: Summary data concerning the U.S. market, 2000-05

(Quantity=short tons, value=1,000 dollars, unit values, unit labor costs, and unit expenses are per short ton; period changes=percent except where noted)

	Reported data						Period changes					
Item	2000	2001	2002	2003	2004	2005	2000-05	2000-01	2001-02	2002-03	2003-04	2004-05
U.S. consumption quantity:												
Amount	3,721,766	3,246,151	3,362,793	3,217,877	3,422,955	3,150,528	-15.3	-12.8	3.6	-4.3	6.4	-8.0
Producers' share (1)	86.0	87.4	89.8	88.1	85.4	82.1	-3.9	1.4	2.4	-1.7	-2.7	-3.3
Importers' share (1):												
Japan	2.6	0.0	0.0	0.0	0.0	0.0	-2.6	-2.6	0.0	0.0	0.0	0.0
All other sources	11.4	12.6	10.2	11.9	14.6	17.9	6.5	1.2	-2.4	1.7	2.7	3.3
Total imports	14.0	12.6	10.2	11.9	14.6	17.9	3.9	-1.4	-2.4	1.7	2.7	3.3
U.S. consumption value:												
Amount	2,199,070	1,936,374	2,018,250	1,963,398	2,281,267	2,382,943	8.4	-11.9	4.2	-2.7	16.2	4.5
Producers' share (1)	85.3	86.9	89.9	87.8	85.2	81.1	-4.2	1.6	3.0	-2.1	-2.6	-4.1
Importers' share (1):												
Japan	2.7	0.0	0.0	0.0	0.0	0.0	-2.7	-2.7	0.0	0.0	0.0	0.0
All other sources	12.0	13.1	10.1	12.2	14.8	18.9	6.9	1.0	-3.0	2.1	2.6	4.1
Total imports	14.7	13.1	10.1	12.2	14.8	18.9	4.2	-1.6	-3.0	2.1	2.6	4.1
U.S. shipments of imports from:												
Japan:												
Quantity	95,533	0	0	0	0	0	-100.0	-100.0	(2)	(2)	(2)	(2)
Value	58,990	0	0	0	0	0	-100.0	-100.0	(2)	(2)	(2)	(2)
Unit value	$617.48	(2)	(2)	(2)	(2)	(2)	-100.0	-100.0	(2)	(2)	(2)	(2)
Ending inventory quantity	***	0	0	0	0	0	***	***	(2)	(2)	(2)	(2)
All other sources:												
Quantity	424,800	408,543	342,006	382,321	499,523	563,173	32.6	-3.8	-16.3	11.8	30.7	12.7
Value	264,629	253,260	204,206	239,326	337,928	450,765	70.3	-4.3	-19.4	17.2	41.2	33.4
Unit value	$622.95	$619.91	$597.08	$625.98	$676.50	$800.40	28.5	-0.5	-3.7	4.8	8.1	18.3
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***
All sources:												
Quantity	520,333	408,543	342,006	382,321	499,523	563,173	8.2	-21.5	-16.3	11.8	30.7	12.7
Value	323,619	253,260	204,206	239,326	337,928	450,765	39.3	-21.7	-19.4	17.2	41.2	33.4
Unit value	$621.95	$619.91	$597.08	$625.98	$676.50	$800.40	28.7	-0.3	-3.7	4.8	8.1	18.3
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***
U.S. producers':												
Average capacity quantity	4,591,145	3,777,878	3,629,045	3,670,240	3,670,240	3,670,240	-20.1	-17.7	-3.9	1.1	0.0	0.0
Production quantity	3,333,869	2,916,110	3,125,623	2,934,465	2,946,392	2,738,382	-17.9	-12.5	7.2	-6.1	0.4	-7.1
Capacity utilization (1)	72.6	77.2	86.1	80.0	80.3	74.6	2.0	4.6	8.9	-6.2	0.3	-5.7
U.S. shipments:												
Quantity	3,201,433	2,837,608	3,020,787	2,835,556	2,923,432	2,587,355	-19.2	-11.4	6.5	-6.1	3.1	-11.5
Value	1,875,451	1,683,114	1,814,044	1,724,072	1,943,339	1,932,178	3.0	-10.3	7.8	-5.0	12.7	-0.6
Unit value	$585.82	$593.15	$600.52	$608.02	$664.75	$746.78	27.5	1.3	1.2	1.2	9.3	12.3
Export shipments:												
Quantity	194,443	105,341	110,525	101,589	123,459	105,963	-45.5	-45.8	4.9	-8.1	21.5	-14.2
Value	108,274	61,367	65,880	56,774	72,304	81,455	-24.8	-43.3	7.4	-13.8	27.4	12.7
Unit value	$556.84	$582.56	$596.06	$558.86	$585.65	$768.71	38.0	4.6	2.3	-6.2	4.8	31.3
Ending inventory quantity	349,202	331,964	324,275	363,429	262,974	307,218	-12.0	-4.9	-2.3	12.1	-27.6	16.8
Inventories/total shipments (1)	10.3	11.3	10.4	12.4	8.6	11.4	1.1	1.0	-0.9	2.0	-3.7	2.8
Production workers	5,794	5,256	4,637	4,331	3,857	3,769	-34.9	-9.3	-11.8	-6.6	-10.9	-2.3
Hours worked (1,000s)	15,399	10,918	9,874	8,609	8,136	7,665	-50.2	-29.1	-9.6	-12.8	-5.5	-5.8
Wages paid ($1,000s)	334,330	287,189	265,145	222,495	223,492	232,355	-30.5	-14.1	-7.7	-16.1	0.4	4.0
Hourly wages	$21.71	$26.30	$26.85	$25.84	$27.47	$30.31	39.6	21.2	2.1	-3.8	6.3	10.4
Productivity (tons/1,000 hours)	216.5	267.1	316.6	340.9	362.1	357.3	65.0	23.4	18.5	7.7	6.2	-1.3
Unit labor costs	$100.28	$98.48	$84.83	$75.82	$75.85	$84.85	-15.4	-1.8	-13.9	-10.6	0.0	11.9
Net sales:												
Quantity	3,358,878	2,940,949	3,132,312	2,936,145	3,048,847	2,695,138	-19.8	-12.4	6.5	-6.3	3.8	-11.6
Value	1,975,725	1,740,481	1,872,924	1,778,843	2,016,042	2,016,252	2.1	-11.9	7.6	-5.0	13.3	0.0
Unit value	$588.21	$591.81	$597.94	$605.84	$661.25	$748.11	27.2	0.6	1.0	1.3	9.1	13.1
Cost of goods sold (COGS)	1,958,057	1,732,228	1,805,419	1,622,522	1,923,537	1,920,750	-1.9	-11.5	4.2	-10.1	18.6	-0.1
Gross profit or (loss)	17,668	8,253	67,505	156,321	92,505	95,502	440.5	-53.3	717.9	131.6	-40.8	3.2
SG&A expenses	97,321	81,965	79,271	133,678	110,965	110,244	13.3	-15.8	-3.3	68.6	-17.0	-0.6
Operating income or (loss)	(79,653)	(73,712)	(11,766)	22,643	(18,460)	(14,742)	81.5	7.5	84.0	292.4	-181.5	20.1
Capital expenditures	83,191	35,529	***	***	***	***	***	-57.3	***	***	***	***
Unit COGS	$582.95	$589.00	$576.39	$552.60	$630.91	$712.67	22.3	1.0	-2.1	-4.1	14.2	13.0
Unit SG&A expenses	$28.97	$27.87	$25.31	$45.53	$36.40	$40.90	41.2	-3.8	-9.2	79.9	-20.1	12.4
Unit operating income or (loss)	($23.71)	($25.06)	($3.76)	$7.71	($6.05)	($5.47)	76.9	-5.7	85.0	305.3	-178.5	9.7
COGS/sales (1)	99.1	99.5	96.4	91.2	95.4	95.3	-3.8	0.4	-3.1	-5.2	4.2	-0.1
Operating income or (loss)/ sales (1)	(4.0)	(4.2)	(0.6)	1.3	(0.9)	(0.7)	3.3	-0.2	3.6	1.9	-2.2	0.2

(1) "Reported data" are in percent and "period changes" are in percentage points.
(2) Not applicable.

Note.--Financial data are reported on a fiscal year basis and may not necessarily be comparable to data reported on a calendar year basis. Because of rounding, figures may not add to the totals shown. Unit values and shares are calculated from the unrounded figures.

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

Table C-1
TCCSS: Summary data concerning the U.S. market, 2006-11

(Quantity=short tons, value=1,000 dollars, unit values, unit labor costs, and unit expenses are per short ton; period changes=percent except where noted)

	Reported data						Period changes					
Item	2006	2007	2008	2009	2010	2011	2006-11	2006-07	2007-08	2008-09	2009-10	2010-11
U.S. consumption quantity:												
Amount	3,283,229	3,159,210	3,139,040	2,749,044	3,212,052	2,683,441	-18.3	-3.8	-0.6	-12.4	16.8	-16.5
Producers' share (1)	80.5	80.6	87.4	85.6	80.2	80.7	0.1	0.0	6.8	-1.7	-5.5	0.5
Importers' share (1):												
Japan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
All other sources	19.5	19.4	12.6	14.4	19.8	19.3	-0.1	0.0	-6.8	1.7	5.5	-0.5
Total imports	19.5	19.4	12.6	14.4	19.8	19.3	-0.1	0.0	-6.8	1.7	5.5	-0.5
U.S. consumption value:												
Amount	2,424,428	2,400,865	2,724,437	3,026,986	3,164,231	2,778,297	14.6	-1.0	13.5	11.1	4.5	-12.2
Producers' share (1)	80.6	80.2	86.7	84.6	78.8	78.9	-1.7	-0.4	6.5	-2.1	-5.9	0.1
Importers' share (1):												
Japan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
All other sources	19.4	19.8	13.3	15.4	21.2	21.1	1.7	0.4	-6.5	2.1	5.9	-0.1
Total imports	19.4	19.8	13.3	15.4	21.2	21.1	1.7	0.4	-6.5	2.1	5.9	-0.1
U.S. imports from:												
Japan:												
Quantity	0	0	0	0	0	0	(2)	(2)	(2)	(2)	(2)	(2)
Value	0	0	0	0	0	0	(2)	(2)	(2)	(2)	(2)	(2)
Unit value	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Ending inventory quantity	0	0	0	0	0	0	(2)	(2)	(2)	(2)	(2)	(2)
All other sources:												
Quantity	639,023	613,755	396,448	394,514	636,373	518,383	-18.9	-4.0	-35.4	-0.5	61.3	-18.5
Value	471,015	475,101	362,537	465,472	671,825	586,977	24.6	0.9	-23.7	28.4	44.3	-12.6
Unit value	$737	$774	$914	$1,180	$1,056	$1,132	53.6	5.0	18.1	29.0	-10.5	7.3
Ending inventory quantity	76,311	41,709	23,752	32,771	58,867	70,261	-7.9	-45.3	-43.1	38.0	79.6	19.4
All sources:												
Quantity	639,023	613,755	396,448	394,514	636,373	518,383	-18.9	-4.0	-35.4	-0.5	61.3	-18.5
Value	471,015	475,101	362,537	465,472	671,825	586,977	24.6	0.9	-23.7	28.4	44.3	-12.6
Unit value	$737	$774	$914	$1,180	$1,056	$1,132	53.6	5.0	18.1	29.0	-10.5	7.3
Ending inventory quantity	76,311	41,709	23,752	32,771	58,867	70,261	-7.9	-45.3	-43.1	38.0	79.6	19.4
U.S. producers':												
Average capacity quantity	3,653,000	3,653,000	3,627,720	3,543,000	3,543,000	3,543,000	-3.0	0.0	-0.7	-2.3	0.0	0.0
Production quantity	2,631,713	2,546,797	2,714,429	2,442,402	2,594,982	2,168,240	-17.6	-3.2	6.6	-10.0	6.2	-16.4
Capacity utilization (1)	72.0	69.7	74.8	68.9	73.2	61.2	-10.8	-2.3	5.1	-5.9	4.3	-12.0
U.S. shipments:												
Quantity	2,644,206	2,545,455	2,742,592	2,354,530	2,575,679	2,165,058	-18.1	-3.7	7.7	-14.1	9.4	-15.9
Value	1,953,413	1,925,764	2,361,900	2,561,514	2,492,406	2,191,320	12.2	-1.4	22.6	8.5	-2.7	-12.1
Unit value	$739	$757	$861	$1,088	$968	$1,012	37.0	2.4	13.8	26.3	-11.1	4.6
Export shipments:												
Quantity	***	***	***	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***	***	***	***
Unit value	$***	$***	$***	$***	$***	$***	***	***	***	***	***	***
Ending inventory quantity	249,005	234,647	249,449	341,928	319,182	297,562	19.5	-5.8	6.3	37.1	-6.7	-6.8
Inventories/total shipments (1)	***	***	***	***	***	***	***	***	***	***	***	***
Production workers	***	***	3,648	3,150	3,200	2,984	-30.2	-17.5	3.5	-13.7	1.6	-6.8
Hours worked (1,000s)	***	***	7,013	6,247	6,455	6,183	-15.3	-3.8	-0.1	-10.9	3.3	-4.2
Wages paid ($1,000s)	***	***	197,843	183,735	199,460	191,594	1.7	-2.9	8.1	-7.1	8.6	-3.9
Hourly wages	$***	$***	$28.21	$29.41	$30.90	$30.99	20.0	1.0	8.2	4.3	5.1	0.3
Productivity (tons/1,000 hours)	***	***	387.1	391.0	402.0	350.7	-2.8	0.6	6.6	1.0	2.8	-12.8
Unit labor costs	$***	$***	$72.89	$75.23	$76.86	$88.36	23.4	0.4	1.5	3.2	2.2	15.0
Net sales:												
Quantity	2,678,947	2,561,155	2,763,295	2,364,130	2,590,379	2,166,858	-19.1	-4.4	7.9	-14.4	9.6	-16.3
Value	1,979,671	1,937,407	2,377,902	2,571,572	2,507,635	2,193,349	10.8	-2.1	22.7	8.1	-2.5	-12.5
Unit value	$739	$756	$861	$1,088	$968	$1,012	37.0	2.4	13.8	26.4	-11.0	4.6
Cost of goods sold (COGS)	1,974,716	1,984,764	2,491,823	2,337,536	2,498,443	2,283,740	15.6	0.5	25.5	-6.2	6.9	-8.6
Gross profit or (loss)	4,955	-47,357	-113,921	234,036	9,192	-90,391	(2)	(2)	-140.6	(2)	-96.1	(2)
SG&A expenses	111,433	113,877	115,281	60,628	87,422	108,403	-2.7	2.2	1.2	-47.4	44.2	24.0
Operating income or (loss)	-106,478	-161,234	-229,202	173,408	-78,230	-198,794	-86.7	-51.4	-42.2	(2)	(2)	-154.1
Capital expenditures	***	***	***	***	***	***	***	***	***	***	***	***
Unit COGS	$737	$775	$902	$989	$965	$1,054	43.0	5.1	16.4	9.6	-2.5	9.3
Unit SG&A expenses	$42	$44	$42	$26	$34	$50	20.3	6.9	-6.2	-38.5	31.6	48.2
Unit operating income or (loss)	-$40	-$63	-$83	$73	-$30	-$92	-130.8	-58.4	-31.8	(2)	(2)	-203.8
COGS/sales (1)	99.7	102.4	104.8	90.9	99.6	104.1	4.4	2.7	2.3	-13.9	8.7	4.5
Operating income or (loss)/ sales (1)	-5.4	-8.3	-9.6	6.7	-3.1	-9.1	-3.7	-2.9	-1.3	16.4	-9.9	-5.9

(1) "Reported data" are in percent and "period changes" are in percentage points.
(2) Not applicable.

Note.--Financial data are reported on a fiscal year basis and may not necessarily be comparable to data reported on a calendar year basis. Because of rounding, figures may not add to the totals s Unit values and shares are calculated from the unrounded figures.

Source: Compiled from data submitted in response to Commission questionnaires and from official Commerce statistics.

Table C-1
TCCSS: Summary data concerning the U.S. market, 2014-16, January to September 2016, and January to September 2017

(Quantity=short tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short ton; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	Calendar year			January-September					
	2014	2015	2016	2016	2017	2014-16	2014-15	2015-16	Jan-Sep 2016-17
U.S. consumption quantity:									
Amount	2,661,145	2,498,450	2,454,209	1,870,725	1,799,976	(7.8)	(6.1)	(1.8)	(3.8)
Producers' share (fn1)	68.3	63.2	56.9	58.8	53.9	(11.4)	(5.1)	(6.3)	(5.0)
Importers' share (fn1):									
Japan	---	---	---	---	---	---	---	---	---
Netherlands	10.7	10.9	12.6	11.8	11.8	2.0	0.2	1.7	0.0
Canada	8.0	8.7	10.6	10.5	10.2	2.6	0.7	1.9	(0.3)
Germany	4.1	7.3	7.7	7.8	9.1	3.6	3.2	0.4	1.3
Korea	3.8	3.9	5.2	4.8	5.0	1.4	0.1	1.3	0.2
China	3.7	3.3	4.4	3.8	5.8	0.7	(0.4)	1.1	2.0
All other sources	1.5	2.8	2.7	2.4	4.2	1.2	1.3	(0.1)	1.8
Nonsubject sources	31.7	36.8	43.1	41.2	46.1	11.4	5.1	6.3	5.0
All import sources	31.7	36.8	43.1	41.2	46.1	11.4	5.1	6.3	5.0
U.S. consumption value:									
Amount	2,802,315	2,561,810	2,199,419	1,673,430	1,689,898	(21.5)	(8.6)	(14.1)	1.0
Producers' share (fn1)	68.1	63.9	58.4	60.2	55.2	(9.7)	(4.2)	(5.4)	(4.9)
Importers' share (fn1):									
Japan	---	---	---	---	---	---	---	---	---
Netherlands	10.3	10.4	12.1	11.3	11.3	1.7	0.1	1.6	0.0
Canada	8.9	9.2	10.9	10.9	10.6	2.0	0.3	1.7	(0.2)
Germany	4.2	7.1	7.7	7.8	9.2	3.5	2.9	0.7	1.4
Korea	3.7	3.8	4.6	4.3	4.6	0.9	0.1	0.8	0.3
China	3.3	2.9	3.7	3.3	5.2	0.4	(0.3)	0.8	1.9
All other sources	1.5	2.7	2.6	2.3	3.9	1.1	1.2	(0.2)	1.6
Nonsubject sources	31.9	36.1	41.6	39.8	44.8	9.7	4.2	5.4	4.9
All import sources	31.9	36.1	41.6	39.8	44.8	9.7	4.2	5.4	4.9
U.S. imports from:									
Japan:									
Quantity	---	---	---	---	---	---	---	---	---
Value	---	---	---	---	---	---	---	---	---
Unit value	---	---	---	---	---	---	---	---	---
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Netherlands:									
Quantity	283,946	272,352	309,996	220,580	212,922	***	***	***	***
Value	290,009	267,356	265,444	188,533	190,629	***	***	***	***
Unit value	$1,021	$982	$856	$855	$895	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Canada									
Quantity	212,299	216,295	259,546	196,883	183,479	***	***	***	***
Value	248,545	234,808	239,577	181,788	179,936	***	***	***	***
Unit value	$1,171	$1,086	$923	$923	$981	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Germany									
Quantity	109,478	182,717	188,800	145,859	163,723	***	***	***	***
Value	117,128	180,761	169,658	130,397	154,823	***	***	***	***
Unit value	$1,070	$989	$899	$894	$946	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Korea									
Quantity	100,001	96,200	126,400	90,449	90,007	***	***	***	***
Value	103,858	97,421	101,117	72,486	77,682	***	***	***	***
Unit value	$1,039	$1,013	$800	$801	$863	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
China									
Quantity	97,713	82,669	107,134	71,458	104,503	***	***	***	***
Value	91,432	74,865	81,471	54,699	87,460	***	***	***	***
Unit value	$936	$906	$760	$765	$837	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
All other sources:									
Quantity	40,645	70,231	66,213	45,019	75,666	***	***	***	***
Value	42,681	70,404	56,759	38,783	66,027	***	***	***	***
Unit value	$1,050	$1,002	$857	$861	$873	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Nonsubject sources:									
Quantity	844,082	920,463	1,058,090	770,248	830,300	***	***	***	***
Value	893,654	925,615	914,025	666,687	756,556	***	***	***	***
Unit value	$1,059	$1,006	$864	$866	$911	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
All import sources:									
Quantity	844,082	920,463	1,058,090	770,248	830,300	***	***	***	***
Value	893,654	925,615	914,025	666,687	756,556	***	***	***	***
Unit value	$1,059	$1,006	$864	$866	$911	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***

Table continued on next page.

Table C-1--Continued
TCCSS: Summary data concerning the U.S. market, 2014-16, January to September 2016, and January to September 2017

(Quantity=short tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short ton; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	Calendar year			January-September					Jan-Sep
	2014	2015	2016	2016	2017	2014-16	2014-15	2015-16	2016-17
U.S. producers':									
Average capacity quantity	3,068,000	3,068,000	3,068,000	2,301,000	2,301,000	---	---	---	---
Production quantity	1,835,936	1,515,670	1,374,409	1,102,314	997,687	(25.1)	(17.4)	(9.3)	(9.5)
Capacity utilization (fn1)	59.8	49.4	44.8	47.9	43.4	(15.0)	(10.4)	(4.6)	(4.5)
U.S. shipments:									
Quantity	1,817,063	1,577,987	1,396,119	1,100,477	969,676	(23.2)	(13.2)	(11.5)	(11.9)
Value	1,908,661	1,636,195	1,285,394	1,006,743	933,342	(32.7)	(14.3)	(21.4)	(7.3)
Unit value	$1,050	$1,037	$921	$915	$963	(12.3)	(1.3)	(11.2)	5.2
Export shipments:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	253,038	190,001	167,428	191,108	191,931	(33.8)	(24.9)	(11.9)	0.4
Inventories/total shipments (fn1)	***	***	***	***	***	***	***	***	***
Production workers	2,857	2,670	2,343	2,349	2,474	(18.0)	(6.5)	(12.2)	5.3
Hours worked (1,000s)	5,564	5,044	4,537	3,417	3,665	(18.5)	(9.3)	(10.1)	7.3
Wages paid ($1,000)	246,839	207,385	202,886	154,431	159,158	(17.8)	(16.0)	(2.2)	3.1
Hourly wages	$44.36	$41.12	$44.72	$45.19	$43.43	0.8	(7.3)	8.8	(3.9)
Productivity (short tons per 1,000 hours)	330.0	300.5	302.9	322.6	272.2	(8.2)	(8.9)	0.8	(15.6)
Unit labor costs	$134	$137	$148	$140	$160	9.8	1.8	7.9	13.9
Net sales:									
Quantity	1,817,123	1,578,707	1,396,982	1,101,207	973,185	(23.1)	(13.1)	(11.5)	(11.6)
Value	1,908,724	1,636,990	1,286,257	1,007,472	936,494	(32.6)	(14.2)	(21.4)	(7.0)
Unit value	$1,050	$1,037	$921	$915	$962	(12.3)	(1.3)	(11.2)	5.2
Cost of goods sold (COGS)	1,865,877	1,604,041	1,279,130	989,636	962,322	(31.4)	(14.0)	(20.3)	(2.8)
Gross profit of (loss)	42,847	32,949	7,127	17,836	(25,828)	(83.4)	(23.1)	(78.4)	fn2
SG&A expenses	55,228	49,272	34,180	27,831	23,809	(38.1)	(10.8)	(30.6)	(14.5)
Operating income or (loss)	(12,381)	(16,323)	(27,053)	(9,995)	(49,637)	118.5	31.8	65.7	396.6
Capital expenditures	***	***	***	***	***	***	***	***	***
Unit COGS	$1,027	$1,016	$916	$899	$989	(10.8)	(1.1)	(9.9)	10.0
Unit SG&A expenses	$30	$31	$24	$25	$24	(19.5)	2.7	(21.6)	(3.2)
Unit operating income or (loss)	($7)	($10)	($19)	($9)	($51)	184.2	51.7	87.3	461.9
COGS/sales (fn1)	97.8	98.0	99.4	98.2	102.8	1.7	0.2	1.5	4.5
Operating income or (loss)/sales (fn1)	(0.6)	(1.0)	(2.1)	(1.0)	(5.3)	(1.5)	(0.3)	(1.1)	(4.3)

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

fn1.--Reported data are in percent and period changes are in percentage points.
fn2.--Undefined.
fn3.--Not available.

Source: Compiled from data submitted in response to Commission questionnaires, and from official U.S. import statistics using HTS statistical reporting numbers 7210.11.0000, 7210.12.0000, 7210.50.0000, and 7212.10.0000, accessed February 1, 2018.

APPENDIX D

IMPACT OF THE ORDER AND LIKELY EFFECTS OF REVOCATION

Table D-1
TCCSS: Firms' narratives on the impact of the order and the likely impact of revocation

Response type	Firm type	Firm name and narrative on impact or likely impact
Effect of order	U.S. producers	***
Effect of order	U.S. producers	***
Effect of order	U.S. producers	***
Likely impact of revocation	U.S. producers	***

Table continued.

Table D-1 Continued
TCCSS: Firms' narratives on the impact of the order and the likely impact of revocation

Response type	Firm type	Firm name and narrative on impact or likely impact
Likely impact of revocation	U.S. producers	***
Likely impact of revocation	U.S. producers	***
Effect of order	Importers	***
Effect of order	Importers	***
Effect of order	Importers	***
Effect of order	Importers	***
Effect of order	Importers	***
Effect of order	Importers	***
Effect of order	Importers	***
Effect of order	Importers	***
Effect of order	Importers	***

Table continued.

Table D-1 Continued
TCCSS: Firms' narratives on the impact of the order and the likely impact of revocation

Response type	Firm type	Firm name and narrative on impact or likely impact
Effect of order	Importers	***
Effect of order	Importers	***
Effect of order	Importers	***
Effect of order	Importers	***
Effect of order	Importers	***
Effect of order	Importers	***
Effect of order	Importers	***
Effect of order	Importers	***
Effect of order	Importers	***
Likely impact of revocation	Importers	***
Likely impact of revocation	Importers	***
Likely impact of revocation	Importers	***
Likely impact of revocation	Importers	***
Likely impact of revocation	Importers	***
Likely impact of revocation	Importers	***
Likely impact of revocation	Importers	***

Table continued.

Table D-1 Continued
TCCSS: Firms' narratives on the impact of the order and the likely impact of revocation

Response type	Firm type	Firm name and narrative on impact or likely impact
Effect of order	Purchasers	***
Effect of order	Purchasers	***
Effect of order	Purchasers	***
Effect of order	Purchasers	***
Effect of order	Purchasers	***
Effect of order	Purchasers	***
Effect of order	Purchasers	***
Effect of order	Purchasers	***
Effect of order	Purchasers	***
Effect of order	Purchasers	***
Effect of order	Purchasers	***
Effect of order	Purchasers	***
Effect of order	Purchasers	***
Effect of order	Purchasers	***
Effect of order	Purchasers	***
Effect of order	Purchasers	***
Effect of order	Purchasers	***
Effect of order	Purchasers	***
Effect of order	Purchasers	***

Table continued.

Table D-1 Continued
TCCSS: Firms' narratives on the impact of the order and the likely impact of revocation

Response type	Firm type	Firm name and narrative on impact or likely impact
Effect of order	Purchasers	***
Effect of order	Purchasers	***
Likely impact of revocation	Purchasers	***
Likely impact of revocation	Purchasers	***
Likely impact of revocation	Purchasers	***
Likely impact of revocation	Purchasers	***
Likely impact of revocation	Purchasers	***
Likely impact of revocation	Purchasers	***
Likely impact of revocation	Purchasers	***
Likely impact of revocation	Purchasers	***
Likely impact of revocation	Purchasers	***

Table continued.

Table D-1 Continued
TCCSS: Firms' narratives on the impact of the order and the likely impact of revocation

Response type	Firm type	Firm name and narrative on impact or likely impact
Effect of order	Foreign producers	***
Effect of order	Foreign producers	***
Effect of order	Foreign producers	***
Likely impact of revocation	Foreign producers	***
Likely impact of revocation	Foreign producers	***

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

APPENDIX E

COMPANY-SPECIFIC FINANCIAL DATA

Table E-1
TCCSS: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Net sales quantity

Quantity in short tons

Firm	2021	2022	2023
Cleveland-Cliffs	***	***	***
Ohio Coatings	***	***	***
U.S. Steel	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued
TCCSS: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Net sales value

Value in 1,000 dollars

Firm	2021	2022	2023
Cleveland-Cliffs	***	***	***
Ohio Coatings	***	***	***
U.S. Steel	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued
TCCSS: U.S. producers' sales, costs/expenses, and profitability, by firm and period

COGS

Value in 1,000 dollars

Firm	2021	2022	2023
Cleveland-Cliffs	***	***	***
Ohio Coatings	***	***	***
U.S. Steel	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued
TCCSS: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Gross profit or (loss)

Value in 1,000 dollars

Firm	2021	2022	2023
Cleveland-Cliffs	***	***	***
Ohio Coatings	***	***	***
U.S. Steel	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued
TCCSS: U.S. producers' sales, costs/expenses, and profitability, by firm and period

SG&A expenses

Value in 1,000 dollars

Firm	2021	2022	2023
Cleveland-Cliffs	***	***	***
Ohio Coatings	***	***	***
U.S. Steel	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued
TCCSS: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Operating income or (loss)

Value in 1,000 dollars

Firm	2021	2022	2023
Cleveland-Cliffs	***	***	***
Ohio Coatings	***	***	***
U.S. Steel	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued
TCCSS: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Net income or (loss)

Value in 1,000 dollars

Firm	2021	2022	2023
Cleveland-Cliffs	***	***	***
Ohio Coatings	***	***	***
U.S. Steel	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued
TCCSS: U.S. producers' sales, costs/expenses, and profitability, by firm and period

COGS to net sales ratio

Ratio in percent

Firm	2021	2022	2023
Cleveland-Cliffs	***	***	***
Ohio Coatings	***	***	***
U.S. Steel	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued
TCCSS: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Gross profit or (loss) to net sales ratio

Ratio in percent

Firm	2021	2022	2023
Cleveland-Cliffs	***	***	***
Ohio Coatings	***	***	***
U.S. Steel	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued
TCCSS: U.S. producers' sales, costs/expenses, and profitability, by firm and period

SG&A expenses to net sales ratio

Ratio in percent

Firm	2021	2022	2023
Cleveland-Cliffs	***	***	***
Ohio Coatings	***	***	***
U.S. Steel	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued
TCCSS: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Operating income or (loss) to net sales ratio

Ratio in percent

Firm	2021	2022	2023
Cleveland-Cliffs	***	***	***
Ohio Coatings	***	***	***
U.S. Steel	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued
TCCSS: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Net income or (loss) to net sales ratio

Ratio in percent

Firm	2021	2022	2023
Cleveland-Cliffs	***	***	***
Ohio Coatings	***	***	***
U.S. Steel	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued
TCCSS: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Unit net sales value

Unit value in dollars per short ton

Firm	2021	2022	2023
Cleveland-Cliffs	***	***	***
Ohio Coatings	***	***	***
U.S. Steel	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued
TCCSS: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Unit total raw materials cost

Unit value in dollars per short ton

Firm	2021	2022	2023
Cleveland-Cliffs	***	***	***
Ohio Coatings	***	***	***
U.S. Steel	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued
TCCSS: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Unit direct labor cost

Unit value in dollars per short ton

Firm	2021	2022	2023
Cleveland-Cliffs	***	***	***
Ohio Coatings	***	***	***
U.S. Steel	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued
TCCSS: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Unit other factory costs

Unit value in dollars per short ton

Firm	2021	2022	2023
Cleveland-Cliffs	***	***	***
Ohio Coatings	***	***	***
U.S. Steel	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued
TCCSS: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Unit COGS

Unit value in dollars per short ton

Firm	2021	2022	2023
Cleveland-Cliffs	***	***	***
Ohio Coatings	***	***	***
U.S. Steel	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued
TCCSS: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Unit gross profit or (loss)

Unit value in dollars per short ton

Firm	2021	2022	2023
Cleveland-Cliffs	***	***	***
Ohio Coatings	***	***	***
U.S. Steel	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued
TCCSS: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Unit SG&A expenses

Unit value in dollars per short ton

Firm	2021	2022	2023
Cleveland-Cliffs	***	***	***
Ohio Coatings	***	***	***
U.S. Steel	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued
TCCSS: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Unit operating income or (loss)

Unit value in dollars per short ton

Firm	2021	2022	2023
Cleveland-Cliffs	***	***	***
Ohio Coatings	***	***	***
U.S. Steel	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued
TCCSS: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Unit net income or (loss)

Unit value in dollars per short ton

Firm	2021	2022	2023
Cleveland-Cliffs	***	***	***
Ohio Coatings	***	***	***
U.S. Steel	***	***	***
All firms	***	***	***

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

APPENDIX F

PURCHASER RESPONSES REGARDING REJECTION RATES

Table F-1
TCCSS: Purchaser responses regarding rejection rates

Proportion in percent; Quantity in short tons

Source	Supplier name	Purchaser	Proportion rejected	Quantity rejected	Narrative on reason for rejection
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***

Table continued.

Table F-1 Continued
TCCSS: Purchaser responses regarding rejection rates

Proportion in percent; Quantity in short tons

Source	Supplier name	Purchaser	Proportion rejected	Quantity rejected	Narrative on reason for rejection
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***

Table continued.

Table F-1 Continued
TCCSS: Purchaser responses regarding rejection rates

Proportion in percent; Quantity in short tons

Source	Supplier name	Purchaser	Proportion rejected	Quantity rejected	Narrative on reason for rejection
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***

Table continued.

Table F-1 Continued
TCCSS: Purchaser responses regarding rejection rates

Proportion in percent; Quantity in short tons

Source	Supplier name	Purchaser	Proportion rejected	Quantity rejected	Narrative on reason for rejection
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***

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

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