Tin- and Chromium-Coated Steel Sheet from Japan

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

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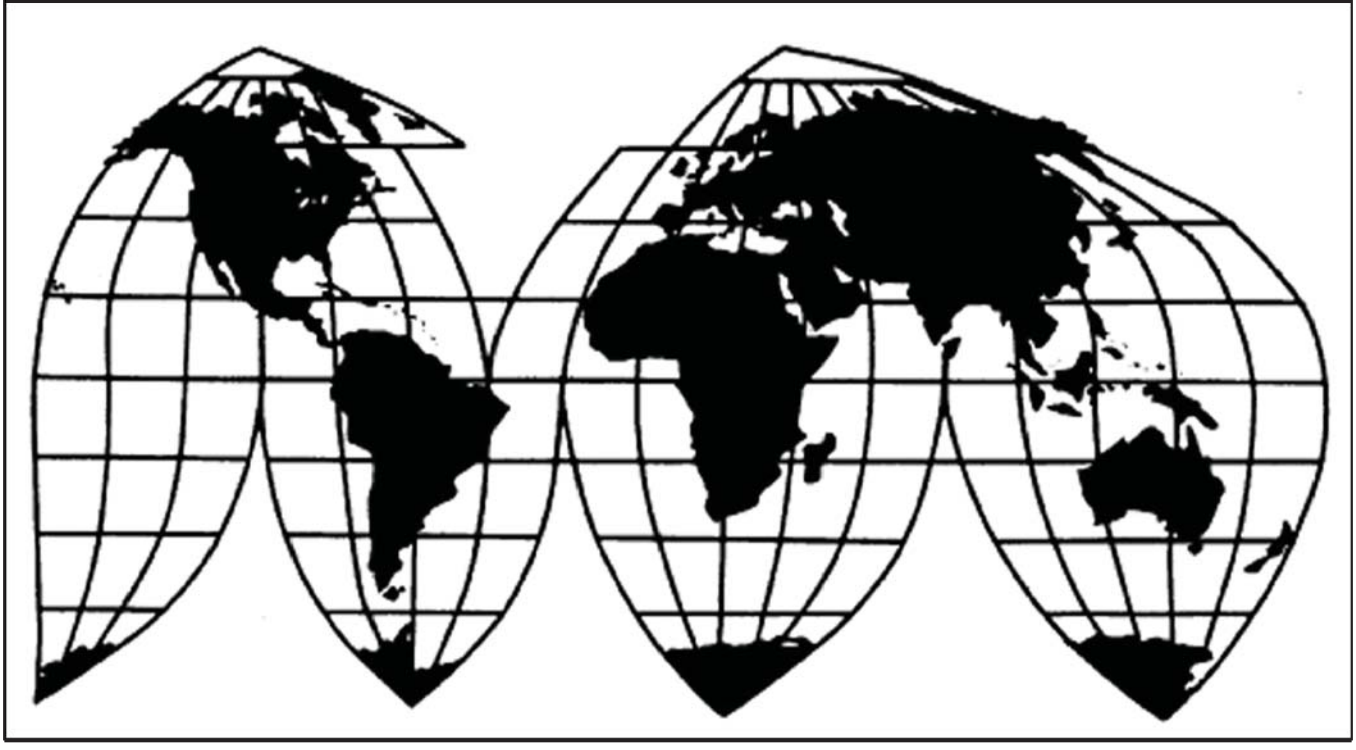
U.S. International Trade Commission



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U.S. International Trade Commission

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CONTENTS

CONTENTS

CONTENTS

CONTENTS

CONTENTS

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UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation No. 731-TA-860 (Third 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, pursuant to section 751(c) of the Act (19 U.S.C. 1675(c)), instituted this review on May 1, 2017 (82 F.R. 20378) and determined on August 4, 2017 that it would conduct a full review (82 F.R. 40168, August 24, 2017). 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 20, 2017 (82 F.R. 49661). The hearing was held in Washington, DC, on February 27, 2018, and all persons who requested the opportunity were permitted to appear in person or by counsel.

[1] The record is defined in sec. 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 Prior Reviews: 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 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 CIT affirmed the negative determinations. *Nippon Steel Corp. v. United States*, Slip Op. 2005-038 (Ct. Int'l Trade 2005).

In the first and second five-year reviews, the Commission conducted full reviews and 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 notice of continuation of the antidumping duty orders on TCCSS from Japan following both prior five-year reviews.[4]

Current Review: The Commission instituted a third five-year review on May 1, 2017.[5] The Commission received adequate substantive responses to its notice of institution from both the domestic and respondent interested parties and determined that it should proceed to a full review on August 4, 2017.[6]

Two domestic producers of TCCSS, United States Steel Corporation ("U.S. Steel") and ArcelorMittal USA, LLC ("AMUSA") (collectively, "Domestic Producers"), filed prehearing and posthearing briefs, supplemental and final comments, and provided testimony at the Commission's hearing. Domestic producer USS-POSCO Industries ("UPI") provided testimony at the Commission's hearing, and submitted a posthearing brief, supplemental comments, and final comments. Japanese producers JFE Steel ("JFE"), Nippon Steel Corporation ("Nippon Steel"), and Toyo Kohan, (collectively, "Japanese Respondents") filed joint prehearing and posthearing briefs, supplemental and final comments, and provided testimony at the hearing.

U.S. industry data for this review are based on the questionnaire responses of four U.S. producers of TCCSS that are believed to have accounted for all domestic production of TCCSS in 2016, and information from the original investigation and the first and second five-year reviews.[7] U.S. import data and related information are based on Commerce's official import statistics and the questionnaire responses of ten U.S. importers of TCCSS that are believed to have accounted for approximately 60 percent of U.S. imports during 2016, and information from the original investigation and the prior reviews.[8] Foreign industry data and related information are based on the questionnaire responses of three subject producers of TCCSS that

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(…Continued)

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").

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

[5] *Tin- and Chromium-Coated Steel Sheet from Japan, Institution of a Five-Year Review*, 82 Fed. Reg. 20378 (May 1, 2017).

[6] *Notice of Commission Determination to Conduct a Full Five-Year Review*, 82 Fed. Reg. 40168 (Aug. 4, 2017).

[7] Confidential Staff Report ("CR") at I-31; Public Staff Report ("PR") at I-23.

[8] CR/PR at IV-1.

are believed to have accounted for all TCCSS production in Japan in 2016, and information from the original investigation and prior reviews.[9]

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."[10] 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."[11] The Commission's practice in five-year reviews is to examine the domestic like product definition from the original investigation and consider whether the record indicates any reason to revisit the prior findings.[12]

In its expedited third five-year review, Commerce described the scope of the products subject to the order as:

> 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 as scroll cut), coating thickness, surface finish, temper, coating metal (tin, chromium, chromium oxide), reduction (single or double-reduced), and whether or not coated with a plastic material. All products that meet the written physical description are included in this definition unless specifically excluded.[13]

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[9] *See, e.g.*, CR at I-15, PR at I-12.

[10] 19 U.S.C. § 1677(4)(A).

[11] 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).

[12] *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).

[13] *Certain Tin Mill Products from Japan; Final Results of Third Expedited Sunset Review of the Antidumping Duty Order*, 82 Fed. Reg. 41933, 41934 (Sept. 5, 2017); CR at I-17-18. Commerce's scope also included a series of examples of tin mill products that were either outside the definition or were specifically excluded from the scope of the order. *Id*.

In its original determination and first and second five-year reviews, the Commission defined a single domestic like product consisting of all TCCSS corresponding with Commerce's scope.[14] The record in the current review provides no basis to warrant a reconsideration of the domestic like product definition.[15] Moreover, no party has argued for a different definition of the domestic like product in this third five-year review.[16] Accordingly, we again define a single domestic like product consisting of all TCCSS coextensive with the scope of the review.

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."[17] 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.

In the original investigation and first and second five-year reviews, the Commission defined a single domestic industry comprised of all domestic producers of TCCSS.[18] As with the definition of the domestic like product, no party has argued for a different definition of the domestic industry,[19] nor does the record here contain any information that would warrant a reconsideration of this definition.[20] We therefore again define the domestic industry as all domestic producers of TCCSS.

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

[15] *See generally* CR at I-29-30, PR at I-22.

[16] AMUSA's Prehearing Brief at 3; Joint Substantive Response of U.S. Steel and AMUSA to Notice of Institution at 16; Substantive Response of JFE-Steel Corporation to Notice of Institution at 11; Substantive Response of Nippon Steel Corporation to Notice of Institution at 12; and Substantive Response of Toyo Kohan to Notice of Institution at 11-12.

[17] 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.

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

[19] *See, e.g.*, AMUSA Prehearing Brief at 3.

[20] There are no related party issues in this third five-year review.

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."[21] 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 elimination of its restraining effects on volumes and prices of imports."[22] Thus, the likelihood standard is prospective in nature.[23] 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.[24]

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."[25] According to the SAA, a "'reasonably foreseeable time' will vary from case-to-case, but

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[21] 19 U.S.C. § 1675a(a).

[22] 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.

[23] 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.

[24] *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'").

[25] 19 U.S.C. § 1675a(a)(5).

normally will exceed the 'imminent' timeframe applicable in a threat of injury analysis in original investigations."[26]

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."[27] It directs the Commission to take into account its prior injury 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).[28] 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.[29]

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.[30] 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.[31]

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

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[26] 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*.

[27] 19 U.S.C. § 1675a(a)(1).

[28] 19 U.S.C. § 1675a(a)(1). Commerce has not made duty absorption findings on the subject merchandise. See Commerce's Issues and Decision Memorandum for the Expedited Third Sunset Review of the Antidumping Duty Order on Certain Tin Mill Products from Japan at 6 (Aug. 29, 2017).

[29] 19 U.S.C. § 1675a(a)(5). Although the Commission must consider all factors, no one factor is necessarily dispositive. SAA at 886.

[30] 19 U.S.C. § 1675a(a)(2).

[31] 19 U.S.C. § 1675a(a)(2)(A-D).

United States at prices that otherwise would have a significant depressing or suppressing effect on the price of the domestic like product.[32]

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.[33] 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.[34]

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."[35] The following conditions of competition inform our determination.

1. Demand

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.[36] In the original investigation, the Commission also found that demand for TCCSS had been relatively

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[32] *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.

[33] 19 U.S.C. § 1675a(a)(4).

[34] 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.

[35] 19 U.S.C. § 1675a(a)(4).

[36] Original Determination, USITC Pub. 3337 at 7; First Review, USITC Pub. 3860 at 10; Second Review, USITC Pub. 4325 at 15.

stable for many years.[37] 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.[38] In the second review, apparent U.S. consumption of TCCSS continued to decline and 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.[39]

In the current review, the record indicates that U.S. demand for TCCSS continues to be driven by demand for downstream products in which it is used, particularly cans for food, as well as general line cans, including aerosol and paint cans, and other products.[40] The majority of responding U.S. purchasers and one-half of domestic producers indicated that demand for TCCSS in the United States has decreased since January 1, 2012,[41] and most market participants reported that demand is expected to continue to decline.[42] Domestic interested parties and respondents cited continued substitution of other packaging for TCCSS and the use of can designs that require less steel for the reduction in demand.[43] Apparent U.S. consumption of TCCSS declined by 7.8 percent between 2014 and 2016, continuing a long-term downward trend.[44] Apparent U.S. consumption for TCCSS declined from 2.7 million short tons in 2014 to 2.5 million short tons in 2015 and 2016.[45] Apparent U.S. consumption of TCCSS was 3.8 percent lower in January-September 2017 ("interim 2017), at 1.8 million short tons, than in January-September 2016 ("interim 2016"), at 1.9 million short tons.[46]

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[37] Original Determination, USITC Pub. 3337 at 7.

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

[39] Second Review, USITC Pub. 4325 at 11-12.

[40] CR at II-11, PR at II-6.

[41] Two of four responding producers, two of seven responding importers, and nine of 11 responding purchasers reported that demand for TCCSS in the U.S. market has decreased since 2012, while two producers reported no change or fluctuating demand, four importers reporters reported no change in demand, another importer reported increasing demand, and two purchasers reported no change or fluctuating demand. CR/PR at Table II-3.

[42] Two of four responding producers, all six responding importers, and nine of 11 responding purchasers anticipate decreasing demand or no change, while two producers and one purchaser anticipate fluctuating or increasing demand, and one purchaser anticipates increasing demand. CR/PR at Table II-3.

[43] CR at II-13; PR at II-8.

[44] CR/PR at Figure II-1 & Table C-1.

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

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

2. Supply

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.[47] It found that 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 nonsubject imports combined by the end of the period of investigation ("POI").[48] While nonsubject imports were not found to compete throughout the United States, the Commission found that they were a significant competitive factor in the U.S. market.[49]

In the first review, the Commission found that there had been virtually no subject TCCSS imports from Japan since 2000 and therefore the U.S. market was supplied during the period of review ("POR") only by domestically produced TCCSS and nonsubject imports.[50] It found that domestic producers' market share decreased during the POR, while nonsubject imports' market share increased.[51] It observed that both the domestic industry's capacity and production decreased over the POR as a result of consolidation due to mergers and bankruptcies.[52] It also found that the domestic industry's consolidation resulted in a reduction in the number of workers but was accompanied by an increase in worker productivity.[53]

In the second review, the Commission found that the U.S. market was supplied during the POR almost exclusively by domestically produced TCCSS and nonsubject imports.[54] 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.[55] It observed that there were virtually no subject imports from Japan during the POR, although some Japanese producers supplied tin mill products to the U.S. market that were excluded from the antidumping duty order.[56]

The U.S. market is currently supplied exclusively by domestically produced TCCSS and imports from nonsubject countries.[57] There were no subject imports from Japan during the POR.[58] Japanese producers, however, supply tin mill products that are excluded from the antidumping duty order to the U.S. market.[59] U.S. producers' share of the TCCSS market

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[47] Original Determination, USITC Pub. 3337 at 9.
[48] Original Determination, USITC Pub. 3337 at 9.
[49] Original Determination, USITC Pub. 3337 at 9.
[50] First Review, USITC Pub. 3860 at 12.
[51] First Review, USITC Pub. 3860 at 12.
[52] First Review, USITC Pub. 3860 at 12-14.
[53] First Review, USITC Pub. 3860 at 12-14.
[54] Second Review, USITC Pub. 4325 at 12.
[55] Second Review, USITC Pub. 4325 at 12.
[56] Second Review, USITC Pub. 4325 at 12.
[57] CR/PR at Table C-1.
[58] CR/PR at IV-1 n.2 and Tables I-6, C-1.
[59] CR/PR at Tables IV-7, IV-12, C-1. The original antidumping duty order on TCCSS listed seven forms of tin mill products that were excluded from the scope of the order. *Certain Tin Mill Products*

declined from 68.3 percent of apparent U.S. consumption in 2014 to 63.2 percent in 2015 and then to 56.9 percent in 2016; it was lower in interim 2017, at 53.9 percent, than in interim 2016, at 58.8 percent.[60] Nonsubject imports' market share increased from 31.7 percent in 2014 to 36.8 percent in 2015 and 43.1 percent in 2016; it was higher in interim 2017, at 46.1 percent, than in interim 2016, at 41.2 percent.[61] The leading sources of nonsubject imports during the POR were Canada, Germany, the Netherlands, China, and Korea, which together accounted for more than 95 percent of nonsubject imports in 2016.[62] AMUSA's Canadian affiliate, ArcelorMittal Dofasco, exports TCCSS from Canada to the United States.[63]

During the POR, there were four domestic producers of TCCSS operating six production facilities, with U.S. Steel operating three different facilities and the remaining three producers each operating one.[64] U.S. Steel and AMUSA are the largest U.S. producers of TCCSS; they accounted for *** percent and *** percent, respectively, of domestic production in 2016.[65] UPI accounted for *** percent of domestic production in 2016, while Ohio Coatings accounted for *** percent of domestic production.[66] U.S. Steel is an integrated producer and performs all production steps; AMUSA and UPI obtain hot-rolled steel in sheet form from their affiliates and then proceed with production at the cold-rolling stage; and Ohio Coatings purchases tin mill black plate and begins its production process with the coating step.[67] Although the domestic

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(…Continued)

from Japan: Notice of Antidumping Duty Order, 65 Fed. Reg. 52067 (August 28, 2000). As a result of changed circumstances reviews, Commerce has excluded additional forms of tin mill products from the scope of the order; there are now ten excluded products. CR at I-16-17, PR at I-12-13; and CR/PR at Appendix E (listing of all excluded forms of tin mill products). The excluded products include certain tin-coated and chromium-coated steel sheet used in film canisters, cable sheathing, letterpress and flexographic printing plates for newspaper and magazine publishing. CR/PR at Appendix E; CR at I-24, PR at I-19. The quantity of excluded tin mill products imported from Japan was 35,848 short tons in 2014, 20,937 short tons in 2015, 44,157 short tons in 2016, 33,013 short tons in interim 2016, and 34,729 short tons in interim 2017. CR/PR at IV-1 n.1.

[60] CR/PR at Tables I-6, C-1.

[61] CR/PR at Tables I-6, C-1.

[62] CR at II-7, PR at II-4; CR/PR at Table IV-1.

[63] CR/PR at Table I-4; CR at II-7, PR at II-4.

[64] CR/PR at Table I-3. During the original investigation, the U.S. TCCSS industry consisted of seven firms with nine production locations. CR/PR at III-1. In the first five-year review, bankruptcies, acquisitions, and consolidations reduced the number of firms to four and the number of production locations to seven. *Id*. In the second five-year review, the number of firms increased to five due to a legally mandated divestiture of the facility at Sparrows Point, Maryland, and the ownership of two production facilities changed, but the industry still consisted of the same seven facilities that were operating in the first five-year review. *Id*. The fifth firm (RG Steel) exited the industry with the subsequent closure of the Sparrows Point facility and the sale of the property in September 2014. CR/PR at Table III-1; CR/PR at III-1.

[65] CR/PR at Table I-3.

[66] CR/PR at Table I-3.

[67] CR at III-15-16, PR at III-13.

industry's production capacity exceeded apparent U.S. consumption throughout the POR,[68] several purchasers reported supply constraints with domestic producers of TCCSS, including limited supplies and late shipments.[69]

During the POR, there were three firms producing TCCSS in Japan: JFE, Nippon, and Toyo Kohan. Nippon ***, while JFE and Toyo Kohan ***.[70] These three firms and the locations of their facilities have not changed since the prior five-year review.[71]

3. Substitutability and Other Conditions

In the original investigation and subsequent reviews, the Commission found that the domestic like product and subject imports were generally substitutable.[72] In each of these prior proceedings, the Commission found that both price and non-price factors were important factors in purchasing decisions and that the U.S. market for TCCSS was price sensitive.[73]

In the original investigation and prior two reviews, the Commission observed that most TCCSS was sold in the U.S. market through contract sales establishing both price and target quantities.[74] 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.[75] Within the original investigation, specifically, the Commission also found that there was significant overlap in the timing of domestic and foreign contract negotiations, and that purchasers had used Japanese prices in contract negotiations with domestic suppliers to leverage lower domestic prices for TCCSS.[76]

With respect to raw material costs, in the last five-year review the Commission found that they accounted for a substantial share of the cost of goods sold ("COGS") for TCCSS, and

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

[69] CR at II-8-10, PR at II-5-6. In March 2015, U.S. Steel had production shutdowns and worker layoffs at its tin mill facility in East Chicago, Indiana, but resumed production and recalled most laid off workers at that facility in June 2016. CR/PR at Table III-1.

[70] CR/PR at Table IV-4. The Japanese producers' share of production in 2016 was *** percent for Nippon, *** percent for JFE, and *** percent for Toyo Kohan. *Id*.

[71] *See, e.g.*, Second Review, USITC Pub. 4325 at 13.

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

[73] Original Determination, USITC Pub. 3337 at 8; Second Remand Determination, USITC Pub. 3674 at 29-33; First Review, USITC Pub. 3860 at 21, 37; Second Review, USITC Pub. 4325 at 18-19, 35.

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

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

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

that the cost of steel, rather than tin or chromium, was the largest raw material cost in producing TCCSS.[77] [78]

In the current review, we find that there is at least a moderate degree of substitutability between domestically produced TCCSS and subject imports.[79] The vast majority of market participants reported that domestically produced TCCSS and subject imports were always or frequently interchangeable.[80]

We also find that the record in the current review indicates that both price and nonprice factors are important in purchasing decisions for TCCSS. Purchasers reported quality, price, and delivery/availability/lead times most commonly as their top factors in purchasing decisions.[81] Virtually all responding purchasers reported that price, availability, product consistency, and reliability of supply were very important factors in purchasing decisions.[82] U.S. producers

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[77] Second Review, USITC Pub. 4325 at 15.

[78] In terms of other conditions of competition that it has found in prior proceedings, the Commission noted in the first review that President George W. Bush had implemented steel safeguard measures under Section 201 of the Trade Act of 1974 ("Section 201") in March 2002 whereby import relief relating to tin mill products (including TCCSS from Japan) consisted of an additional tariff for a period of three years and one day (30 percent ad valorem on imports in the first year, 24 percent in the second year, and 18 percent in the third year). First Review, USITC Pub. 3860 at 16-17. It also observed that President Bush terminated the Section 201 steel safeguards in December 2003 following receipt of the Commission's mid-point monitoring report in September 2003, as well as the receipt of information from the Commerce and Labor Departments. *Id*. at 17.

[79] CR at II-14-15, PR at II-9.

[80] CR/PR at Table II-9. Three of four U.S. producers reported that domestically produced TCCSS and subject imports were always or frequently interchangeable, while one producer reported that they were sometimes interchangeable. Six of eight U.S. importers reported that domestically produced TCCSS and subject imports were always or frequently interchangeable, while two importers reported that they were never interchangeable. Four of six U.S. purchasers reported that domestically produced TCCSS and subject imports were always or frequently interchangeable, while two purchasers reported that they were sometimes interchangeable. CR/PR at Table II-9.

[81] CR/PR at Table II-5. Eleven purchasers cited price among the top three factors in purchasing decisions for TCCSS, 10 purchasers cited quality, and 6 purchasers cited delivery/availability/lead times. Five purchasers cited quality as the number one factor in purchasing decisions while three purchasers cited price as the number one factor in purchasing decisions. Four purchasers cited price as the second most important factor in purchasing decisions for TCCSS while three purchasers cited quality, and two purchasers cited delivery/availability/lead times. Four purchasers cited price as the third most important factor in purchasing decisions for TCCSS, four purchasers cited delivery/availability/lead times, and two purchasers cited quality. *Id*.

[82] CR/PR at Table II-6. All eleven responding U.S. purchasers reported that price, availability, and product consistency were very important in purchasing decisions for TCCSS. *Id*. Ten of 11 purchasers reported that reliability of supply was very important in purchasing decisions for TCCSS while one purchaser reported that it was somewhat important. *Id*.

differed with importers and purchasers concerning whether or not factors other than price were significant when comparing domestically produced TCCSS and subject imports.[83]

During the POR, nearly all U.S. producers' sales of TCCSS were on an annual or longer-term contract basis with very few spot sales.[84] Importers reported using spot sales and contracts, including short-term and annual contracts.[85]

Raw material costs accounted for a substantial share of the COGS for TCCSS.[86] The cost of steel, rather than tin or chromium, is the largest raw material cost in producing TCCSS.[87] Prices for hot-rolled steel and cold-rolled steel fluctuated during the POR, declining in 2014 and 2015, increasing in 2016, and showing mixed trends in 2017.[88] Between January 2014 and December 2017, hot-rolled steel prices declined by *** percent while cold-rolled steel prices increased by *** percent.[89]

All eleven responding purchasers reported that they require their TCCSS suppliers to become certified or qualified; reported qualification times generally ranged from six months to one year.[90]

4. Section 232 Tariffs

On March 8, 2018, the President issued Presidential Proclamation 9705 entitled "Adjusting Imports of Steel into the United States" (hereafter, "Proclamation 9705") 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

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[83] CR/PR at Table II-11. All three responding U.S. producers reported that differences other than price were sometimes or never significant. By contrast, four of six responding U.S. importers reported that differences other than price were always or frequently significant, while two importers reported that such differences were sometimes significant. Four of five responding U.S. purchasers reported that differences other than price were always or frequently significant, while one purchaser reported that such differences were sometimes significant. *Id*.

[84] In 2016, *** percent of U.S. producers' sales were on an annual contract basis, *** percent were on a longer-term basis, and *** percent was on a spot basis. CR at V-3, PR at V-2.

[85] CR at V-4, PR at V-2. Of the ten responding importers, six reported using spot sales, six reported using contracts, and three reported using other methods. *Id*.

[86] As a share of cost-of-goods-sold ("COGS"), U.S. producers' raw material costs declined from 63.5 percent in 2014 to 59.5 percent in 2015 and then to 49.9 percent in 2016; they were higher in interim 2017, at 52.8 percent, than in interim 2016, at 49.9 percent. CR/PR at V-1, Table III-9.

[87] CR/PR at V-1.

[88] CR/PR at V-1 & Figure V-1.

[89] CR/PR at V-1 & Figure V-1. Two of four U.S. producers and six of nine U.S. importers reported that raw material prices fluctuated during the POR. CR/PR at V-1. Three of four producers and seven of nine importers reported that they anticipated raw material prices will continue to fluctuate. *Id*.

[90] CR at II-18, PR at II-11. Four of 11 responding purchasers reported that a domestic or foreign supplier had failed in its attempt to qualify product, or had lost its approved status since January 1, 2012, with purchasers identifying one domestic producer (U.S. Steel) and three TCCSS suppliers in China. CR at II-19, PR at II-12.

(including TCCSS) from all countries except Canada and Mexico effective March 23, 2018.[91] The justification for the President's imposition of Section 232 tariffs arises from Commerce's Section 232 investigations, which found that unfairly traded steel imports "threaten to impair the national security of the United States."[92] Section 232 tariffs are supplemental to any duties already in place.[93] The President's Proclamation on Steel did not indicate the duration of Section 232 tariffs.[94] Instead, it encouraged countries with which the United States has a security relationship to discuss with the United States alternative ways to address the threatened impairment, and stated that if the President determines "that imports from that country no longer threaten to impair the national security, I {the President} may remove or modify the restriction on steel articles imports from that country and, if necessary, make any corresponding adjustments to the tariff as it applies to other countries as our national security interests require."[95] Prior to the record closing in these third five-year reviews, the President announced country exemptions from Section 232 steel tariffs for Argentina, Australia, Brazil, and South Korea, and temporary exemptions until May 31, 2018 for Canada, Mexico, and the European Union.[96] In addition to country-specific exemptions by the President, the Secretary of Commerce may grant product-specific exclusions from Section 232 steel tariffs.[97] At the time of the record closing in this review, Commerce had not acted upon any product-specific exclusion requests, including for TCCSS from Japan.

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[91] CR at I-8-9, PR at I-6-7; 83 Fed. Reg. 11,625-11,627 (March 15, 2018) (Presidential Proclamation 9705). On March 23, 2018, the Section 232 tariffs became effective and U.S. Customs and Border Protection began collecting them. *See, e.g.*, CR at I-8-9, PR at I-6-7; U.S. Customs and Border Protection, *Section 232 Tariffs on Aluminum and Steel: Additional Duty on Imports of Steel and Aluminum Articles under Section 232 of the Trade Expansion Act of 1962* (April 3, 2018) (EDIS Doc.No. 640833).

[92] CR at I-8 & n.37, PR at I-6 n.37; see also Japanese Respondents' Prehearing Br., Exhibit 2 (Commerce Department's 232 Report titled "The Effect of Steel on National Security" at 9 (Jan. 11, 2018)).

[93] *See, e.g.*, CR at I-8 & n.37, PR at I-6 n.37; see also Japanese Respondents' Prehearing Br., Exhibit 2 (Commerce Department's 232 Report titled "The Effect of Steel on National Security" at 8 (Jan. 11, 2018)).

[94] Under 19 U.S.C. § 1862(c)(1)(A)(ii), the President is to "determine the nature and duration of the action that, in the judgment of the President, must be taken to adjust the imports of the article and its derivatives so that such imports will not threaten to impair the national security."

[95] *See, e.g.*, Presidential Proclamation 9705 at paragraph 9.

[96] *See, e.g.*, 83 Fed. Reg. 20683-20685 (May 7, 2018) (Presidential Proclamation 9740).

[97] *See, e.g.,* Commerce 232 Steel Report at 9-10. On March 19, 2018, the Commerce Department announced its procedures for excluding products from the Section 232 tariffs, and began accepting exclusion requests. *See, e.g.*, *Requirements for Submissions Requesting Exclusions from the Remedies Instituted in Presidential Proclamations Adjusting Imports of Steel Into the United States; and the Filing of Objections to Submitted Exclusion Requests for Steel and Aluminum*, 83 Fed. Reg. 12106-12112 (March 19, 2018). Commerce has indicated that its processing of product exclusion requests normally will not exceed 90 days from when the exclusion requests are submitted. *Id*. at 12,111.

C. Likely Volume of Subject Imports

1. The Prior Proceedings

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.[98] It found that the market share of subject imports also increased significantly during the POI.[99] Accordingly, the Commission found that the volume of cumulated subject imports, as well as the increase in such volume, was significant, both in absolute terms and relative to production and consumption.[100]

In each of the subsequent reviews, the Commission found that the likely volume of subject imports would be significant within the reasonably foreseeable future if the order were revoked.[101] In finding likely significant volumes, the Commission emphasized the Japanese TCCSS producers' large and excess production capacity, their export orientation and declining home market shipments, the inability of the global tin market to absorb Japan's excess capacity, the well established relationships of Japanese producers with U.S. purchasers of excluded tin mill products that were also the main purchasers of TCCSS, the fact that the United States was an attractive market for sales of TCCSS given its relatively high prices and large size, and the significant volume and increase in volume of subject imports prior to imposition of the order during the original investigation.[102]

2. The Current Review

In this review, we find that should the order be revoked, the likely volume of subject imports from Japan would be significant. Although Japanese producers reported relatively steady capacity and production during the POR, they also reported having excess capacity.[103] Like the U.S. market, the Japanese market for TCCSS has been in a long-term decline. Due to

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

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

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

[101] First Review, USITC Pub. 3860 at 18-22; Second Review, USITC Pub. 4325 at 17-22.

[102] First Review, USITC Pub. 3860 at 18-22; Second Review, USITC Pub. 4325 at 17-22.

[103] The Japanese industry's production capacity was 1.8 million short tons in 2014 and 2015, 1.7 million short tons in 2016, and 1.3 million short tons in interim 2016 and interim 2017. Its production was 1.5 million short tons in 2014, 1.6 million short tons in 2015 and 2016, 1.2 million short tons in interim 2016, and 1.1 million short tons in interim 2017. Its capacity utilization for TCCSS was 86.0 percent in 2014, 87.6 percent in 2015, 91.2 percent in 2016, 91.1 percent in interim 2016, and 86.4 percent in interim 2017. CR/PR at Table IV-6. The Japanese industry's excess capacity exceeded 150,000 short tons annually from 2014 to 2016. *Id*.

declining home market shipments and increasing exports, the Japanese TCCSS industry grew increasingly export oriented from 2014 to 2016.[104] Exports accounted for 50.8 percent of the Japanese TCCSS industry's total shipments in 2014; by 2016, that figure had grown to 58.2 percent.[105] During the POR, Japanese TCCSS producers showed a global reach beyond Asia in their exports.[106] The Japanese industry's exports of TCCSS were largely to markets other than Asia, and its TCCSS exports to non-Asian markets grew more than its TCCSS exports to Asia.[107] Mexico was the leading export market for Japanese TCCSS, with exports from Japan ranging from 195,184 short tons to 228,129 short tons from 2014 to 2016.[108] In 2016, Mexico accounted for 21.7 percent of total Japanese exports, followed by the Philippines (15.5 percent), and Saudi Arabia (8.5 percent).[109]

In addition to being highly export oriented, the record shows that subject Japanese producers view the U.S. market as attractive and have a strong incentive to direct exports to the United States if the order is revoked. The U.S. market is one of the largest markets in the world for TCCSS.[110] At the hearing, the Japanese Respondents acknowledged that the U.S. market is also the highest-priced market in the world for TCCSS.[111] Other than the section 232 tariffs discussed in greater detail below, there are few barriers to accessing the U.S. market.[112]

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

[105] CR/PR at Table IV-6. Exports accounted for 59.4 percent of the Japanese TCCSS industry's total shipments in interim 2016 and 56.5 percent in interim 2017. *Id*. Japan exported TCCSS to 55 countries in 2017. U.S. Steel's Prehearing Brief at 6, Exhibit 1.

[106] CR/PR at Table IV-8. Export shipments to Asia accounted for only 11.3 percent of the Japanese TCCSS industry's total shipments in 2016 whereas all other markets accounted for 42.1 percent, and the European Union accounted for 4.8 percent. *Id*. at Table IV-6.

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

[108] CR/PR at Table IV-8.

[109] CR at IV-12, PR at IV-10; CR/PR at Table IV-8. During the POR, the Japanese TCCSS industry's other major export markets included Brazil, Australia, India, Indonesia, and the United Arab Emirates. CR/PR at Table IV-8.

[110] CR/PR at Table IV-12.

[111] Hearing Tr. at 164 (Arena), 177 & 206 (Porter). Two U.S. importers (***) indicated that the U.S. market is higher-priced than other markets for TCCSS, although price comparison data for U.S. TCCSS prices and TCCSS prices in other markets was not provided by most market participants. CR at IV-17, PR at IV-14. In the second five-year review, the Commission found that prices in the United States were sufficiently high relative to other markets to create an incentive for Japanese producers to seek access to the U.S. market. Second Review, USITC Pub. 4325 at 19. Similarly, based on information available in the current review that the U.S. market is the highest-priced market in the world for TCCSS, we find that there is an incentive for Japanese TCCSS producers to shift exports from other markets to the United States if the order were revoked.

[112] CR at II-10-11, PR at II-6. Eight purchasers indicated that new suppliers entered the U.S. market since January 1, 2012, and two expect additional entrants. Purchasers cited TCCSS mills located in Brazil, China, Korea, Turkey, and Taiwan. ***. *** stated that it would expect additional foreign suppliers in the U.S. market ***. *** stated that it anticipates additional suppliers following the trend in global capacity expansion. *Id.*

Japanese TCCSS producers are already substantially present as exporters of excluded tin mill products, and thus, have a knowledge of the U.S. market, as well as established relationships with U.S. purchasers.[113] Notably, the purchasers of excluded tin mill products from Japan include large can manufacturers that are also the main purchasers of TCCSS.[114] As discussed below, purchasers and importers of TCCSS have expressed interest in purchasing subject imports from Japan if the order were revoked. Moreover, Mexico was the leading export market for Japanese TCCSS producers during the POR.[115] Thus, if the order were revoked, the 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 export market with higher prices.[116]

Japanese Respondents argue that the volume of subject imports from Japan will not likely be significant if the order were revoked due to the recent imposition of 25 percent tariffs under Section 232 for steel imports, including TCCSS.[117] We initially observe that assessing the likely market impact of the Section 232 tariffs is challenging given their recent origin and their uncertain scope. In addition, because the section 232 tariffs were imposed near the date of the

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[113] Toyo Kohan shipped samples of excluded tin mill products to its U.S. importer in December 2017, which further demonstrates the interest of Japanese TCCSS producers in the U.S. market. *See, e.g.*, U.S. Steel's Prehearing Br. at 7.

[114] *See, e.g.*, U.S. Purchaser Questionnaires of *** at II-4; AMUSA Prehearing Br. at 22-25; AMUSA Final Comments at 9; Hearing Tr. at 150 (Arena). Japanese producers sold 35,848 short tons of excluded tin mill products in the United States in 2014, 20,937 short tons in 2015, 44,157 short tons in 2016, 33,013 short tons in interim 2016, and 34,729 short tons in interim 2017. CR/PR at IV-1 n.1.

[115] CR/PR at Table IV-8.

[116] We are not persuaded by Japanese Respondents' argument that Japanese producers are not interested in the U.S. market for TCCSS because they are concentrating on growing export markets for TCCSS outside the United States. *See, e.g.*, Japanese Respondents' Prehearing Br. at 33-36. The U.S. market for TCCSS is likely to be attractive to Japanese producers due to its higher prices than in other markets. For example, in 2016, AUVs for the Japanese producers' overall exports were only $654/short ton. CR/PR at Table IV-8. AUVs for Japanese exports to Mexico, Japan's largest export market, were also $654/short ton in 2016. By contrast, in 2016 the domestic industry's U.S. shipment AUVs for TCCSS were $921/short ton, 40.8 percent higher. CR/PR at Table III-5. The AUVs for nonsubject imports in the U.S. market were also substantially higher at $861/short ton in 2016. CR/PR at Table C-1. While we recognize that Japanese producers' export AUVs and U.S. producers' shipment AUVs are not directly comparable because they are at different levels of trade, we nonetheless find that the U.S. market for TCCSS is likely to be attractive to Japanese producers for the reasons discussed above, including that the AUVs in the U.S. market are substantially higher than in Japanese producers' largest export market (*i.e.*, Mexico) and that Japanese Respondents acknowledged at the hearing that the U.S. TCCSS market is the highest priced. Moreover, Japanese producers could use excess capacity to take advantage of relatively higher U.S. prices for TCCSS, and would have an incentive to shift some exports to the United States from other export markets, including their leading market that is geographically close to the United States.

[117] See, e.g., Japanese Respondents' Posthearing Br. at 1-4, 7-11; Japanese Respondents' Comments on the Relevance of Section 232 Duties at 6-9, Exhibit 1; Japanese Respondents' Final Comments at 3-6.

record closing, the Commission collected only limited information which would allow us to examine any existing effects of the tariffs on different sources of supply in the market and might otherwise inform our likely volume analysis. Nevertheless, the Commission has considered these measures in its analysis as a relevant economic factor.

Japanese Respondents rely heavily on an economic analysis which estimates that subject imports from Japan would increase by approximately 20,000 short tons but would be offset by much larger declines in nonsubject imports, ranging from approximately 156,000 short tons to 351,000 short tons, depending upon the nature of country exemptions from Section 232 tariffs.[118]

We find that Japanese Respondents' model is not appropriate for use in assessing likely subject import volume in this five-year review because there are no subject imports currently entering the U.S. market and therefore the model cannot predict the change in imports.[119] Japanese Respondents have substituted the volume of imports of nonsubject excluded tin mill products from Japan into the model as if they were subject imports. This analysis incorrectly conflates subject and excluded product imports. Any projections of the likely volume of subject imports within the reasonably foreseeable future should take into account the fact that there are currently zero subject imports. Similarly, as discussed below, we do not find Japanese Respondents use of purchaser estimates for projected subject import volumes as an appropriate input in the economic model.

Other evidence in the record indicates that subject import volumes would likely be significant upon revocation of the order notwithstanding the imposition of 25 percent tariffs under Section 232. The AUVs for Japanese exports of TCCSS to all export markets were $654 per short ton in 2016.[120] In that same year, AUVs for U.S. producers' U.S. shipments ($921 per short ton) were 40.8 percent higher than the Japanese industry's export AUVs and AUVs for

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[118] Under a so-called "limited exclusion" scenario, Japanese Respondents estimate that the expected import volume of tin mill products from nonsubject countries that are non-exempt from Section 232 tariffs will decline by approximately 351,000 short tons. In this scenario, Korean imports are reduced by a negotiated quota amount, only Brazilian imports are exempted from Section 232 tariffs, and all other countries' imports are subject to 25 percent tariffs. See Japanese Respondents' Supplemental Comments at 6. The Japanese Respondents argue that this scenario is more likely because, whether the Section 232 tariffs take effect or quotas are restricted, imports from the European Union and NAFTA countries are likely to be restricted. *See id*. at 10. Under a so-called "larger exclusion" scenario, Japanese Respondents estimate that the expected import volume of tin mill products from nonsubject countries that are non-exempt from Section 232 tariffs will decline by approximately 156,000 short tons. *Id*. at 6. In this scenario, Korean imports are reduced by a negotiated quota amount, Brazilian, NAFTA, and European Union imports are excluded from Section 232 tariffs, and all other countries imports are subject to 25 percent tariffs. *Id*. at 6-7.

[119] Japanese Respondents acknowledge this difficulty. *See, e.g.*, Japanese Respondents' Posthearing Br. at 4-5.

[120] We note that, based on questionnaire data rather than Global Trade Atlas Data, the AUVs for Japanese exports of TCCSS to all markets in 2016 was even lower, at $611 per short ton. CR/PR at Table IV-6.

nonsubject imports ($864 per short ton) were 32.1 percent higher than the Japanese industry's export AUVs.[121] Given the magnitude of these differences, Japanese producers are not likely to be deterred by 25 percent tariffs from selling into the higher-priced U.S. market.[122] Considering especially that the U.S. market for TCCSS is among the largest and highest-priced TCCSS markets in the world and the Japanese TCCSS producers have acknowledged that they have an incentive to sell into markets where higher prices and greater net profits are available,[123] we find that the U.S. market is sufficiently attractive to encourage Japanese producers to again export significant quantities of TCCSS in the absence of the antidumping duty order even with the imposition of the Section 232 tariffs.

Claiming that U.S. purchasers of TCCSS would not purchase significant quantities of subject imports if the order were revoked, Japanese Respondents have submitted affidavits from four of the largest U.S. purchasers of TCCSS estimating that they would collectively purchase *** subject imports in 2018 and up to *** short tons of subject merchandise in 2019.[124] We do not find these purchaser statements to be persuasive. U.S. purchasers have shown a strong interest in purchasing more product from the Japanese TCCSS industry. In addition to purchasing excluded tin mill products from Japan during the POR, major U.S. purchasers (including *** and ***) have applied to Commerce for at least 23 product-specific exclusions from Section 232 tariffs for tin mill products from Japan, not limited to currently

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[121] CR/PR at Tables III-5, IV-8, and C-1. We recognize that differences in AUVs may reflect differences in product mix and levels of trade. Nevertheless, in the current review, Japanese Respondents themselves rely upon AUVs and recognize their utility for analyzing the likely effects of subject imports upon revocation of the order. *See, e.g.*, Japanese Respondents' Prehearing Br. at 41, 43-45; Japanese Respondents' Final Comments at 9-10; Hearing Tr. at 157, 206-07 (Porter). Moreover, available information on the record indicates that prices for different types of TCCSS are sufficiently similar to allow us to use AUV data as a basis for drawing broad comparisons between pricing levels in different markets. *See, e.g.*, CR/PR at Table V-1.

[122] AUVs for Japanese exports of TCCSS to Mexico were $654 per short ton in 2016, which was the same as AUVs for Japanese exports of TCCSS for all export markets as discussed above. CR/PR at Table IV-8.

[123] We note that in the last five-year review Japanese Respondents argued that "Japanese producers have no incentive to increase shipments to the United States when higher prices and greater profits are available in other export markets." Second Review, USITC Pub.4325 at 21. Conversely, the higher prices and greater profits available in selling TCCSS to the United States today are a powerful magnet to pull Japanese TCCSS into the U.S. market absent the order. *See, e.g.*, Japanese Respondents' Posthearing Br., Exhibit 1 at Attachments A & B (emphasizing the importance of profits to Japanese producers).

[124] *See, e.g.*, Japanese Respondents' Posthearing Br. at 5 & Exhibits 4A-4D. With respect to the estimate of *** short tons in 2019, *** reports possibly buying up to *** short tons of TCCSS from Japanese producers, while *** estimates possibly buying up to *** short tons from them. *See, e.g.*, Japanese Respondents' Posthearing Br. at 5 & Exhibits 4A-4D; Japanese Respondents' Final Comments at 7-8.

excluded tin mill products.[125] Moreover, prior to the hearing in this review, ***, sent an email to officials at U.S. Steel ***.[126] Silgan, thus, appeared eager to have access to additional tin mill products from Japan that were unencumbered by an antidumping duty order. Additionally, the purchaser affidavits relied upon by Japanese Respondents refer to preferences for domestic TCCSS and certain advantages that U.S. mills have over foreign suppliers.[127] Notwithstanding any such preferences or advantages, the volume of nonsubject imports increased significantly since the last review.[128] Indeed, three of the largest purchasers of TCCSS (*i.e.*, ***, ***, and ***) purchased more from nonsubject foreign sources than from the domestic industry in 2016, which indicates that U.S. purchasers are likely upon revocation to be interested in foreign suppliers of TCCSS, including suppliers from Japan.[129] Finally, we note that there is information in the record from other purchasers and importers indicating their interest in purchasing more Japanese tin mill products or having subject imports from Japan as an alternative supply source upon revocation.[130]

As discussed above, the subject industry in Japan has excess capacity and was increasingly and highly export oriented. We find that subject producers in Japan would likely direct significant volumes of TCCSS to the U.S. market should the antidumping duty order be revoked, based on the attractiveness of the U.S. market as one of the largest and highest-priced markets in the world for TCCSS, the demonstrated interest of subject producers in the U.S. market, and the significant increase in subject imports during the original period of investigation. We therefore conclude that the volume of subject imports of TCCSS would likely be significant, both in absolute terms and relative to U.S. consumption, upon revocation of the order.[131] [132]

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[125] *See, e.g.*, U.S. Purchaser Questionnaires of *** at II-4; AMUSA Prehearing Br. at 22-25; Hearing Tr. at 150 (Arena); AMUSA's Final Comments at 7 n.7; Japanese Respondents' Comments on the Relevance of Section 232 Duties at Exhibit 2 (Bway).

[126] *See, e.g.*, U.S. Steel's Final Comments at 6; U.S. Steel's Posthearing Br. at Exhibit 3, paras. 29-30 & Attachment E.

[127] *See, e.g.*, Japanese Respondents' Posthearing Br. at 5 & Exhibits 4A-4D.

[128] CR/PR at Table I-1.

[129] *See, e.g.*, *** U.S. Purchaser Questionnaire at II-1; *** U.S. Purchaser Questionnaire at II-1; CR/PR at Table C-1. As discussed above, nonsubject imports' market share increased from 31.7 percent in 2014 to 43.1 percent in 2016. CR/PR at Table C-1.

[130] Some purchasers (including *** and ***) indicated their interest in purchasing subject imports from Japan upon revocation while other purchasers (including ***) indicated that subject imports from Japan would likely increase their presence in the U.S. market if the order were revoked. CR at Appendix D-5, PR at Appendix D-5. Several importers, including ***, cited a desire to see more suppliers or more competition in the U.S. market as well as in the product range and quality offered by Japanese TCCSS producers. CR at Appendix D-5, PR at Appendix D-5.

[131] We have also examined inventories in our analysis of the volume of subject imports. Japanese TCCSS producers' end-of-period inventories declined by 11.5 percent from 2014 to 2016, but were 25.9 percent higher in interim 2017 than in interim 2016. The three Japanese producers that responded to the Commission's questionnaire reported end-of-period inventories of 149,537 short tons in 2014, 162,909 short tons in 2015, 132,318 short tons in 2016, 113,019 short tons in interim 2016, and

D. Likely Price Effects

1. The Prior Proceedings

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

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(…Continued)
142,259 short tons in interim 2017. CR/PR at Table IV-6. As a share of total shipments, they reported that inventories were 9.7 percent in 2014, 10.5 percent in 2015, 8.2 percent in 2016, 6.8 percent in interim 2016, and 9.4 percent in interim 2017. *Id*. As a share of production, they reported that inventories were 9.8 percent in 2014, 10.4 percent in 2015, 8.4 percent in 2016, 7.1 percent in interim 2016, and 9.3 percent in interim 2017. *Id*. No U.S. importers reported inventories of subject merchandise. CR/PR at Table IV-3.

With respect to product-shifting, Japanese producers have the capacity to produce TCCSS on the same equipment and machinery used to produce other tin mill products. CR at IV-9-10, PR at IV-8, and CR/PR at Table IV-7.

We note that there is no indication in the record that TCCSS from Japan are subject to any antidumping or countervailing duty orders or proceedings in any markets other than the United States. CR at IV-12, PR at IV-10.

[132] We reject Japanese Respondents' argument that the need for Japanese producers to re-qualify as suppliers to large U.S. customers prevents Japanese mills from shipping large quantities of TCCSS within the reasonably foreseeable future. Contrary to their claims, it would not take two or three years for TCCSS producers in Japan to find customers and become qualified suppliers before shipping to the U.S. market. Rather, as discussed above, Japanese producers already have existing U.S. customers, and have shipped them an increasing volume of tin mill products excluded from the order. CR/PR at IV-1 n.1. Moreover, the record indicates that most U.S. purchasers reported qualification times ranging from six months to one year. CR at II-18, PR at II-11. Five purchasers reported that the qualification process takes six months or less. *See, e.g.*, U.S. Purchasers' Questionnaires of ***. Only one purchaser indicated that the process could take more than a year, and one stated that the process could take as little as seven days. *See, e.g.*, U.S. Purchasers' Questionnaires of ***. Moreover, there is information in the record indicating that relatively few purchasers reported that TCCSS suppliers had failed to become certified or qualified and that none reported that subject producers from Japan had failed to become certified or qualified during the POR. CR at II-19, PR at II-12.

We also are not persuaded by Japanese Respondents' argument that Japanese producers' joint venture ("JV") arrangements for the production of tin mill products in China and other markets (principally in Asia) will constrain their ability to export subject imports to the United States. *See, e.g.*, Japanese Respondents' Prehearing Br. at 33. According to the Japanese Respondents, tin mill black plate that Japanese producers export to these JVs as a substrate for the production of tin mill products is made on the same production lines as subject TCCSS and thereby occupies capacity that could otherwise be used to make TCCSS. *Id*. Regardless of any such purported capacity constraints, Japanese producers' capacity has been sufficient to enable them to export large and increasing quantities of TCCSS to markets worldwide. *See, e.g.*, CR/PR at Table IV-6.

sensitive.[133] It found that there was significant underselling by subject imports, which coincided with domestic price declines for TCCSS during the POI.[134] The Commission observed that the record evidence indicated 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.[135] It concluded that subject imports generally undersold nonsubject imports toward the end of the POI and that subject imports had a significant adverse effect on domestic prices that was distinct from any adverse price effects of nonsubject imports.[136] Given these considerations, the Commission found that significant volumes of low-priced subject imports had significant price-suppressing and price-depressing effects on prices for domestically produced TCCSS.[137]

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.[138] 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.[139] It concluded that, in the event of revocation, 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.[140] Finally, it observed that the U.S. market for TCCSS was characterized by a small number of purchasers, and that even a

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[133] Original Determination, USITC Pub. 3337 at 11-12; Second Remand Determination, USITC Pub. 3674 at 32, 61-62; CR at V-10 n.14.

[134] In the original investigation prices were collected based on bid data. One or more of the final Japanese bids was 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 considered 51 bid comparisons. In 21 instances, 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. *See, e.g.*, CR at V-10 n.14; PR at V-6 n.14; Original Determination, USITC Pub. 3337 at 12; Second Remand Determination, USITC Pub. 3674 at 6-26, 61-62.

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

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

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

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

[139] First Review, USITC Pub. 3860 at 26. 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. CR at V-10 n.14, PR at V-6 n.14.

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

few low-priced sales of subject imports would have significant adverse price effects in a relatively short period of time.[141]

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.[142] 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.[143] It concluded that, upon revocation, 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.[144] It observed that the credible threat of purchasers buying subject imports could put pressure on domestic prices even when subject producers did not 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.[145] 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.[146]

2. The Current Review

As previously discussed, we find that there is at least a moderate degree of substitutability between domestically produced TCCSS and subject merchandise and that price is an important factor in purchasing decisions for TCCSS.

Given the absence of subject imports from the U.S. market, the record does not contain any price comparison data for subject imports and domestically produced TCCSS in the U.S. market during the POR.[147]

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 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.

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

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

[143] Second Review, USITC Pub. 4325 at 25. In the second review, there were no price comparisons available between subject imports and domestically produced TCCSS. CR at V-10 n.14, PR at V-6 n.14.

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

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

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

[147] The record does contain pricing data for domestically produced TCCSS. Prices for those products fluctuated but declined overall between January 2014 and September 2017, with declines ranging from 5.3 percent to *** percent. CR/PR at Tables V-1 to V-2 & Figure V-2.

Moreover, as discussed above, the record indicates that Japanese TCCSS producers are selling in other markets at AUVs well below prevailing AUVs in the U.S. market and therefore would have additional incentive to obtain higher prices while still being able to price below the domestic industry in order to gain market share. Increased volumes of low-priced subject imports would require the domestic industry to cut prices or forego price increases to compete with the subject imports or to lose sales.[148]

Accordingly, we find that subject imports from Japan would likely undersell the domestic like product to a significant degree and likely gain market share at the domestic industry's expense and also would likely have significant price depressing or suppressing effects upon revocation of the order within a reasonably foreseeable time.[149]

E. Likely Impact[150]

1. The Prior Proceedings

In the original investigation and related remand proceedings, the Commission found that subject imports had a significant adverse impact on the domestic industry.[151] It emphasized that most of the domestic industry's output, employment, and financial performance indicia declined overall during the POI, especially operating income and net

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[148] Available information in the current record also indicates that annual or longer-term contracts would not insulate the domestic industry from likely significant adverse price effects by subject imports. For example, ***. *See, e.g.*, CR/PR at V-3-4. U.S. Steel's Posthearing Br. at Exh. 3; U.S. Steel's Final Comments at 9-10. ***.

[149] Based on a constructed price that uses the U.S. price of a product excluded from the order, Japanese Respondents argue that subject imports are likely to be sold at higher prices than domestically produced TCCSS. *See, e.g.*, Japanese Respondents' Prehearing Br. at 38-40 & Exh. 6. We do not find Respondents' constructed price to be probative of the likely price of Japanese TCCSS in the U.S. market. Respondents' constructed price is based on the price of laminated tin-free steel, a product sold in modest quantities that does not compete with domestically produced TCCSS, and requires an adjustment based on a U.S. third-party converters' estimate of laminating costs for the Japanese TCCSS industry. We find Japanese producers' actual pricing behavior in other markets with respect to covered TCCSS to be more relevant than this constructed price.

[150] Section 752(a)(6) of the Act states that "the Commission may consider the magnitude of the margin of dumping" in making its determination in a five-year review. 19 U.S.C. § 1675a(a)(6). The statute defines the "magnitude of the margin of dumping" to be used by the Commission in five-year reviews as "the dumping margin or margins determined by the administering authority under section 1675a(c)(3) of this title." 19 U.S.C. § 1677(35)(C)(iv); see also SAA at 887. In its expedited third review of the antidumping duty order for Japan, Commerce found likely dumping margins of up to 95.29 percent. *Certain Tin Mill Products from Japan; Final Results of the Expedited Third Sunset Review of the Antidumping Duty Order*, 82 Fed. Reg. 41933, 41934 (Sept. 5, 2017); CR/PR at Table I-2.

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

sales.[152] It noted that the indicia pertaining to the domestic industry's financial performance were lowest when subject import volumes peaked.[153] 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.[154] 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.[155]

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.[156] 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 that the domestic industry was experiencing; and the domestic industry's consistently poor financial performance during the POR.[157] 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 resumption of likely significant volumes of low-priced subject imports would likely result in continuation or recurrence of material injury to the domestic industry.[158]

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 POR.[159] Given these considerations, it 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.[160] 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.[161] It also observed that nonsubject imports' market share declined during the POR and therefore nonsubject imports were not likely to increase to such an extent as to render insignificant the likely volume and price effects of subject imports.[162]

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[152] Original Determination, USITC Pub. 3337 at 17-18.
[153] Original Determination, USITC Pub. 3337 at 17-18.
[154] Original Determination, USITC Pub. 3337 at 18.
[155] Second Remand Determination, USITC Pub. 3674 at 44-62.
[156] First Review, USITC Pub. 3860 at 27-30.
[157] First Review, USITC Pub. 3860 at 29-30.
[158] First Review, USITC Pub. 3860 at 29-30.
[159] Second Review, USITC Pub. 4325 at 27-28.
[160] Second Review, USITC Pub. 4325 at 29.
[161] Second Review, USITC Pub. 4325 at 29-30.
[162] Second Review, USITC Pub. 4325 at 30.

2. The Current Review

As in both prior five-year reviews, data in the current review indicate that the domestic industry producing TCCSS continues to struggle. Although the domestic industry's capacity was constant during the POR,[163] its production, capacity utilization, and market share steadily declined.[164] [165] The domestic industry's U.S. shipments declined throughout the POR as apparent U.S. consumption declined.[166]

The domestic industry's employment-related indicia were mixed. Most of the domestic industry's employment indicators declined from 2014 to 2016, but were slightly higher in interim 2017 than in interim 2016, including the number of production and related workers ("PRWs"), hours worked, and wages paid.[167] Worker productivity declined throughout the POR.[168] Hourly wages increased irregularly from 2014 to 2016, but were lower in interim 2017 than in interim 2016.[169]

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[163] The domestic industry's production capacity was 3.1 million short tons in 2014, 2015, and 2016, and 2.3 million short tons in interim 2016 and interim 2017. CR/PR at Table III-3.

[164] The domestic industry's production declined from 1.8 million short tons in 2014 to 1.5 million short tons in 2015, and then to 1.4 million short tons in 2016. CR/PR at Table III-3. Its production was lower in interim 2017, at 997,687 short tons, than in interim 2016, at 1.1 million short tons. *Id*. Its capacity utilization declined from 59.8 percent in 2014 to 49.4 percent in 2015, and then to 44.8 percent in 2016. *Id*. Its capacity utilization was lower in interim 2017, at 43.4 percent, than in interim 2016, at 47.9 percent. *Id*.

[165] U.S. producers' end-of-period inventories declined from 2014 to 2016, although they were slightly higher in interim 2017 than in interim 2016. CR/PR at Table III-6. U.S. producers' end-of-period inventories were 253,038 short tons in 2014, 190,001 short tons in 2015, 167,428 short tons in 2016, 191,108 short tons in interim 2016, and 191,931 short tons in interim 2017. *Id*.

[166] U.S. producers' U.S. shipments declined from 1.8 million short tons in 2014 to 1.6 million short tons in 2015 to 1.4 million short tons in 2016; they were lower in interim 2017, at 969,676 short tons, than in interim 2016, at 1.1 million short tons. CR/PR at Table III-5. By value, U.S. producers' U.S. shipments declined from $1.9 billion in 2014 to $1.6 billion in 2015 and $1.3 billion in 2016; they were lower in interim 2017, at $933.3 million, than in interim 2016, at $1.0 billion. *Id*. The domestic industry's market share declined from 68.3 percent in 2014 to 63.2 percent in 2015, and then to 56.9 percent in 2016. CR/PR at Table C-1. Its market share was lower in interim 2017, at 53.9 percent, than in interim 2016, at 58.8 percent. *Id*.

[167] PRWs were 2,857 in 2014, 2,670 in 2015, 2,343 in 2016, 2,349 in interim 2016, and 2,474 in interim 2017. CR/PR at Table III-8. Total hours worked were 5.6 million hours in 2014, 5.0 million hours in 2015, 4.5 million hours in 2016, 3.4 million hours in interim 2016, and 3.7 million hours in interim 2017. *Id*. Total wages paid were $246.8 million in 2014, $207.4 million in 2015, $202.9 million in 2016, $154.4 million in interim 2016, and $159.2 million in interim 2017. *Id*.

[168] Worker productivity was 330.0 short tons per hour in 2014, 300.5 short tons per hour in 2015, 302.9 short tons per hour in 2016, 322.6 short tons per hour in interim 2016, and 272.2 short tons per hour in interim 2017. CR/PR at Table III-8.

[169] Hourly wages were $44.36 in 2014, $41.12 in 2015, $44.72 in 2016, $45.19 in interim 2016, and $43.43 in interim 2017. CR/PR at Table III-8.

Virtually all of the domestic industry's financial performance indicia declined during the POR. The domestic industry's net sales declined throughout the POR as apparent U.S. consumption declined.[170] The domestic industry sustained increasing operating and net income losses throughout the POR,[171] and its gross profits steadily declined with the industry suffering gross losses in interim 2017.[172] The domestic industry's capital expenditures declined from 2014 to 2016, but were higher in interim 2017 than in interim 2016.[173] Its research and development expenses increased from 2014 to 2016, but were lower in interim 2017 than in interim 2016.[174]

In light of the foregoing, we conclude that the domestic industry is currently vulnerable to injury by increased subject imports. The industry's production, capacity utilization, shipments, net sales, operating income margin, operating income as a ratio to net sales, net income, gross profits, production and related workers, hours worked, worker productivity, and wages paid all decreased during the POR. The domestic industry's financial performance was particularly weak, as the industry suffered increasing operating losses throughout the POR. The deteriorating demand conditions during the current review period are not likely to improve significantly in the reasonably foreseeable future. These conditions have left the domestic industry particularly susceptible to injury from reduced sales or lower prices as a result of renewed competition with low-priced subject imports.

As explained above, we have 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 effects on the domestic industry. The likely significant volume of the subject imports would likely have an adverse impact on the production, shipments, sales, market share, and

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[170] By value, the domestic industry's net sales declined from $1.9 billion in 2014 to $1.6 billion in 2015 and $1.3 billion in 2016; they were lower in interim 2017, at $936.5 million, than in interim 2016, at $1.0 billion. CR/PR at Table III-11. U.S. producers' U.S. shipments declined from 1.8 million short tons in 2014 to 1.6 million short tons in 2015 to 1.4 million short tons in 2016; they were lower in interim 2017, at 969,676 short tons, than in interim 2016, at 1.1 million short tons. CR/PR at Table III-5. By value, U.S. producers' U.S. shipments declined from $1.9 billion in 2014 to $1.6 billion in 2015 and $1.3 billion in 2016; they were lower in interim 2017, at $933.3 million, than in interim 2016, at $1.0 billion. *Id*.

[171] The domestic industry's operating losses were $12.4 million in 2014, $16.3 million in 2015, $27.1 million in 2016, $10.0 million in interim 2016, and $49.6 million in interim 2017. CR/PR at Table III-11. Operating losses as a ratio to net sales were 0.6 percent in 2014, 1.0 percent in 2015, 2.1 percent in 2016, 1.0 percent in interim 2016, and 5.3 percent in interim 2017. *Id*. The domestic industry's net losses were $21.8 million in 2014, $48.5 million in 2015, $43.9 million in 2016, $23.5 million in interim 2016, and $70.9 million in interim 2017. *Id*.

[172] The domestic industry's gross profits were $42.9 million in 2014, $32.9 million in 2015, $7.1 million in 2016, $17.9 million in interim 2016, and the domestic industry had a gross loss of $25.8 million in interim 2017. CR/PR at Table III-9.

[173] The domestic industry's capital expenditures were $*** in 2014, $*** in 2015, $*** in 2016, $*** in interim 2016, and $*** in interim 2017. CR/PR at Table III-12.

[174] The domestic industry's research and development expenses were $*** in 2014, $*** in 2015, $*** in 2016, $*** in interim 2016, and $*** in interim 2017. CR/PR at Table III-12.

revenues of the domestic industry. These reductions would likely have a direct adverse impact on the industry's profitability and employment, as well as its ability to raise capital and make and maintain necessary capital investments.[175] We therefore conclude that subject imports from Japan would likely have a significant impact on the domestic industry upon revocation of the order within a reasonably foreseeable time.

Claiming that the imposition of Section 232 tariffs would likely result in sharp improvements in the domestic industry's performance as projected by their economic model, Japanese Respondents argue that subject imports would not likely have a significant adverse impact on the domestic industry based upon revocation of the order.[176] We are not persuaded by Japanese Respondents' argument on this issue. While we recognize that 25 percent tariffs under Section 232 have recently been applied to imports of TCCSS from non-exempt countries including Japan, any current predictions of the effects of these tariffs on market conditions are speculative. The limited available information in the current record, covering a period of review that ended prior to the imposition of the Section 232 tariffs,[177] does not indicate that the tariffs have resulted in significant changes in market conditions for the domestic TCCSS industry as of the closing of the record.[178]

We have also considered the role of nonsubject imports in the U.S. market. There is no indication on this record 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 export orientation of the subject industry and the relative attractiveness of the U.S. market. Given the substitutability between the subject imports and the domestic like product, the likely increase in subject imports upon revocation would likely take significant market share from the domestic industry, or otherwise cause significant adverse price effects, despite the growing and significant presence of nonsubject imports in the U.S. market.[179] Competition for sales between low-priced subject TCCSS and non-subject TCCSS would in any event likely affect market prices negatively to the detriment of the domestic

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[175] The domestic industry made substantial capital investments that would likely be adversely affected by an influx of subject imports, including U.S. Steel's investments in 2017 of more than *** as part of its "Can-Do Program." CR at II-5, PR at II-3; U.S. Steel Posthearing Br. at 13 & Exhibit 3. This program ***. CR at III-27, PR at III-18; U.S. Steel Posthearing Br. at 13 & Exhibit 3.

[176] *See, e.g.*, Japanese Respondents' Posthearing Br. at 10-11& Exhibit 6.

[177] The Commission collected data in this third review covering the POR from January 2014 to September 2017. CR/PR at Table C-1. The President's Proclamation announcing Section 232 tariffs on steel was issued on March 8, 2018, and those tariffs became effective on March 23, 2018. CR at I-8-9, PR at I-6-7.

[178] *See, e.g.*, U.S. Steel's Supplemental Comments at 9 & Attachment 1 (Affidavit of Amy Smith-Yoder, Packaging General Manager, Consumer Solutions for U.S. Steel); U.S. Steel's Final Comments at 15; UPI's Supplemental Comments at 4 & Declaration of MD Amin, Vice President of Commercial Sales for UPI.

[179] CR/PR at Tables I-6, C-1.

industry. Therefore, the subject imports are likely to have adverse effects on the domestic industry distinct from the effects of nonsubject imports in the event of revocation.[180]

Accordingly, we find that revocation of the antidumping duty order on TCCSS from Japan would likely have a significant impact on the domestic industry.

IV. Conclusion

For the above-stated reasons, we determine 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.

[180] Even if nonsubject imports or some other factors are likely to cause material injury to the domestic industry upon revocation of an order, subject imports can also be a cause of such injury to the domestic industry, as long as they represent more than a minimal or tangential cause of the material injury that is likely to be suffered by the industry upon revocation. *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").

PART I: INTRODUCTION

BACKGROUND

On May 1, 2017, 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 likely lead to the continuation or recurrence of material injury to a domestic industry.[2] [3] On August 4, 2017, the Commission determined that it would conduct a full review pursuant to section 751(c)(5) of the Act.[4] The following tabulation presents information relating to the background and schedule of this proceeding:[5]

Effective date	Action
June 26, 2000	Commerce's antidumping duty order on TCCSS from Japan (65 FR 39364)
May 1, 2017	Commission's institution of a five-year review (82 FR 20378)
May 1, 2017	Commerce's initiation of a five-year review (82 FR 20314)
August 4, 2017	Commission's determination to conduct a full five-year review (82 FR 40168)
August 25, 2017	Commerce's final results of expedited reviews of the antidumping duty order (82 FR 41933)
October 20, 2017	Commission's scheduling of a full five-year review (82 FR 49661)
February 27, 2018	Commission's hearing
May 31, 2018	Commission's vote
June 19, 2018	Commission's determination and views

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

[2] *Tin- and Chromium-Coated Steel Sheet From Japan; Institution of a Five-Year Review, 82* FR 20378*,* May 1, 2017. 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 review of the subject antidumping duty order concurrently with the Commission's notice of institution. *Initiation of Five-Year ("Sunset") Reviews,* 82 FR 20314, May 1, 2017*.*

[4] *Tin- and Chromium-Coated Steel Sheet From Japan; Notice of Commission Determination To Conduct a Full Five-Year Review,* 82 FR 40168, August 4, 2017*.* The Commission found that both the domestic and respondent interested party group responses to its notice of institution (82 FR 20314, May 1, 2017) were adequate*.*

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

The original investigations

The original investigations resulted from petitions filed by Weirton Steel Corp., Weirton, West Virginia,[6] the Independent Steel Workers Union, and the United Steelworkers of America, AFL-CIO, on October 28, 1999, alleging material injury and threat of material injury to an industry in the United States by reason of subsidized imports of TCCSS from Japan and less-than-fair-value ("LTFV") imports of TCCSS from Japan. In the original investigation, *** producers representing *** percent of U.S. production supported the petition while *** producers representing *** percent of U.S. production took no position. No producer other than Weirton appeared in support of the imposition of antidumping duties at the Commission's hearing.[7] Following notification of a final determination by Commerce that imports of TCCSS from Japan were being sold at LTFV, 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]

Subsequent proceedings

As noted above, the Commission issued its original injury determination in the antidumping investigation covering TCCSS from Japan in August 2000.[10] In September 2000, the Japanese respondents appealed the Commission's affirmative determination to the U.S. Court of International Trade ("CIT"). On December 31, 2001, the CIT remanded the Commission's pricing and impact analysis for a "more complete analysis."[11]

In March 2002, the Commission issued its first remand determination.[12] After reconsidering the record, the Commission again determined that the domestic TCCSS industry was materially injured by reason of the subject imports from Japan.[13] On August 9, 2002, the

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[6] Weirton Steel Corp. filed for bankruptcy in 2003 and its mill in Weirton, West Virginia was acquired by International Steel Group, which subsequently merged with Mittal Steel (which in turn merged with Arcelor).

[7] *Tin- and Chromium-Coated Steel Sheet from Japan*, *Investigation No. 731-TA-860 (Final)*, USITC Staff Report, memorandum INV-X-160, July 18, 2000, table III-1 and Appendix B.

[8] *Tin- and Chromium-Coated Steel Sheet from Japan*, *Inv. No. 731-TA-860 (Final)*, USITC Publication 3337, August 2000.

[9] *Certain Tin Mill Products from Japan: Notice of Antidumping Duty Order*, 65 FR 52067, August 28, 2000.

[10] *Tin- and Chromium-Coated Steel Sheet from Japan, Investigation No. 731-TA-860 (Final),* USITC Publication 3337, August 2000 ("Original Determination").

[11] *Nippon Steel Corp. v. United States*, 182 F. Supp.2d 1330 (Ct. Int'l Trade 2001)(*"Nippon I*") p. 1356.

[12] Views of the Commission on Remand, *Tin- and Chromium-Coated Steel Sheet from Japan, Investigation No. 731-TA-860 (Remand),* USITC Publication 3493, March 2002 ("First Remand Determination").

[13] Ibid., pp. 2-14.

CIT issued its second decision in the proceeding.[14] In that opinion, the CIT vacated the Commission's affirmative material injury determination and expressly ordered the Commission to enter a negative determination.[15]

The Commission appealed *Nippon II* to the U.S. Court of Appeals for the Federal Circuit ("CAFC"). On October 3, 2003, the CAFC vacated the CIT's decision in *Nippon II*.[16] The CAFC held that the CIT went "beyond its statutorily-assigned role to 'review'" because "it engaged in refinding facts (e.g., by determining witness credibility), or interposing its own determinations on causation and material injury itself." However, because of the "multiplicity, specificity, and cogency" of the CIT's critiques of the Commission's remand determination, the CAFC stated that the Commission should on remand "attend to all the points made by the CIT, especially those of {Nippon II} which the Commission has not yet had the opportunity to address."[17]

On February 23, 2004, the Commission issued an affirmative determination on its second remand.[18] On October 14, 2004, the CIT issued its third opinion in the appeal and concluded, the "record fully supports a negative determination and will not support an affirmative one."[19] The CIT therefore remanded the Commission's second remand determination with "instructions to issue a negative material injury determination."[20]

On December 13, 2004, the Commission issued its third remand determination, finding in the negative as ordered by the CIT. The Commission also issued a negative threat determination, stating that this was "dictated by the CIT's findings in *Nippon IV*" and noting it would not have made such a determination "in the absence of {the CIT's} findings."[21] The CIT affirmed the determination[22] and its decision was appealed to the CAFC. The case was argued before the CAFC on March 7, 2006. On August 10, 2006, the CAFC reversed the CIT's decision vacating the Commission's affirmative determination, instructed the CIT to vacate the Commission's negative injury and threat determinations issued pursuant to the lower court's orders, and directed the CIT to "reinstate the Commission's affirmative material injury determination" in the investigation.[23]

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

[15] *Nippon II*, pp. 1371-72.

[16] *Nippon Steel Corp. v. International Trade Commission*, 345 F.3d 1379, 1381-82 (Fed. Cir. 2003) (*"Nippon III"*).

[17] *Nippon III,* 345 F.3d at 1382.

[18] Views of the Commission on Second Remand, *Tin- and Chromium-Coated Steel Sheet from Japan*, *Investigation No. 731-TA-860 (Second Remand),* USITC Publication 3674, February 2004 ("Second Remand Determination").

[19] Nippon Steel Corp. v. United States, 350 F.Supp.2d 1186 (Ct. Int'l Trade 2004) ("*Nippon IV")*, pp. 64-65 (emphasis in original).

[20] Ibid., p. 66.

[21] Third Remand Determination, p. 10.

[22] *Nippon Steel Corp. v. United States*, Slip Op. 05-38 (CIT March 23, 2005).

[23] Nippon Steel Corporation, et al. v. United States, 458 F. 3d 1345 (Fed. Cir. 2006).

First and second five-year reviews

In June 2006, the Commission initiated a full five-year review of the subject order and determined that revocation of the antidumping 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.[24] Following an affirmative determination in the first five-year review by Commerce and the Commission,[25] Commerce issued a continuation of the antidumping order on imports of TCCSS from Japan, effective July 1, 2006.[26]

In September 2011, the Commission initiated a full five-year review of the subject order and determined that revocation of the antidumping 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.[27] Following an affirmative determination in the second five-year review by Commerce and the Commission, Commerce issued a continuation of the antidumping order on imports of TCCSS from Japan, effective June 12, 2012.[28]

RELATED INVESTIGATIONS

Commission investigations

In a 2001 safeguards investigation, the Commission was evenly divided as to whether TCCSS were being imported into the United States in such increased quantities as to be a substantial cause of serious injury, or threat thereof, to the domestic industry producing such articles. The three affirmative-voting Commissioners recommended an additional tariff decreasing from either 40 percent to 31 percent over four years or from 20 percent to 11 percent over four years.[29] On March 5, 2002, President George W. Bush announced the implementation of steel safeguard measures. Import relief relating to tin mill products consisted of an additional tariff for a period of three years and one day (30 percent ad valorem on imports in the first year, 24 percent in the second year, and 18 percent in the third year).[30]

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[24] *Tin- and Chromium-Coated Steel Sheet From Japan, Inv. No. 731-TA-860 (Review),* USITC Publication 3860, June 2006.

[25] *Tin- and Chromium- Coated Steel Sheet From Japan, 71* FR 37944, July 3, 2006; *Certain Tin Mill Products from Japan; Final Results of the Expedited Sunset Review of the Antidumping Duty Order*, 70 FR 67448, November 7, 2005.

[26] *Certain Tin Mill Products from Japan: Continuation of Antidumping Duty Order,* 71 FR 41422, July 21, 2006.

[27] *Tin- and Chromium-Coated Steel Sheet From Japan, Inv. No. 731-TA-860 (Second Review),* USITC Publication 4325, May 2012.

[28] *Tin- and Chromium-Coated Steel Sheet From Japan,* 77 FR 32998, June 4, 2012; *Certain Tin Mill Products from Japan: Continuation of Antidumping Duty Order,* 77 FR 34938, June 12, 2012.

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

[30] *Presidential Proclamation 7529 of March 5, 2002, To Facilitate Positive Adjustment to Competition From Imports of Certain Steel Products*, 67 FR 10553, March 7, 2002. The President also instructed the

(*continued*...)

Following receipt of the Commission's mid-term monitoring report in September 2003, and after seeking information from the U.S. Secretary of Commerce and U.S. Secretary of Labor, President Bush determined that the effectiveness of the action taken had been impaired by changed circumstances. Therefore, he terminated the U.S. measure with respect to increased tariffs on December 4, 2003.[31] On March 21, 2005, the Commission instituted an investigation under section 204(d) of the Trade Act of 1974 to evaluate the effectiveness of the relief action on imports of certain steel products.[32] The Commission submitted the evaluation report to the President and the Congress on September 19, 2005.[33]

In the second half of 2016, the United States issued antidumping duty and/or countervailing duty orders on hot-rolled and cold-rolled steel, including the substrates used in the production of TCCSS. In total, these orders covered imports of hot-rolled steel from six countries and cold-rolled steel from seven countries.[34]

(…*continued*)
Secretaries of Commerce and the Treasury to establish a system of import licensing to facilitate steel import monitoring.

[31] *Presidential Proclamation 7741 of December 4, 2003, To Provide for the Termination of Action Taken With Regard to Imports of Certain Steel Products*, 68 FR 68483, December 8, 2003. Import licensing remained in place through March 21, 2005. Effective March 21, 2017, the Steel Import Monitoring and Analysis System Licensing, formerly the Steel Import Licensing and Surge Monitoring Program, was extended to March 21, 2022, *Steel Import Monitoring and Analysis System,* 82 FR 1183, January 5, 2017.

[32] *Steel: Evaluation of the Effectiveness of Import Relief,* 70 FR 17113, April 4, 2005.

[33] *Steel: Evaluation of the Effectiveness of Import Relief, Investigation No. TA-204-12*, USITC Publication 3797, September 2005, p. 1.

[34] On July 7, 2016, the Commission completed and filed its determinations that an industry in the United States is materially injured by reason of imports of cold-rolled steel flat products from China and Japan and that have been found by the Department of Commerce (''Commerce'') to be sold in the United States at less than fair value (''LTFV''), and that have been found by Commerce to be subsidized by the government of China.

On September 12, 2016, the Commission completed and filed its determinations that an industry is materially injured by reason of imports of cold-rolled steel flat products from Brazil, India, Korea, and the United Kingdom that have been found by Commerce to be sold in the United States at LTFV, and to be subsidized by the governments of Brazil and Korea. The Commission further determined that an industry in the United States is threatened with material injury by reason of imports of cold-rolled steel flat products that have been found by Commerce to be subsidized by the government of India.

On September 26, 2016, the Commission completed and filed its determinations that an industry in the United States is materially injured by reason of imports of certain hot-rolled steel flat products from Australia, Brazil, Japan, Korea, the Netherlands, Turkey, and the United Kingdom found by Commerce to be sold in the United States at LTFV and subsidized by the governments of Brazil and Korea.

Section 232 investigation (Commerce)

On April 19, 2017, the Secretary of Commerce initiated a Section 232 investigation, under the *Trade Expansion Act of 1962*, as amended (19 U.S.C. §1862), to assess the impact of steel imports on the national security of the United States.[35] Commerce submitted the findings from its investigation to the President on January 11, 2018, and by law, the President has 90 days to decide on any potential trade remedies.[36] In its report, Commerce recommended the following:

* A global tariff of at least 24% on all steel imports from all countries, or
* A tariff of at least 53% on all steel imports from 12 countries (Brazil, China, Costa Rica, Egypt, India, Malaysia, Republic of Korea, Russia, South Africa, Thailand, Turkey and Vietnam) with a quota by product on steel imports from all other countries equal to 100% of their 2017 exports to the United States, or
* A quota on all steel products from all countries equal to 63% of each country's 2017 exports to the United States.[37]

On March 8, 2018, the President announced his decision to impose 25-percent ad valorem duties on all steel mill products[38] (including TCCSS) imported from all U.S. trade partners, except from Canada and Mexico.[39] On March 22, 2018, the president authorized the suspension of tariffs on steel and aluminum imports from the following countries: Argentina, Australia, Brazil, Canada, Mexico, member countries of the European Union, and South Korea.[40] On April 30, 2018, the President announced the expiration of exemptions on tariffs on steel and aluminum imports from Canada, the European Union member states, and Mexico on May 31,

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[35] U.S. Department of Commerce website: https://www.commerce.gov/page/section-232-investigation-effect-imports-steel-us-national-security (accessed January 29, 2018).

[36] U.S. Department of Commerce website: https://www.commerce.gov/news/press-releases/2018/01/statement-department-commerce-submission-steel-section-232-report (accessed January 23, 2018).

[37] Commerce, *The Effect of Imports of Steel on the National Security, an Investigation Conducted Under Section 232 of the Trade Expansion Act of 1962, as Amended*, January 11, 2018, pp. 58-61, https://www.commerce.gov/sites/commerce.gov/files/the_effect_of_imports_of_steel_on_the_national_security_-_with_redactions_-_20180111.pdf (accessed February 23, 2018). See also: Commerce, "Secretary Ross Releases Steel and Aluminum 232 Reports in Coordination with White House," Press Release, February 16, 2018, https://www.commerce.gov/news/press-releases/2018/02/secretary-ross-releases-steel-and-aluminum-232-reports-coordination (accessed February 23, 2018).

[38] See paragraphs 8 and proclamation paragraph (1) of The White House, "Presidential Proclamation on Adjusting Imports of Steel into the United States," March 8, 2018. https://www.whitehouse.gov/presidential-actions/presidential-proclamation-adjusting-imports-steel-united-states/ (accessed March 16, 2018).

[39] See paragraph 10 and proclamation paragraph (2), Ibid.

[40] https://www.whitehouse.gov/briefings-statements/president-trump-approves-section-232-tariff-modifications/ (accessed March 26, 2018).

2018.[41] The President also announced the exemptions were extended permanently for Korea in return for agreeing to product-specific quotas beginning on January 1, 2019, and expiration of exemptions for Argentina, Australia, and Brazil were not imposed.[42]

SUMMARY DATA

Table I-1 and figure I-1 presents a summary of data from the original investigations (1999) as well as the first (2005), the second (2011), and the current full five-year review (2016). The data sets for the original investigation, the prior two five-year reviews, and the current review are believed to be generally comparable, although there have been numerous tin mill products excluded from the scope since the original antidumping duty order was issued. Apparent U.S. consumption has declined by more than one-third since 1999. Subject TCCSS from Japan exited the U.S. market (although as discussed in Part IV, imports of excluded tin mill and tin-free products continued). U.S. mills' shipments have declined markedly since 1999, consistent with multiple consolidations and closures. U.S. imports from nonsubject sources have increased noticeably and comprise more than two-fifths of the U.S. market.

[41] See paragraphs 6 and 7 of The White House, "Presidential Proclamation on Adjusting Imports of Steel into the United States," April 30, 2018, https://www.whitehouse.gov/presidential-actions/presidential-proclamation-adjusting-imports-steel-united-states-3/ (accessed May 7, 2018).

[42] See paragraph 4 of The White House, "Presidential Proclamation on Adjusting Imports of Steel into the United States," April 30, 2018, https://www.whitehouse.gov/presidential-actions/presidential-proclamation-adjusting-imports-steel-united-states-3/ (accessed May 7, 2018); Annex, section B, South Korea, quantitative limitations, in 83 FR 20682, "Presidential Documents, Proclamation 9740 of April 30, 2018, Adjusting Imports of Steel Into the United States," May 7, 2018, https://www.gpo.gov/fdsys/pkg/FR-2018-05-07/pdf/2018-09841.pdf (accessed May 8, 2018); Office of the United States Trade Representative (USTR), "Joint Statement by the United States Trade Representative Robert E. Lighthizer and Republic of Korea Minister for Trade Hyun Chong Kim," Press Release, March 28, 2018, https://ustr.gov/about-us/policy-offices/press-office/press-releases/2018/march/joint-statement-united-states-trade (accessed May 7, 2018); USTR, "New U.S. Trade Policy and National Security Outcomes with the Republic of Korea," Fact Sheet, March 28, 2018, https://ustr.gov/about-us/policy-offices/press-office/fact-sheets/2018/march/new-us-trade-policy-and-national (accessed May 7, 2018); and Coyne, Justine, "US Reaches Agreement on Steel, Aluminum Tariffs with 3 Countries," *Platts*, April 30, 2018, https://www.platts.com/latest-news/metals/washington/us-reaches-agreement-on-steel-aluminum-tariffs-27964478 (accessed May 7, 2018).

Table I-1
TCCSS: Comparative data from the original investigation and subsequent reviews, 1999, 2005, 2011, and 2016

Item	Original investigation	First review	Second review	Third review
	1999	2005	2011	2016
	Quantity (short tons)			
U.S. consumption quantity	***	3,150,528	2,683,441	2,454,209
	Share of quantity (percent)			
Share of U.S. consumption:				
U.S. producers' share	***	82.1	80.7	56.9
U.S. importers' share:				
Japan	***	---	---	---
Nonsubject sources	***	17.9	19.3	43.1
All import sources	***	17.9	19.3	43.1
	Value (1,000 dollars)			
U.S. consumption	***	2,382,943	2,778,297	2,199,419
	Share of value (percent)			
Share of U.S. consumption:				
U.S. producers' share	***	81.1	78.9	58.4
U.S. importers' share:				
Japan	***	---	---	---
Nonsubject sources	***	18.9	21.1	41.6
All import sources	***	18.9	21.1	41.6
	Quantity (short tons); value (1,000 dollars); and unit value (dollars per short ton)			
U.S. importers' U.S. shipments of imports from[1]				
Japan				
Quantity	329,645	---	---	---
Value	196,185	---	---	---
Unit value	$595	---	---	---
Nonsubject sources:				
Quantity	***	563,173	518,383	1,058,090
Value	***	450,765	586,977	914,025
Unit value	***	$800	$1,132	$864
All import sources:				
Quantity	***	563,173	518,383	1,058,090
Value	***	450,765	586,977	914,025
Unit value	***	$800	$1,132	$864

Table continued on next page.

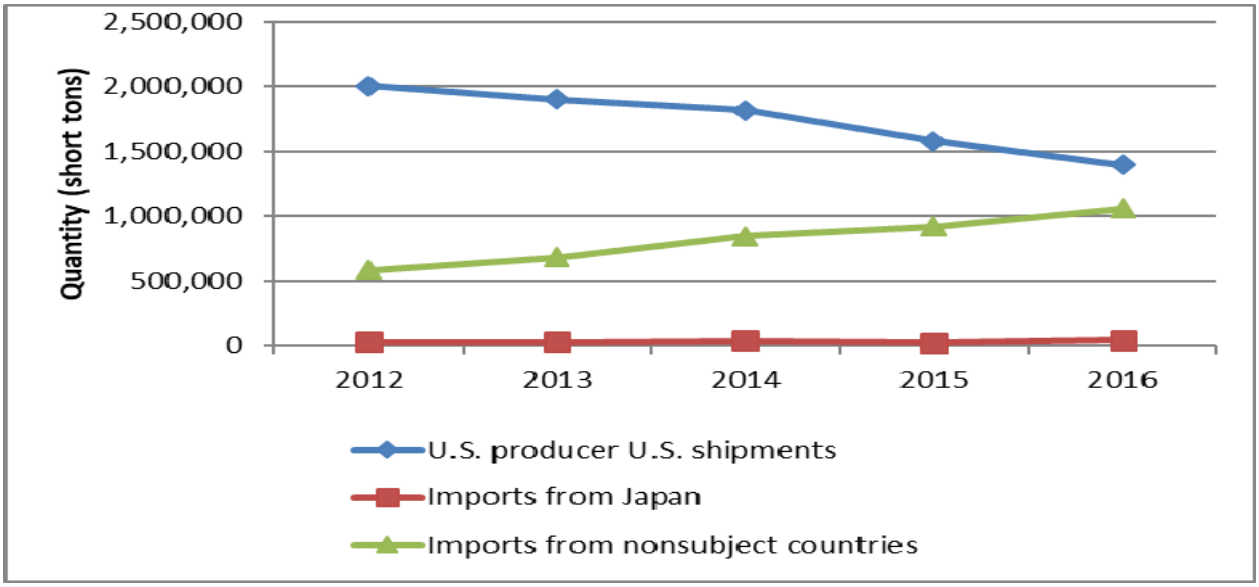
Table I-1--Continued
TCCSS: Comparative data from the original investigation and subsequent reviews, 1999, 2005, 2011, and 2016

Item	Original investigation	First review	Second review	Third review
	1999	2005	2011	2016
	Quantity (short tons); value (1,000 dollars); and unit value (dollars per short ton)			
U.S. industry:				
Capacity (quantity)	4,607,145	3,670,240	3,543,000	3,068,000
Production (quantity)	3,433,592	2,738,383	2,168,240	1,374,409
Capacity utilization (percent)	82.4	74.5	61.2	44.8
U.S. shipments:				
Quantity	3,227,134	2,587,355	2,165,058	1,396,119
Value	1,898,063	1,932,178	2,191,320	1,285,394
Unit value	$588	$747	$1,012	$921
Ending inventory	346,375	307,218	297,562	167,428
Inventories/total shipments	10.0	11.4	***	***
Production workers	6,004	3,769	2,984	2,343
Hours worked (1,000)	13,297	7,665	6,183	4,537
Wages paid (1,000 dollars)	344,320	232,355	191,594	202,886
Hourly wages	$25.89	$30.31	$30.99	$44.72
Productivity (short tons per 1,000 hour)	258.2	357.3	350.7	302.9
Financial data:				
Net sales:				
Quantity	3,472,054	2,695,138	2,166,858	1,396,982
Value	2,034,967	2,016,252	2,193,349	1,286,257
Unit value	$586	$748	$1,012	$921
Cost of goods sold	2,061,471	1,920,750	2,283,740	1,279,130
Gross profit or (loss)	(26,504)	95,502	(90,931)	7,127
SG&A expense	105,980	110,244	108,403	34,180
Operating income or (loss)	(132,484)	(14,742)	(198,794)	(27,053)
Unit COGS	$594	$713	$1,054	$916
Unit operating income	($38)	($5)	$50	($19)
COGS/ Sales (percent)	101.3	95.3	104.1	99.4
Operating income or (loss)/ Sales (percent)	(6.5)	(0.7)	(9.1)	(2.1)

[1] U.S. importers' U.S. shipments of imports were reported in the original investigation and the first review, while data presented for the second and third reviews are based on official U.S. import statistics, excluding merchandise reported as country of origin Japan.

Source: Office of Investigations memorandum INV-X-160 (July 18, 2000), memorandum INV-DD-073 (May 30, 2006), memorandum INV-KK-084 (May 3, 2012), official U.S. import statistics, and compiled from data submitted in response to Commission questionnaires.

Figure I-1
TCCSS: U.S. imports and U.S. producers' U.S. shipments TCCSS, 2012-16



Source: Compiled from data provided 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.

STATUTORY CRITERIA AND ORGANIZATION OF THE REPORT

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 review is presented in appendix C. U.S. industry data are based on the questionnaire responses of four U.S. producers of TCCSS that are believed to have accounted for all domestic production of TCCSS in 2016. U.S. import data and related information are based on Commerce's official import statistics and the questionnaire responses of ten U.S. importers of TCCSS that are believed to have accounted for three-fifths of U.S. imports during 2016. Foreign industry data and related information are based on the questionnaire responses of three producers of TCCSS that are believed to have accounted for all production in Japan. 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 that order are presented in appendix D.

COMMERCE'S REVIEWS

Administrative reviews[43]

There have been no administrative reviews by Commerce since the original investigation or the first and second five-year reviews. U.S. Steel requested administrative reviews for the periods August 1, 2009, through July 31, 2010 and August 1, 2010, through July 31, 2010, but rescinded both requests.

[43] *Tin- and Chromium-Coated Steel Sheet from Japan*, *Inv. No. 731-TA-860 (Second Review),* USITC Publication 4325, May 2012, pg. 7.

Changed circumstances reviews[44]

Commerce has conducted three changed circumstances reviews with respect to TCCSS from Japan. On October 12, 2001, Commerce published its final results of the first changed circumstances review in the *Federal Register.* The antidumping duty order was revoked, in part, with respect to certain double reduced (CADR8 temper) electrolytically chromium-coated steel, based on the fact that Weirton Steel expressed no interest in the continuation of the order with respect to these steel products.

On July 1, 2002, Commerce published its final results of the second changed circumstance review in the *Federal Register.* The antidumping duty order was revoked, in part, with respect to certain chromium-coated steel, based on the fact that Weirton Steel expressed no interest in the continuation of the order with respect to these steel products.

On February 7, 2003, Commerce published its final results of the third changed circumstances review in the *Federal Register.* The antidumping duty order was revoked, in part, with respect to certain laminated tin-free steel, based on the fact that domestic interested parties expressed no interest in the continuation of the order with respect to these steel products.

Commerce has conducted no other changed circumstances reviews concerning imports of TCCSS from Japan.

Scope inquiry reviews

Commerce has not conducted scope inquiry reviews with respect to TCCSS from Japan.

Five-year reviews

Commerce has issued the final results of its expedited reviews with respect to Japan.[45] Table I-2 presents the dumping margins calculated by Commerce in its original investigations, and the first, second, and third five-year reviews.

[44] As noted above, Commerce has conducted three changed circumstances reviews; for more detailed descriptions of each review see *Tin- and Chromium-Coated Steel Sheet from Japan*, *Inv. No. 731-TA-860 (Second Review),* USITC Publication 4325, May 2012, p. 7.

[45] *Certain Tin Mill Products From Japan: Final Results of the Expedited Review of the Antidumping Duty Order*, 82 FR 41933, August 25, 2017.

Table I-2
TCCSS: Commerce's margins in its original investigation and subsequent reviews

Producer/exporter	Original margin (*percent*)	First five-year review margin (*percent*)[1]	Second five-year review margin (*percent*)[1]	Third five-year review margin (*percent*)[1]
Kawasaki Steel Corp.[2]	95.29	95.29	95.29	--
Nippon	95.29	95.29	95.29	--
NKK Corp.[2]	95.29	95.29	95.29	--
Toyo	95.29	95.29	95.29	--
All others	32.25	32.25	32.25	--
Weighted average dumping margin	--	--	--	(3)

[1] *Certain Tin Mill Products from Japan: Notice of Antidumping Duty Order, 65 FR 52067, August 28, 2000; Certain Tin Mill Products from Japan; Final Results of the Expedited Sunset Review of the Antidumping Duty Order*, 70 FR 67448, November 7, 2005; *Certain Tin Mill Products From Japan; Final Results of the Second Expedited Sunset Review of the Antidumping Duty Order*, 76 FR 60001, September 28, 2011. *Certain Tin Mill Products From Japan: Final Results of the Expedited Review of the Antidumping Duty Order*, 82 FR 41933, August 25, 2017
[2] Kawasaki Steel Corp. and NKK Corp. merged in 2002 creating a new entity JFE. JFE Holdings Co., "Consolidation Marks Launch of JFE Group," News release, September 2002, http://www.jfe-holdings.co.jp/en/release/nkk/42-7/art01.html.
[3] Commerce determined that revocation of the antidumping duty order on tin mill products 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.

Source: *Certain Tin Mill Products From Japan: Final Results of the Expedited Review of the Antidumping Duty Order*, 82 FR 41933, August 25, 2017.

THE SUBJECT MERCHANDISE

Commerce's scope

In the current proceeding, Commerce has defined the scope as follows:
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 this investigation unless specifically excluded. The following products 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/m^2; with a chrome oxide coating restricted to 6 to 25 mg/m^2 with a modified 7B ground roll finish or blasted roll finish; with roughness average (Ra) 0.10 to 0.35 micrometers, measured with a stylus instrument with a stylus radius of 2 to 5 microns, a trace length of 5.6 mm, and a cut-off of 0.8 mm, and the measurement traces shall be made perpendicular to the rolling direction; with an oil level of 0.17 to 0.37 grams/base box as type BSO, or 2.5 to 5.5 mg/m^2as type DOS, or 3.5 to 6.5 mg/m^2 as type ATBC; with electrical conductivity of static probe voltage drop of 0.46 volts drop maximum, and with electrical conductivity degradation to 0.70 volts drop maximum after stoving (heating to 400 degrees F for 100 minutes followed by a cool to room temperature).

- Single reduced electrolytically chromium-or tin-coated steel in the gauges of 0.0040 inch nominal, 0.0045 inch nominal, 0.0050 inch nominal, 0.0061 inch nominal (55 pound base box weight), 0.0066 inch nominal (60 pound base box weight), and 0.0072 inch nominal (65 pound base box weight), regardless of width, temper, finish, coating or other properties.
- Single reduced electrolytically chromium coated steel in the gauge of 0.024 inch, with widths of 27.0 inches or 31.5 inches, and with T-1 temper properties.
- Single reduced electrolytically chromium coated steel, with a chemical composition of 0.005% max carbon, 0.030% max silicon, 0.25% max manganese, 0.025% max phosphorous, 0.025% max sulfur, 0.070% max aluminum, and the balance iron, with a metallic chromium layer of 70-130 mg/m^2, with a chromium oxide layer of 5-30 mg/m^2, with a tensile strength of 260-440 N/mm^2, 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/m^2 and chromium oxide of 10 mg/m^2, with a chemistry of 0.13% maximum carbon, 0.60% maximum manganese, 0.15% maximum silicon, 0.20% maximum copper, 0.04% maximum phosphorous, 0.05% maximum sulfur, and 0.20% maximum aluminum, with a surface finish of Stone Finish 7C, with a DOS-A oil at an aim level of 2 mg/square meter, with not more than 15 inclusions/foreign matter in 15 feet (4.6 meters) (with inclusions not to exceed 1/32 inch (0.8 mm) in width and 3/64 inch (1.2 mm) in length), with thickness/temper combinations of either 60 pound base box (0.0066 inch) double reduced CADR8 temper in widths of 25.00 inches, 27.00 inches, 27.50 inches, 28.00 inches, 28.25 inches, 28.50 inches, 29.50 inches, 29.75 inches, 30.25 inches, 31.00 inches, 32.75 inches, 33.75 inches, 35.75 inches, 36.25 inches, 39.00 inches, or 43.00 inches, or 85 pound base box (0.0094 inch) single reduced CAT4 temper in widths of 25.00 inches, 27.00 inches, 28.00 inches, 30.00 inches, 33.00 inches, 33.75 inches, 35.75 inches, 36.25 inches, or 43.00 inches, with width tolerance of 1/8 inch, with a thickness tolerance of #0.0005 inch, with a maximum coil weight of 20,000 pounds (9071.0 kg), with a minimum coil weight of 18,000 pounds (8164.8 kg) with a coil inside diameter of 16 inches

(40.64 cm) with a steel core, with a coil maximum outside diameter of 59.5 inches (151.13 cm), with a maximum of one weld (identified with a paper flag) per coil, with a surface free of scratches, holes, and rust.

- Electrolytically tin coated steel having differential coating with 1.00 pound/base box equivalent on the heavy side, with varied coating equivalents in the lighter side (detailed below), with a continuous cast steel chemistry of type MR, with a surface finish of type 7B or 7C, with a surface passivation of 0.7 mg/square foot of chromium applied as a cathodic dichromate treatment, with coil form having restricted oil film weights of 0.3-0.4 grams/base box of type DOS-A oil, coil inside diameter ranging from 15.5 to 17 inches, coil outside diameter of a maximum 64 inches, with a maximum coil weight of 25,000 pounds, and with temper/coating/dimension combinations of: (1) 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/m^2 and a chromium oxide layer between 5-30 mg/m^2; chemical composition of 0.05% maximum carbon, 0.03% maximum silicon, 0.60% maximum manganese, 0.02% maximum phosphorous, and 0.02% maximum sulfur; magnetic flux density ("Br") of 10 kg minimum and a coercive force ("Hc") of 3.8 Oe minimum.
- Tin-free steel laminated on one or both sides of the surface with a polyester film, consisting of two layers (an amorphous layer and an outer crystal layer), that contains no more than the indicated amounts of the following environmental hormones: 1 mg/kg BADGE (BisPhenol—A Di-glycidyl Ether), 1 mg/kg BFDGE (BisPhenol—F Di-glycidyl Ether), and 3 mg/kg BPA (BisPhenol—A). [46]

[46] *Certain Tin Mill Products from Japan: Final Results of the Expedited Third Sunset Review of the Antidumping Duty Order*, 77 FR 34938, August 25, 2017.

Tariff treatment

TCCSS is classifiable in the Harmonized Tariff Schedule of the United States ("HTS") under subheadings 7210.11.00, 7210.12.00, 7210.50.00, 7212.10.00, and 7212.50.00 if of nonalloy steel and reported for statistical purposes under statistical reporting numbers 7225.99.0090 and 7226.99.0180 if of alloy steel (other than stainless steel).[47] [48] At the time of the original investigation, general U.S. tariffs on TCCSS, applicable to U.S. imports that are products of Japan and classified under these headings, ranged from 1.4 to 2.6 percent ad valorem. By January 1, 2004, these tariffs were eliminated, resulting in a general duty rate of "Free."

THE PRODUCT

Description and applications[49]

Tin plate

Tin plate is a tin-coated flat-rolled steel product that is manufactured from black plate, an uncoated flat-rolled steel which is the basic material for the production of tin mill products. To create tin plate, black plate is coated on both sides with commercially pure tin via electrolytic deposition. Tin coatings vary by thickness, depending on intended end use. A common commercial weight for tin is 20 pounds/base box. [50] In addition, tin plate is available with different coating weights on the two sides of the sheet. Single-reduced electrolytic tin plate is commonly produced via cold rolling in thicknesses of 0.38 mm and lighter while double-reduced electrolytic tin plate is normally produced via cold rolling and annealing, followed by further cold reduction in thicknesses of 0.28 mm and lighter.[51] Tin plate is manufactured to a

[47] USITC, *Harmonized Tariff Schedule of the United States (2018) Basic Edition*, USITC Publication 4750, January 2018, pp. 72-17, 72-19, 72-41, and 72-42.

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

[49] Unless otherwise noted, this information is based on *Tin and Chromium Coated Steel Sheet from Japan*, *Investigation No. 731-TA-860 (Second Review),* USITC Publication 4325, May 2012, pp. I-14-15.

[50] A base box is a unit of sale under the imperial system, with a unit or area equivalent to 31,360 square inches (or 217.78 square feet). ArcelorMittal, "Tinplate Glossary," http://dofasco.arcelormittal.com/what-we-do/products/tinplate/tinplate-glossary.aspx (accessed June 20, 2017). 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 through 134.

[51] ArcelorMittal, "Tinplate," http://dofasco.arcelormittal.com/what-we-do/products/tinplate.aspx (accessed June 20, 2017).

number of American Society for Testing and Materials ("ASTM") Standard Specifications, including A623,[52] A624,[53] and A626.[54]

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. Like tin plate, 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.[55]

Applications

Major end uses of tin plate are in the manufacture of welded cans for food, beverages, aerosols, and paint. 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 crowns for glass containers. Tin plate 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 ends of cans. According to *** published statistics, *** percent of all U.S. shipments of tin plate in 2016 were used in container, packaging, and shipping applications, including cans, compared to *** percent for such applications in 2010. Of U.S. shipments of tin-free steel in 2016, *** percent were used in container, packaging, shipping applications, including cans, crown caps, and other closures, compared to *** percent for such applications in 2010.[56] According to the respondents, factors for the declining demand

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[52] 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 through 122; and "A623M-11: Standard Specification for Tin Mill Products, General Requirements (Metric)," pp. 155 through 160.

[53] 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 through 185.

[54] 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 through 192.

[55] 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 through 227.

[56] ***.

for TCCSS by can customers include the continued preference for lighter-weight cans of thinner gauge (thickness) steel, rising preference for two-piece cans (consisting of one end and the can body) rather than three-piece cans (consisting of two ends and the can body), rising use of specialty (e.g., laminated) tin mill steel not produced by U.S. mills, and rising consumer preference for alternative (non-steel) packaging.[57]

A domestic-industry witness's testimony noted the availability to the market of tin mill products with wider widths— referred to as "wide drawn and ironed ("D&I")—[58] for manufacturing two-piece cans.[59] Wider-width tin mill products offer can manufacturers the ability of producing more cans per punch in their manufacturing process.[60]

There are applications for tin-coated sheet steel other than can manufacturing. For example, one tin mill product, excluded from Commerce's scope, is used to manufacture 35mm film canisters. Fuji Photo Film Inc. and Nippon Steel requested that this product be excluded, as they claimed that this tin-free steel product requires strict specifications and is claimed not to be available from U.S. producers. Another excluded product is used to produce cable sheathing. A third excluded product is certain ultra-flat chromium-coated sheet used in the manufacture of letterpress and flexographic printing plates for newspaper and magazine publishing.

Manufacturing processes[61]

Both tin plate and chromium-coated steel sheet are manufactured in five major steps. The manufacturing processes for both products and the production workers employed are identical until the final coating step.

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[57] *JFE Steel's Responses to the Notice of Institution,* May 31, 2017, pp. 10 and 11; *NSSMC's Responses to the Notice of Institution,* May 31, 2017, pp. 11 and 12; and *Toyo's Responses to the Notice of Institution,* May 31, 2017, pp. 10 and 11.

[58] Hearing transcript, p. 104 (Smith-Yoder). U.S. Steel produces 46-inch wide D&I tin mill products at its East Chicago and Midwest facilities. U.S. Steel posthearing brief, exhibit 1, "Answers to Commissioner's Questions," pp. 22-23.

[59] Producing the seamless body for a two-piece can begins with drawing a circular disk, blanked (punched) from tin mill product coil, into a shallow "cup." The cup is shaped by "drawing (elongating) and ironing (thinning)" by being rammed through a series of tungsten carbide rings that lengthen its height, reduce its diameter, thin its wall, and shape its base. For more details about the D&I process, see, Metal Packaging Manufacturers Association, "How a Two-Piece Draw and Wall-Ironed Drinks Can is Made,' no date; and ITRI Ltd., "Drawn and Wall-Ironed Cans," Guide to Tinplate, 2000, pp. 49-53.

[60] Hearing transcript, p. 105 (Kopf); and U.S. Steel posthearing brief, exhibit 1, "Answers to Commissioner's Questions," p. 23.

[61] Unless otherwise noted, this information is based on *Tin- and Chromium-Coated Steel Sheet from Japan, Investigation No. 731-TA-860 (Second Review),* USITC Publication 4325, May 2012, pp. I-16 through 1-18.

Hot rolling and cold reduction

Both tin plate 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,* 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 obtained 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* takes place 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. 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 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"[62] 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. According to counsel for the Japanese respondents, 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[63] or to other manufacturers.[64]

Coating

In the electroplating process, the temper-rolled or double-reduced coiled strip travels through a lower and upper plating unit where individual plating cells are arranged in tandem. The plating cells contain the plating solution— either a stannous tin (Sn^{2+})-containing sulphonic acid or halogen solution[65] for tin plate, and a chromate solution for chromium-coated steel sheet. A conductor roll at the end of each cell rides along the top surface of the strip and serves as the cathode, while the tin- or chromium-coating material is deposited in the bottom of each cell and serves as the anode. The coating material dissolves into the plating solution and is electrochemically deposited on the steel substrate. The electroplating process is followed by rinsing, drying, quenching, and applying a lubricating film.

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

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[62] In October 1991, the U.S. Customs Service ("Customs") recognized the steel industry's distinction of thickness as the defining factor to distinguish "black plate" from other cold-rolled steel sheet, rather than the TSUS practice of limiting black plate solely to tin mill products. Customs Ruling HQ 089823, RE: Black Plate Cold-Rolled Steel Sheets in Coils; Protest No. 1101-91-100017, October 18, 1991; and Customs Ruling HQ 089824, RE: Black Plate Cold-Rolled Steel Sheets in Coils; Protest No. 1101-91-100018, October 18, 1991.

The current HTS 8-digit subheading for black plate is HTS 7209.18.25: Flat-rolled products of iron or nonalloy steel, of a width of 600 mm or more, cold-rolled (cold-reduced), not clad, plated or coated, of a thickness of less than 0.361 mm (blackplate). USITC, *Harmonized Tariff Schedule of the United States (2018) Basic Edition*, USITC Publication 4750, January 2018, pp. 72-16.

[63] Hearing transcript, pp. 166-167 (Porter).

[64] Black plate steel is also suitable as the substrate for laminates, inks, and other coatings. Typical end uses that rely on the strength and formability of black plate include radiator fins, picture frames, gaskets, and battery casings. Randall Metals Corp., "Cold Roll Steel & Black Plate Steel," 2008.

[65] Among U.S. tin plate producers, ***. AMUSA posthearing brief, exhibit 7, ***. For further details about tin-containing electrolyte solutions, see: ITRI Ltd., *Guide to Tinplate*, 2000, pp. 18-23.

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.

Producers need not engage in all five production steps, as steel inputs can be obtained from outside a production facility. U.S. Steel is an integrated producer that makes its own steel and performs all five production steps. RG Steel also performed all five production steps before it filed for bankruptcy and closed its tin mill facility in 2012.[66] The other U.S. production facilities skip some of these production steps. Although AMUSA's Weirton facility does not make its own steel and does not have a hot-strip mill, it obtains hot-rolled sheet from other AMUSA steel mills. Ohio Coatings neither produces nor rolls steel. The company obtains black plate and begins its production process with the coating step. UPI obtains hot-rolled steel in coils from its parent companies, U.S. Steel and the Korean company POSCO, and begins its manufacturing process with cold reduction of the hot-rolled coils.

DOMESTIC LIKE PRODUCT ISSUES

In its original determination and the first and second five-year reviews, the Commission defined the domestic like product as consisting of all domestically produced tin- and chromium-coated steel sheet corresponding to Commerce's definition of the scope of the investigation.[67] 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.[68] Both domestic and respondent interested parties agreed with the Commission's prior definition of the domestic like product in the original investigation and previous five-year reviews although respondent interested parties reserved the right to further analyze the issue.[69] No party requested that the Commission collect data concerning other possible domestic like products in their comments on the Commission's draft questionnaires.[70] No other interested party provided further comment on domestic like product.

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[66] *Domestic Interested Parties' Response to the Notice of Institution,* May 31, 2017, p. 13.

[67] *Tin- and Chromium-Coated Steel Sheet From Japan, Investigation No. 731-TA-860 (Final),* USITC Publication 3337, August 2000,p. 5; *Tin- and Chromium-Coated Steel Sheet From Japan, Investigation No. 731-TA-860 (First Review),* USITC Publication 3860, June 2006, p. I-20-21; *Tin and Chromium Coated Steel Sheet from Japan, Investigation No. 731-TA-860 (Second Review),* USITC Publication 4325, May 2012.

[68] *Tin- and Chromium-Coated Steel Sheet From Japan; Institution of a Five-Year Review*, 82 FR 20378, May 1, 2017.

[69] *Domestic Interested Parties' Response to the Notice of Institution,* May 2017, p. 16; *JFE Steel's Response to the Notice of Institution,* May 31, 2017, p. 11; *NSSMC's Response to the Notice of Institution,* May 31, 2017, p. 12; *Toyo Kohan's Response to the Notice of Institution,* May 31, 2017, pp. 11-12.

[70] *Comments of Japanese Respondents on Draft Questionnaires Tin- and Chromium Coated Steel Sheet from Japan Investigation No. 731-TA-860 (Third Sunset Review); US Steel's Response Draft Questionnaires Tin- and Chromium-Coated Steel Sheet from Japan Inv. No. 731-TA-860 (Third Review).*

U.S. MARKET PARTICIPANTS

U.S. producers

During the original investigation, seven firms supplied the Commission with information on their U.S. operations with respect to TCCSS. These firms accounted for all known U.S. production of TCCSS in 1999.[71] During the first five-year review, the U.S. industry producing TCCSS underwent extensive consolidation; the number of domestic firms decreased from seven to four.[72] During the second five-year review, the U.S. industry producing TCCSS experienced further consolidation and the number of firms producing TCCSS increased to five.[73] In these current proceedings, the Commission issued and received U.S. producers' questionnaires from four firms,[74] which provided the Commission with information on their TCCSS operations. These firms are believed to account for all U.S. production of TCCSS in 2016. Presented in table I-3 is a list of current domestic producers of TCCSS and each company's position on continuation of the orders, production locations(s), and share of reported production of TCCSS in 2016.

[71] The seven U.S. producers that supplied the Commission with usable questionnaire information during the original investigations were: Bethlehem Steel Corp., LTV Steel Co., National Steel Corp., Ohio Coatings Co., USS Posco Industries Inc., U.S. Steel Group, and Weirton Steel Corp. (petitioner). *Tin- and Chromium-Coated Steel Sheet From Japan*, *Investigation No. 731 -TA-860 (Final),* USITC Publication 3337, August 2000, p. I-1.

[72] LTV filed for protection under chapter 11 of the U.S Bankruptcy Code on December 29, 2000, then closed its Cleveland-West operations in June 2001 and the remainder of its flat rolled steel operations in December 2001. International Steel Group acquired and restarted those facilities in May and June 2002. Bethlehem Steel filed voluntary petitions under chapter 11 of the United States Code in the United States Bankruptcy Court on October 15, 2001, then was acquired by International Steel Group in May 2003; National Steel filed voluntary petitions for relief under chapter 11 of the United States code in the United States Bankruptcy Court on March 6, 2002, then was acquired by U.S. Steel in May 2003; Weirton filed a voluntary petition for reorganization under chapter 11 of the Bankruptcy Code of the United States Bankruptcy Court, then was acquired by International Steel Group in May 2004; In April 2005, International Steel Group merged with Mittal Steel. *Tin- and Chromium-Coated Steel Sheet From Japan, Investigation No. 731-TA-860 (Review),* USITC Publication 3860, June 2006, pp. I-21 to I-23.

[73] In June 2006, Mittal Steel and Arcelor announced an agreement to merge and create ArcelorMittal, however, in August 2006, the U.S. Department of Justice filed a suit to block the merger unless one of the three North American TCCSS mills that would be owned by the new entity divested or either the Sparrows Point, Maryland or Weirton, West Virginia mill is divested. In March 2011, RG Steel acquired the Sparrows Point, Maryland mill. *Tin- and Chromium-Coated Steel Sheet From Japan, Investigation No. 731-TA-860 (Second Review),* USITC Publication 4325, May 2012, pp. III-1 to III-2.

[74] RG Steel idled production at its Sparrow Point, Maryland tin plate production facility in 2012. In 2015, RG Steel sold the facility to Sparrows Point Terminal.

Table I-3
TCCSS: U.S. producers, position on orders, U.S. production locations, and share of 2016 reported U.S. production

Firm	Position on orders	Production location(s)	Share of production (percent)
AMUSA	***	Weirton, WV	***
Ohio Coatings	***	Yorkville, OH	***
U.S. Steel	***	Gary, IN East Chicago, IN Portage, IN	***
UPI	***	Pittsburg, CA	***
Total			***

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

As indicated in table I-4, four U.S. producers are related to foreign producers of TCCSS and two are related to U.S. importers of TCCSS. In addition, as discussed in greater detail in Part III, no U.S. producer directly imported the subject merchandise and no U.S. producer purchased the subject merchandise from U.S. importers.

Table I-4
TCCSS: U.S. producers' ownership, related and/or affiliated firms, since January 2016

* * * * * * *

U.S. importers

In the original investigation, 18 U.S. importing firms supplied the Commission with usable information on their operations involving the importation of TCCSS, accounting for virtually all of U.S. imports of TCCSS during 1999.[75] In the first review, the Commission issued 61 U.S. importers' questionnaires and 27 firms provided usable information.[76] In the second review, 21 U.S. importing firms provided usable information to the Commission.[77]

In the current proceedings, the Commission issued U.S. importers' questionnaires to 21 firms believed to be importers of TCCSS, as well as to all U.S. producers of TCCSS. Usable questionnaire responses were received from 10 firms.[78] Table I-5 lists all responding U.S. importers of TCCSS from Japan and other sources, their locations, and their shares of U.S. imports in 2016.

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[75] *Tin- and Chromium-Coated Steel Sheet from Japan*, *Inv. No. 731-TA-860 (Second Review),* USITC Publication 4325, May 2012.

[76] *Tin- and Chromium-Coated Steel Sheet From Japan, Investigation No. 731-TA-860 (Review),* USITC Publication 3860, June 2006, p. I-24

[77] *Tin- and Chromium-Coated Steel Sheet from Japan*, *Inv. No. 731-TA-860 (Second Review),* USITC Publication 4325 May 2012, p. I-21.

[78] Two firms reported they have not imported TCCSS since 2012.

Table I-5
TCCSS: U.S. importers, source(s) of imports, U.S. headquarters, and shares of imports in 2016

Firm	Headquarters	Share of imports by source (percent)		
		Japan	All other sources	Total
AM Dofasco	Hamitlon, ON	***	***	***
JFE Shoji	Long Beach, CA	***	***	***
Kemeny Overseas Products Corp	Chicago, IL	***	***	***
Marubeni	New York, NY	***	***	***
Mitsui	New York, NY	***	***	***
NSSBA	Schaumburg, IL	***	-	-
TATA	London, UK	***	***	***
ThyssenKrupp Steel NA	Southfield, MI	***	***	***
Titan	Baltimore, MD	***	***	***
Toyota Tsusho	Georgetown, KY	***	***	***
Total		***	***	***

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

U.S. purchasers

The Commission received 11 usable questionnaire responses from firms that have purchased TCCSS since 2014. These firms are principally can manufacturers.

APPARENT U.S. CONSUMPTION AND MARKET SHARES

Data concerning apparent U.S. consumption of TCCSS and market shares are shown in table I-6 and figure I-2.

Table I-6
TCCSS: U.S. shipments of domestic product, U.S. shipments of imports, and apparent U.S. consumption, 2014 to 2016, January to September 2016, and January to September 2017

Item	Calendar year			January to September	
	2014	2015	2016	2016	2017
	Quantity (short tons)				
U.S. producers' U.S. shipments	1,817,063	1,577,987	1,396,119	1,100,477	969,676
U.S. imports from.--					
Japan	---	---	---	---	---
Netherlands	283,946	272,352	309,996	220,580	212,922
Canada	212,299	216,295	259,546	196,883	183,479
Germany	109,478	182,717	188,800	145,859	163,723
Korea	100,001	96,200	126,400	90,449	90,007
China	97,713	82,669	107,134	71,458	104,503
All other sources	40,645	70,231	66,213	45,019	75,666
Nonsubject sources	844,082	920,463	1,058,090	770,248	830,300
All import sources	844,082	920,463	1,058,090	770,248	830,300
Apparent consumption	2,661,145	2,498,450	2,454,209	1,870,725	1,799,976
	Value (1,000 dollars)				
U.S. producers' U.S. shipments	1,908,661	1,636,195	1,285,394	1,006,743	933,342
U.S. imports from.--					
Japan	---	---	---	---	---
Netherlands	290,009	267,356	265,444	188,533	190,629
Canada	248,545	234,808	239,577	181,788	179,936
Germany	117,128	180,761	169,658	130,397	154,823
Korea	103,858	97,421	101,117	72,486	77,682
China	91,432	74,865	81,471	54,699	87,460
All other sources	42,681	70,404	56,759	38,783	66,027
Nonsubject sources	893,654	925,615	914,025	666,687	756,556
All import sources	893,654	925,615	914,025	666,687	756,556
Apparent consumption	2,802,315	2,561,810	2,199,419	1,673,430	1,689,898

Table continued on next page.

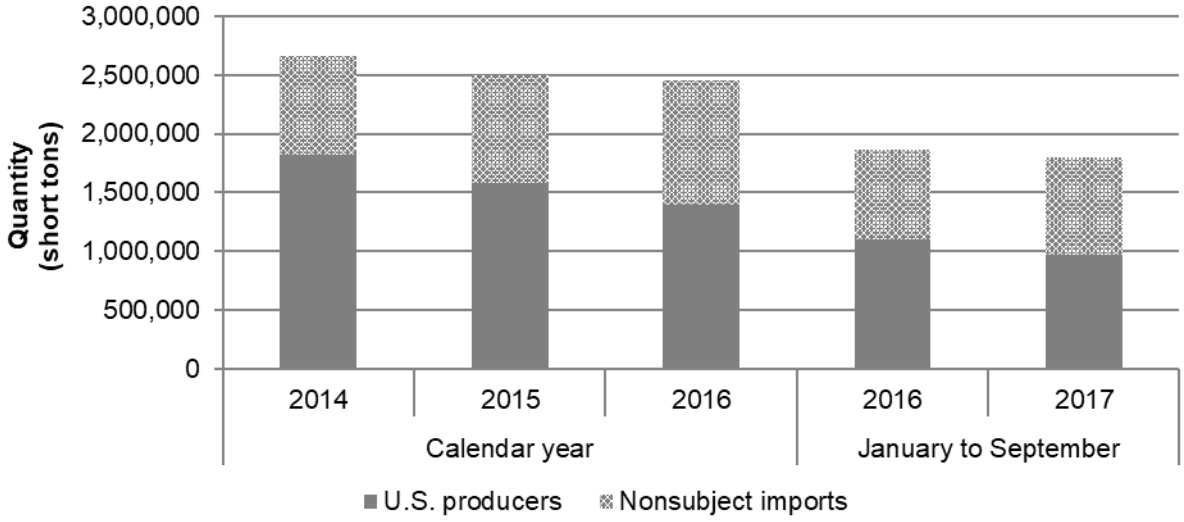
Table I-6--Continued
TCCSS: U.S. shipments of domestic product, U.S. shipments of imports, and apparent U.S. consumption, 2014 to 2016, January to September 2016, and January to September 2017

Item	Calendar year			January to September	
	2014	2015	2016	2016	2017
	Share of quantity (percent)				
U.S. producers' U.S. shipments	68.3	63.2	56.9	58.8	53.9
U.S. imports from.--					
Japan	---	---	---	---	---
Netherlands	10.7	10.9	12.6	11.8	11.8
Canada	8.0	8.7	10.6	10.5	10.2
Germany	4.1	7.3	7.7	7.8	9.1
Korea	3.8	3.9	5.2	4.8	5.0
China	3.7	3.3	4.4	3.8	5.8
All other sources	1.5	2.8	2.7	2.4	4.2
Nonsubject sources	31.7	36.8	43.1	41.2	46.1
All import sources	31.7	36.8	43.1	41.2	46.1
	Share of value (percent)				
U.S. producers' U.S. shipments	68.1	63.9	58.4	60.2	55.2
U.S. imports from.--					
Japan	---	---	---	---	---
Netherlands	10.3	10.4	12.1	11.3	11.3
Canada	8.9	9.2	10.9	10.9	10.6
Germany	4.2	7.1	7.7	7.8	9.2
Korea	3.7	3.8	4.6	4.3	4.6
China	3.3	2.9	3.7	3.3	5.2
All other sources	1.5	2.7	2.6	2.3	3.9
Nonsubject sources	31.9	36.1	41.6	39.8	44.8
All import sources	31.9	36.1	41.6	39.8	44.8

Source: Compiled from data provided 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. .

Figure I-2

TCCSS: Apparent U.S. consumption, 2014-16, January to September 2016, and January to September 2017



Source: Compiled from data provided 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. .

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. TCCSS faces competition from substitute materials as well as pressure from can manufacturers to reduce the weight of TCCSS used per container.[1] The U.S. market is served by domestically produced TCCSS and imports from nonsubject sources; no imports from Japan were reported since January 1, 2014. Overall, apparent U.S. consumption in 2016 was 7.8 percent lower than in 2014. Apparent U.S. consumption of TCCSS has been in decline since the original investigation in 1999.[2]

U.S. PURCHASERS

The Commission received 11 questionnaire responses from purchasers of TCCSS.[3] Nine responding purchasers are end users and two are distributors.[4] Six firms indicated that they produce food cans, four produce aerosol cans, four produce pet food cans, one produces paint cans, and four indicated other end uses.[5] Silgan, which produces cans for the food industry, is the largest U.S. can manufacturer and purchases approximately 850-900 thousand tons of tin mill steel annually.[6] Overall, the largest purchasers of TCCSS are ***.

Three of the responding purchasers, ***, have processing facilities on the grounds of U.S. producer ***.[7] *** reported that there are separate negotiations for consumption at this facility. *** stated that other suppliers are allowed to compete for this business,[8] ***.

CHANNELS OF DISTRIBUTION

More than four-fifths of U.S. producers' shipments of TCCSS were made directly to end users, generally can manufacturers (table II-1). The vast majority of U.S. importers' shipments were also to can manufacturers.

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

[2] Apparent U.S. consumption was 3.9 million short tons in 1999 and was 2.5 million short tons in 2016.

[3] All of the 11 responding purchasers purchased domestic TCCSS and imports of TCCSS from nonsubject countries.

[4] ***.

[5] Other end use products listed by purchasers include top and bottom closures for cans and filter shells.

[6] Hearing transcript, p. 121 (Arena). ***. Respondent interested parties' prehearing brief, exh. 8.

[7] ***.

[8] ***.

Table II-1
TCCSS: U.S. producers' and importers' share of reported U.S. commercial shipments, by sources and channels of distribution, 2014-16, January-September 2016, and January-September 2017

* * * * * * *

GEOGRAPHIC DISTRIBUTION

U.S. producers reported selling TCCSS to all regions in the contiguous United States. All four U.S. producers reported serving each specified region except for the Mountain region, which is served ***.[9] For U.S. producers, 43 percent of sales were within 100 miles of their production facility, 55 percent were between 101 and 1,000 miles, and 2 percent were over 1,000 miles. U.S. producer UPI stated that it serves a very small number of customers that produce cans for fruits and vegetables and that these customers are located within 100 miles of its plant in Pittsburg, California.[10]

SUPPLY AND DEMAND CONSIDERATIONS

U.S. supply

Four U.S. producers and imports from nonsubject sources supply TCCSS to the U.S. market. The share of imports in the U.S. market has increased from less than one-fifth of the U.S. market during the original investigations and first and second reviews to more than two-fifths of the U.S. market in 2016. A summary of supply factors for U.S. and subject foreign producers are presented in table II-2.

Table II-2
TCCSS: Factors that affect ability to increase shipments to the U.S. market, by country

	Capacity (1,000 short tons)		Capacity utilization (percent)		Inventory levels relative to total shipments (percent)		Able to shift to alternate products	Home market shipments (percent)	Shipments exported to non-U.S. markets (percent)
Country	2014	2016	2014	2016	2014	2016	No. of firms reporting "yes"	2016	2016
United States	3,068	3,068	59.8	44.8	13.9	12.0	0 of 4	***	***
Japan	1,782	1,736	86.0	91.2	9.7	8.2	1 of 3	41.8	58.2

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

[9] The specified regions were Northeast, Midwest, Southeast, Central Southwest, Mountains, and Pacific Coast.

[10] Hearing transcript, p. 31 (Giacobazzi).

Domestic production

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

U.S. producers' reported capacity was unchanged from 2014 to 2016. ***. ***. Capacity utilization was relatively low and declined from 2014 to 2016. *** U.S. producers reported no exports during January 2014-September 2017, and ***, reported exports to ***. All four responding U.S. producers stated that they could not switch production from TCCSS to other products.

Purchasers were asked to identify improvements or changes in the U.S. TCCSS industry since January 1, 2012. *** opined that U.S. tin mills remain far behind world class mills in terms of equipment modernization and that U.S. mills minimally invest in their tin mill assets. *** contended that service and quality have regressed over the last five years, particularly in 2016 and 2017. *** speculated that the antidumping duties on hot-rolled and cold-rolled coil have affected UPI and OCC's ability to secure substrate at a competitive price. *** reported that the closure of U.S. producer RG Steel left a temporary market void that has since been filled by other producers. Purchasers reported that investment is needed to see improvements in quality, and four purchasers reported that domestic mills have indicated that they intend to undertake capital investments.

Beginning in 2017, U.S. Steel made investments in its tin mill manufacturing facilities under its "Can-Do Program" and reports that the quality of its tin mill products has improved, along with improved inventory and transportation management to meet customer requirements.[11] U.S. Steel stated that quality improvements can be seen in the decline in the percentage of claims received by its customers from 2016 to 2017.[12]

Subject imports from Japan

Based on available information, Japanese producers of TCCSS have the ability to respond to changes in demand with moderate 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 unused capacity and the ability to shift shipments from alternate markets. Factors mitigating responsiveness of supply include the limited ability to shift production to or from alternate products.

Japanese producers' capacity decreased slightly from 2014 to 2016, while capacity utilization increased. Japanese shipments to the Japanese home market declined both

[11] Hearing transcript, pp. 20-22 (Smith-Yoder).

[12] U.S. Steel's posthearing brief, exh. 3, p. 11.

absolutely and as a share of total shipments from 2014 to 2016.[13] Shipments to export markets other than the United States increased both absolutely and as a share of total shipments. The share of shipments to markets other than the EU and Asia showed the largest growth from 2014 to 2016. Japanese producers' export markets include Central and South America, the Middle East, and Asia. In 2016, the largest export market for TCCSS produced in Japan was Mexico, followed by the Philippines (see Part IV). Japanese producers stated that they could not easily shift shipments to the U.S. market because it would take more than a year to find new customers and complete the qualification process. In addition, *** stated that high freight costs from Japan and annual pricing contracts would limit its sales to the U.S. market.

Two of the three responding Japanese producers stated that they could not switch production from TCCSS to other products. The third producer, ***, stated that it produces other products *** but that these products have a higher profit margin than TCCSS, and therefore *** does not have the incentive to switch production from these products to TCCSS.

Imports from nonsubject sources

Imports from nonsubject sources accounted for all U.S. imports of TCCSS in 2016. The largest sources of nonsubject imports in 2016 by descending order of volume were the Netherlands, Canada, Germany, Korea, China, and Taiwan. Combined, these countries accounted for more than 95 percent of imports from nonsubject sources in 2016. AMUSA's affiliate AM Dofasco exports TCCSS from Canada to the United States. The stated reason for exporting TCCSS to the United States rather than supplying from AMUSA is to supply drawn-and-ironed ("D&I") product that AMUSA does not produce at its Weirton plant, and at the request of customers that have relocated from Canada to the United States.[14]

***.[15] ***.[16]

As discussed in Part I, Section 232 tariffs apply to imports of steel articles, including TCCSS. The Presidential Proclamation exempted imported of steel articles from Canada and Mexico, "at least at this time.[17] As discussed in Part I, the Proclamation provides for exclusion requests.

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[13] The share of Japanese producers' shipments to the Japanese home market declined from 49 percent in 2014 to 42 percent in 2016.

[14] Hearing transcript, pp. 28-29 (Mull), and AMUSA's posthearing brief, exh. 1, pp. 21-23.

[15] Respondent interested parties' prehearing brief, exh. 8.

[16] Respondent interested parties' prehearing brief, exh. 7.

[17] On March 8, 2018, the Presidential Proclamation on Adjusting Imports of Steel into the United States announced that an additional 25 percent ad valorem rate of duty with respect to "steel articles" defined at the Harmonized Tariff Schedule 6 digit level as: 7206.10 through 7216.50, 7216.99 through 7301.10, 7302.10, 7302.40 through 7302.90, and 7304.10 through 7306.90, including any subsequent revisions to these HTS classifications, would apply to imports of steel articles from all countries except Canada and Mexico.

Supply constraints

Ten of the 11 responding purchasers reported supply constraints for TCCSS since 2012. Five of these firms specifically noted supply issues with domestic producers, including limited supplies and late shipments. *** stated that a key domestic supplier has been unable to supply its contractual obligations over the past three years (2015-17).[18] *** stated that U.S. Steel and AMUSA limit the quantities they will supply. *** stated that U.S. Steel and AMUSA fail to meet timely shipment commitments, and that AMUSA has controlled order entry. *** stated that U.S. mills had late deliveries in 2017 and that it is unable to order its entire requirements from domestic sources. *** stated that occasional supply disruptions have occurred, notably the temporary closing of U.S. Steel East Chicago in 2015, but did not consider these disruptions serious. *** stated that U.S. mills are unable to supply coils for D&I cans, coils with high elongation properties for easy-open ends ("EOE"), and laminated coils. Purchasers also reported that some foreign suppliers, including European suppliers, have limited quantities available.

U.S. Steel stated that it produces D&I tin mill products at all three of its U.S. facilities, and that it "has developed a high elongation double-reduced tin mill product that can be used for 'quick top' can ends."[19] AMUSA does not make D&I steel at its Weirton facilities, but rather supplies D&I products to its customers from its Canadian affiliate, AM Dofasco.[20]

***.[21]

All 11 responding purchasers reported delivery delays from TCCSS suppliers. Purchasers noted particular issues with domestic suppliers, with *** stating that one large domestic supplier was late on more than 50 percent of deliveries, and *** similarly stating that its suppliers' on-time delivery performance averages 50 to 60 percent. Some purchasers noted delivery issues with all of their suppliers, and several firms identified particular supply issues with AMUSA and U.S. Steel. Firms noted particular delivery issues in 2016 and 2017. Some purchasers (***) added that they had to shut down production lines because of delayed deliveries. Five purchasers reported that they had difficulty acquiring needed levels of TCCSS. *** stated that this was due to mill mechanical failures, lack of raw materials, and production curtailments. *** stated that delivery performance jeopardized its ability to cover its requirements. *** stated that U.S. manufacturers are not investing to meet the evolving demands of the marketplace in terms of quantity and technical requirements.

Silgan stated that the availability and reliability of U.S. TCCSS producers has declined each year over the past five years, and that trade restrictions on hot-rolled steel imports have affected UPI and OCC's ability to procure needed raw materials.[22] It added that because of these supply issues, it has increased its purchases of imported TCCSS from Europe and

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[18] ***.

[19] U.S. Steel's posthearing brief, exh. 3, p. 12.

[20] Hearing transcript, p. 28 (Mull).

[21] U.S. Steel's posthearing brief, exh. 3, p. 5.

[22] Hearing transcript, p. 123 (Arena).

Canada.[23] Section 232 trade remedies on steel imports, including hot-rolled and cold-rolled steel, may impact U.S. producers' ability to procure these inputs.

One producer, three importers, and eight purchasers reported that the availability of domestically produced TCCSS has changed since January 1, 2012, largely due to reduced capacity.[24] Three importers and six purchasers anticipate changes in the availability of domestically produced TCCSS; no U.S. producers anticipate any changes in availability.

New suppliers

Eight purchasers indicated that new suppliers entered the U.S. market since January 1, 2012, and two expect additional entrants. Purchasers cited TCCSS mills located in Brazil, China, Korea, Turkey, and Taiwan. ***. *** stated that it would expect additional foreign suppliers in the U.S. market ***. *** stated that it anticipates additional suppliers following the trend in global capacity expansion.

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.

End uses and cost share

Demand for TCCSS depends on the level of demand for cans used for food and other products. Overall can consumption has steadily declined over the longer term (1997-2015), as shown in figure II-1.[25] UPI stated that demand on the West Coast has fallen from 700,000 tons in 1999 to 400,000 tons currently, and that the number of buyers has declined from about 20 buyers to three major buyers and a few smaller purchasers.[26] AMUSA stated that the U.S. market for TCCSS is declining slowly at about 1 to 2 percent per year.[27]

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[23] Silgan also manufactures cans in Europe. Hearing transcript, p. 124 (Arena).

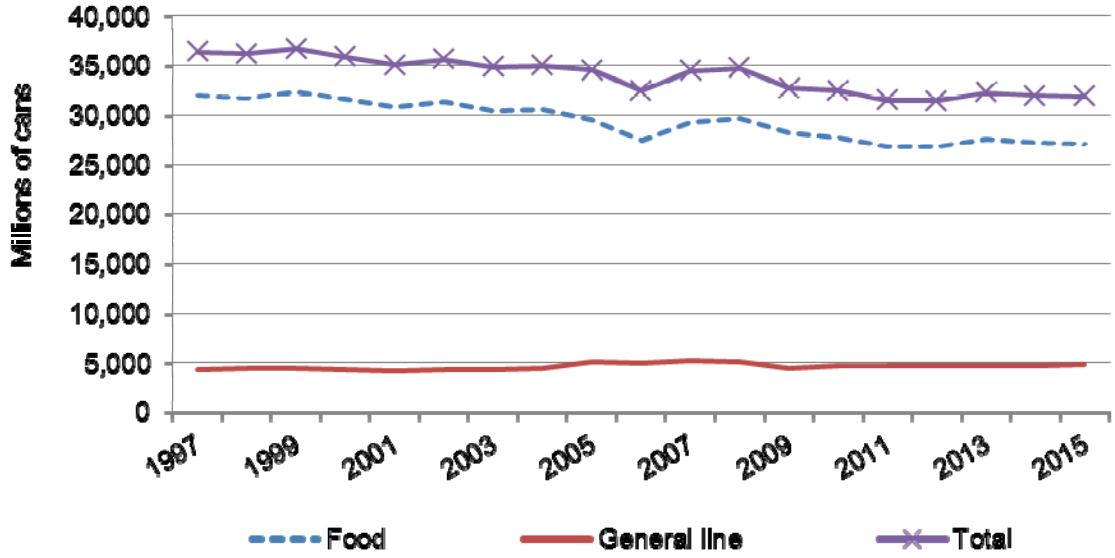
[24] RG Steel closed its Sparrows Point tin mill plant in 2012. See Part III for an overview of industry events.

[25] The latest publicly available information from the Can Manufacturers' Institute regarding can consumption is for 2015.

[26] Hearing transcript, p. 33 (Giacobazzi). UPI stated that it has lost business to imports in the West, primarily as a result of a new Ardagh manufacturing facility in Reno, Nevada, which sources TCCSS solely from foreign suppliers. UPI's posthearing brief, p. 2.

[27] Hearing transcript, p. 85 (Goedeke).

Figure II-1
Cans: U.S. can consumption, 1997-2015



Source: Can Manufacturers Institute's 2015-16, 2012-13, and 2010-11 Annual Reports and Can Manufacturers Institute's 1970-2010 food can history and general line can shipments. Where amounts from these sources differ, data from the Annual Reports were used. Note the cans reported include some cans not made from TCCSS. http://www.cancentral.com/can-stats/statistics, retrieved January 23, 2018.

TCCSS accounts for a moderate-to-large share of the cost of the end-use products in which it is used. Reported cost shares for some end uses were as follows:

- 60 to 70 percent for food cans
- 30 percent for ring and membrane style closures
- 40 to 70 percent for metal closures
- 50 to 60 percent for aerosol cans
- 60 percent for filter shells and paint cans

All 4 responding U.S. producers, 8 importers, and 9 purchasers reported no changes in end uses. Importer *** stated that the beverage sector globally has moved completely to aluminum and that there is an "ongoing threat" of substitute products such as aluminium, plastic, and tetrapak in the food/aerosol and general line can segments. Six purchasers reported that demand for end-use products declined and eight purchasers reported that end-use demand affected their demand. In particular, *** stated that as a result of the reduced demand for composite (paperboard) cans it produces using TCCSS, its overall demand for TCCSS has declined. *** stated that poor quality and high price volatility have pushed customers to alternative packaging. *** stated that new customer demand required increased purchases of TCCSS.

Business cycles

All four U.S. producers, 5 of 9 importers, and 7 of 11 purchasers indicated that the market was subject to business cycles or other distinct conditions of competition. Specifically,

demand for tin plate is impacted by the food packaging cycle, typically from June to October. Importer *** stated that a distinct condition is that the U.S. TCCSS market operates on a yearly contract cycle for most purchases.

Demand trends

Most purchasers reported a decrease in U.S. demand for TCCSS and for their final products made with TCCSS since 2012, and anticipated that demand would continue to decline (table II-3). Producers and importers were more mixed in their assessments of demand but only one firm (an importer) reported an increase in demand since 2012.

Domestic interested parties stated that recent declining consumption trends are generally attributable to the increasing development of substitute products for TCCSS and the greater use of can designs that require less metal.[28] Respondents, likewise, noted the use of alternative packaging, the use of lighter and thinner gauges of steel, and the continuing shift from three piece cans to two piece cans.[29]

Table II-3
TCCSS: Firms' responses regarding U.S. demand

Item	Number of firms reporting			
	Increase	No change	Decrease	Fluctuate
Demand in the United States:				
U.S. producers	---	1	2	1
Importers	1	4	2	---
Purchasers	---	1	9	1
Foreign producers	---	1	---	---
Anticipated future demand in the United States:				
U.S. producers	---	1	1	2
Importers	---	3	3	---
Purchasers	1	3	6	1
Foreign producers	---	1	---	---
Demand for purchasers' final products:				
Purchasers	2	2	6	1

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

Substitute products

All responding U.S. producers, 4 of 9 importers, and 8 of 11 purchasers reported that there were substitutes for TCCSS. Substitutes include aluminum, plastic, glass, foil pouches, flexible packaging, and PET, for food packaging or aerosol cans. Most responding firms reported

[28] Domestic interested parties' response to notice of institution, p. 15.
[29] Respondent interested parties' responses to notice of institution, pp. 10-11.

that the prices of substitutes do not impact the price of TCCSS. Most firms reported that there have not been any changes in substitutes and do not anticipate any future changes in substitutes.

SUBSTITUTABILITY ISSUES

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

Lead times

U.S. producers reported that all of their commercial shipments were produced-to-order, with lead times ranging from 56 to 100 days.[30] ***. U.S. importer *** reported lead times of 120 to 150 days for produced-to-order product from Japan.

Japanese interested parties stated that the large food can companies source mostly from domestic mills because of shorter lead times. Can producers require short lead times and the flexibility to adjust delivery schedules and product specifications on short notice. Can producers also need to manage the on-time delivery of hundreds of different products to dozens of canning plants located around the United States, because food must be canned as soon as possible after it reaches the canning facility. They also note that Japanese delivery lead times of three to four months do not allow for the flexibility required by purchasers.[31]

Knowledge of country sources

All eleven responding purchasers indicated they had marketing/pricing knowledge of domestic product, four of Japanese product, and nine of product from nonsubject countries.[32]

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[30] In the second review, U.S. producers reported lead times ranging from 21 to 70 days. *Tin-and Chromium-Coated Steel Sheet from Japan, Investigation No. 731-TA-860 (Final),* USITC Publication 4325, May 2012, p. V-6.

[31] Respondent interested parties' responses to notice of institution, pp. 3-4.

[32] These include Brazil, Canada, China, France, Germany, Mexico, the Netherlands, Norway, Spain, South Korea, Taiwan, and Thailand.

As shown in table II-4, most purchasers and their customers sometimes or never make purchasing decisions based on the producer or country of origin. Of the two purchasers that reported that they always or usually make decisions based on the manufacturer, *** stated it considers price, quality, and availability, and *** stated that the producer matters if it provides better quality and service.

Table II-4
TCCSS: Purchasing decisions based on producer and country of origin

Purchaser/customer decision	Always	Usually	Sometimes	Never
Purchaser makes decision based on producer	2	1	8	---
Purchaser's customers make decision based on producer	---	---	2	3
Purchaser makes decision based on country	---	---	5	6
Purchaser's customers make decision based on country	---	---	---	5

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

Factors affecting purchasing decisions

The most often cited top three factors firms consider in their purchasing decisions for TCCSS were price (11 firms), quality (10 firms), and delivery/availability/lead times (6 firms) as shown in table II-5. Quality was the most frequently cited first-most important factor (cited by 5 firms), followed by price (cited by 3 firms). Price was the most frequently cited second-most important factor (4 firms), followed by quality (3 firms). ***.

Table II-5
TCCSS: Ranking of factors used in purchasing decisions as reported by U.S. purchasers, by factor

Factor	First	Second	Third	Total
Quality	5	3	2	10
Price	3	4	4	11
Delivery/availability/lead times	0	2	4	6
Qualification/ability to meet specifications	1	1	0	2
Extension of credit/payment terms	0	1	3	4
Other[1]	2	0	0	2

[1] Other factors include service and traditional supplier for the first factor.

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

When determining the quality of TCCSS, purchasers look for flatness, surface quality, metallurgical cleanliness, formability properties, cleanliness of coatings, and that specifications are met. *** stated that the product must meet ASTM A623-08 standard specification for tin mill products. Nine of eleven purchasers reported that they sometimes purchase the lowest-priced product.[33]

Four purchasers reported that they purchase TCCSS from one country in particular over other sources of supply. Two purchasers indicated a preference for domestic product and two indicated a preference for imported product. *** prefers domestic TCCSS due to shorter lead

[33] Two firms reported usually and one firm indicated both sometimes and usually.

times, and *** stated that it buys as much U.S.-produced TCCSS as possible "as capability and economics permit." *** prefers TCCSS from Korea because of quality and price. *** prefers imported product for its TCCSS specifications that have higher quality requirements.[34]

Seven purchasers reported that there are certain types of TCCSS available from certain country sources. Five purchasers reported that mills in Europe and Asia offer wider and thinner TCCSS than is available from domestic producers; and two purchasers reported that high elongation coils used for easy-open ends were not available from domestic producers. A number of purchasers also referred to out-of-scope products.

Importance of specified purchase factors

Purchasers were asked to rate the importance of 15 factors in their purchasing decisions (table II-6). The factors rated as very important by more than half of responding purchasers were availability, price, and product consistency (11 firms each), reliability of supply (10), quality meets industry standards (9), quality exceeds industry standards (7), and delivery time and extension of credit (6 firms each).

Table II-6
TCCSS: Importance of purchase factors, as reported by U.S. purchasers, by factor

Factor	Very important	Somewhat important	Not important
Availability	11	---	---
Delivery terms	2	9	---
Delivery time	6	5	---
Discounts offered	1	7	3
Extension of credit	6	3	2
Minimum quantity requirements	1	5	5
Packaging	2	7	2
Price	11	---	---
Product consistency	11	---	---
Product range	2	9	---
Quality meets industry standards	9	2	---
Quality exceeds industry standards	7	4	---
Reliability of supply	10	1	---
Technical support/service	3	8	---
U.S. transportation costs	2	8	1

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

Supplier certification

All responding purchasers require their suppliers to become certified or qualified to sell TCCSS to their firm. Most purchasers reported that the time to qualify a new supplier ranges from six months to one year and can include trial runs to meet regulatory requirements and

[34] ***.

determine quality. Silgan stated that suppliers must be qualified for each type of steel and for each of its can manufacturing sites.[35]

Four of the eleven responding purchasers reported that a domestic or foreign supplier had failed in its attempt to qualify product, or had lost its approved status since January 1, 2012. Three of these firms identified foreign suppliers in China. Two of these purchasers also indicated that domestic producer U.S. Steel failed to qualify. *** stated that ***. *** stated that U.S. Steel failed to qualify ***.

Number of specifications

Purchasers typically buy a large number of different TCCSS product specifications, with all but one purchaser reporting purchases of 28 or more specifications in 2016. The four largest purchasers each reported buying over 100 different specifications in 2016, with the largest purchaser, ***, reporting *** different specifications. Purchasers reported buying 172 different product specifications exclusively from U.S. producers, accounting for *** short tons, and 85 product specifications exclusively from nonsubject countries, accounting for *** short tons.[36] *** stated that it purchases a majority of specifications from U.S. producers because of inventory requirements and lead times. At the hearing, Silgan stated that it buys more than 400 different specifications of tin mill steel each year, but that only a few of these specifications are from suppliers outside of North America.[37]

Changes in purchasing patterns

Nine of eleven purchasers reported decreased purchases of TCCSS from domestic producers and increased purchases from nonsubject countries since 2012 (table II-7). Reasons reported for decreased domestic purchases included quality (noted by seven purchasers), on-time delivery, lead times, service, change in product mix, ability to supply new specifications, and the closure of RG Steel. *** stated that it decreased its domestic purchases because of reduced level of product quality, on-time delivery, and customer service.

Table II-7
TCCSS: Changes in purchase patterns from U.S., subject, and nonsubject countries

Source of purchases	Did not purchase	Decreased	Increased	Constant	Fluctuated
United States	---	9	---	1	1
Japan	8	---	2	1	---
All other countries	---	---	9	1	1

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

[35] Hearing transcript, p. 129 (Arena). ***. Respondent interested parties' prehearing brief, exh. 8.
[36] Total apparent U.S. consumption of TCCSS in 2016 was 2.5 million short tons.
[37] Hearing transcript, p. 128 (Arena).

Nine of the eleven responding purchasers reported that they had changed suppliers since January 1, 2012, as shown in the tabulation below.[38]

* * * * * * *

Importance of purchasing domestic product

Most (9 of 11) of the responding purchasers did not report any domestic requirements for their TCCSS purchases. *** reported that *** percent of its sales did not have domestic requirements and *** percent had producer specific requirements. *** stated that ***, accounting for less than *** percent of its purchases.

All eleven purchasers reported that there are advantages to purchasing domestically produced TCCSS, most citing shorter lead times.

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 comparison on the same 15 factors (table II-8) for which they were asked to rate the importance.

Most purchasers reported that domestic TCCSS was inferior to that from Japan[39] and nonsubject countries on three factors: product consistency, quality exceeds industry standards, and reliability of supply. Most responding purchasers also reported that domestic TCCSS was also inferior to that from Japan on extension of credit and product range. Most responding purchasers reported that U.S.-produced TCCSS and that from nonsubject countries were comparable on 8 of the 15 factors. A slight majority of purchasers (7 of 11) reported that domestic product was superior with respect to delivery time. Equal numbers of purchasers reported that domestic product was inferior and comparable to nonsubject country product with respect to availability, price, and product range.

[38] Two firms, ***, indicated that they had not changed suppliers.

[39] There are limited comparisons between the United States and Japan because there were no reported subject imports since January 1, 2014.

Table II-8
TCCSS: Purchasers' comparisons between U.S.-produced and imported product

Factor	Number of firms reporting								
	U.S. vs. Japan			U.S. vs. other countries			Japan vs. other countries		
	S	C	I	S	C	I	S	C	I
Availability	1	2	1	---	6	6	---	3	---
Delivery terms	---	3	---	1	7	3	---	3	---
Delivery time	2	1	---	7	2	2	---	3	---
Discounts offered	---	3	---	2	9	---	---	3	---
Extension of credit	---	---	3	1	7	3	---	3	---
Minimum quantity requirements	---	3	---	2	9	---	---	3	---
Packaging	---	2	1	---	8	3	---	3	---
Price[1]	---	2	---	---	5	5	---	1	1
Product consistency	---	---	3	---	1	10	---	3	---
Product range	---	1	2	1	5	5	---	2	1
Quality meets industry standards	---	2	1	---	8	3	---	3	---
Quality exceeds industry standards	---	---	3	---	1	10	---	3	---
Reliability of supply	---	---	3	---	4	7	---	3	---
Technical support/service	---	2	1	2	7	2	---	3	---
U.S. transportation costs[1]	1	1	---	1	7	---	---	2	---

[1] A rating of superior means that price/U.S. transportation costs 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.

Note.--S=first listed country's product is superior; C=both countries' products are comparable; I=first list country's product is inferior. ***.

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

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 and other countries, 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-9, three of the four producers reported that domestic product was always interchangeable with TCCSS from Japan and other countries. The majority of importers and purchasers reported that the products were frequently interchangeable. Among the two importers that reported that domestic and Japanese TCCSS were never interchangeable, *** stated that "U.S. mills cannot meet the sophisticated technical specifications and end user approval requirements for quality" and *** referred to tin mill products excluded from the order.

In additional comments by purchasers, *** stated that some TCCSS products from Europe and Canada cannot be supplied by domestic or Japanese mills. Purchaser *** stated

that U.S. manufacturers have not sufficiently upgraded their facilities to meet the evolving demands of the marketplace in terms of quantity and technical requirements.

Table II-9
TCCSS: Interchangeability between TCCSS produced in the United States and in other countries, by country pairs

Country pair	U.S. producers				U.S. importers				U.S. purchasers			
	A	F	S	N	A	F	S	N	A	F	S	N
United States vs. Japan	3	---	1	---	3	3	---	2	1	3	2	---
United States vs. Other	3	---	1	---	2	5	1	---	3	6	2	---
Japan vs. Other	2	---	---	---	---	5	---	1	2	3	1	---

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

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

As can be seen from table II-10, nine responding purchasers reported that domestically produced TCCSS usually met minimum quality specifications. All responding purchasers reported that TCCSS from Japan and from other countries always or usually met minimum quality specifications.

Table II-10
TCCSS: Ability to meet minimum quality specifications, by source[1]

Source	Always	Usually	Sometimes	Rarely or never
United States	---	9	2	---
Japan	3	1	---	---
Other countries	5	5	---	---

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

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

In addition, 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-11, the responding producers indicated that such factors were never or sometimes significant. Importers reported mixed answers. Most purchasers reported that factors such as quality, delivery, service, consistency, and meeting evolving demands for quantity and technical requirements were always or frequently significant. Importer *** stated that domestic mills will always have "a location, culture and local resource" advantage in serving the U.S. market, although imports have an advantage in terms of freight costs on the West Coast.

Silgan stated that it has increased its purchases of imports in recent years because of changes in customer requirements to specifications that the domestic TCCSS industry is not

able to supply and difficulties of the U.S. mills in "supplying promised quantities of defect-free steel."[40]

Table II-11
TCCSS: Significance of differences other than price between TCCSS produced in the United States and in other countries, by country pairs

Country pair	U.S. producers				U.S. importers				U.S. purchasers			
	A	F	S	N	A	F	S	N	A	F	S	N
United States vs. Japan	---	---	1	2	3	1	2	---	2	2	1	---
United States vs. Other	---	---	1	2	2	2	3	1	3	4	4	---
Japan vs. Other	---	---	---	2	3	1	3	---	---	1	2	---

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

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

ELASTICITY ESTIMATES

This section discusses elasticity estimates. Parties did not comment on these estimates.

U.S. supply elasticity

The domestic supply elasticity[41] 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 is likely to be able to increase or decrease shipments to the U.S. market moderately; an estimate in the range of 3 to 6 is suggested.

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 in the range of -0.85 to -1.35.

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[40] One example cited as a change in customer requirements is the more frequent use of convenience ends with an affixed pull tab. The steel used for convenience ends is a lower gauge steel with high elongation attributes, and domestic TCCSS mills have not qualified with Silgan to supply this type of steel. Hearing transcript, pp. 129-130 (Arena).

[41] A supply function is not defined in the case of a non-competitive market.

Substitution elasticity

The elasticity of substitution depends upon the extent of product differentiation between the domestic and imported products.[42] 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 TCCSS and imported TCCSS is likely to be in the range of 2 to 4.

[42] 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. Four firms, which are believed to account for all U.S. production of TCCSS during 2016, supplied information on their operations.

The four producers, along with their six active U.S. TCCSS production locations are listed in table I-3. During the original investigation, the domestic industry consisted of seven firms with nine production locations.[1] Mergers and acquisitions reduced the number of firms to four and the number of production facilities to seven between 2001 and 2005 during the first review.[2] The number of production facilities remained at seven during the second review but the number of firms rose to five due to a legally mandated divestiture of the facility at Sparrows Point, Maryland.[3] The fifth firm exited the industry with the subsequent closure of the Sparrows Point facility and sale of the property in September 2014.[4] Industry events since January 1, 2012, as reported in the industry press, are presented in table III-1.

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[1] The seven producers were Bethlehem Steel Corp., LTV Corp., National Steel, Ohio Coatings Co., U.S. Steel Corp., USS POSCO Industries (UPI), and Weirton Steel Corp. (petitioner). Original Investigation Staff Report (INV-X-160, July 18, 2000), table III-1.

[2] The four producers were Mittal Steel, Ohio Coatings, U.S. Steel, and UPI. U.S. Steel acquired LTV Steel in March 2001 and National Steel in May 2003. The International Steel Group ("ISG") acquired the assets of Bethlehem in May 2003 and Weirton in May 2004. ISG subsequently merged with Mittal Steel in April 2005. First Review Staff Report (INV-DD-073, May 30, 2006), p. I-29 and table III-1.

[3] The U.S. Department of Justice filed suit to block Mittal's merger with Arcelor unless one of the three North American TCCSS mills (Dofasco, Sparrows Point, Maryland; and Weirton, West Virginia) that would be owned by the new entity was divested. The divested tin mill at Sparrows Point, Maryland, had three owners during 2006-14; ArcelorMittal (2006 through May 2008), Severstal Holdings LLC (May 2008 through March 2011), and RG Steel (March 2011 through September 2014). Second Review Staff Report (INV-KK-084, May 3, 2012), pp. I-23 to I-24, table I-3, pp. III-1 to III-2, and table III-1; and *The Baltimore Sun*, "As Sparrows Point Demolition Continues, Plans for Rebuilding Begin," June 22, 2015, http://www.baltimoresun.com/business/bs-bz-sparrows-point-tour-20150622-story.html (accessed June 6, 2017).

[4] The tin-mill operations at Sparrows Point were idled in February 2012 and the property was sold by RG Steel in September 2014 to Sparrows Point Terminal which planned to redevelop the property, including the former steel mill, into an industrial business park. *The Baltimore Sun*, "As Sparrows Point Demolition Continues, Plans for Rebuilding Begin," June 22, 2015, http://www.baltimoresun.com/business/bs-bz-sparrows-point-tour-20150622-story.html (accessed June 6, 2017).

Table III-1
TCCSS: Important industry events since January 1, 2012

Year	Company/Agency	Description of event
2012	RG Steel	**Production resumption:** RG Steel received a cash infusion from the equity firm Cerberus Capital Management LP and restarted its steelmaking and hot-rolling operations at Sparrows Point, Maryland.[1]
	RG Steel	**Production shutdown:** RG Steel announced that it would idle its tin plate production facility at Sparrows Point, Maryland.[2]
	Esmark Inc./Ohio Coatings Co.	**Acquisition:** Esmark Inc. acquired a 50-percent stake in Ohio Coatings Co.[3]
2014	UPI	**WARN Notice:** UPI issued a WARN notice to employees at its Pittsburgh, California mill due to "economic uncertainty," however, the company indicated that it had no immediate plans to lay off workers.[4]
	RG Steel/Sparrows Point Terminal	**Closure and acquisition**: Sparrows Point Terminal purchased RG Steel's property for $110 million with plans to redevelop the property, including the steel mill, into an industrial business park.[5]
2015	U.S. Steel	**Production shutdown and layoff:** U.S. Steel announced that it would lay off 369 workers and temporarily idle its tin mill operations in East Chicago, Indiana beginning in mid-March 2015.[6]
		Labor agreement: U.S. Steel reached a tentative labor agreement with workers represented by the United Steelworkers Union in December 2015 for a three year term expiring September 1, 2018.[7]
2016	RG Steel/Sparrows Point Terminal/ Tradepoint Atlantic	**Name change**: Sparrows Point Terminal announced that it would change its name to Tradepoint Atlantic.[8]
	U.S. Steel	**Production resumption:** U.S. Steel announced that production resumed at its tin mill operations in East Chicago, Indiana due to improving market conditions and that the company recalled most workers.[9]
	AMUSA	**Labor agreement:** AMUSA reached a tentative labor agreement with workers represented by the United Steelworkers Union in April 2016. The proposed agreement would expire on September 1, 2018.[10]

Table continued on next page.

Table III-1 – Continued
TCCSS: Important industry events since January 1, 2012

Year	Company/Agency	Description of event
	AMUSA/Frontier Group	**Acquisition:** AMUSA sold 1,100 acres of property in Weirton, West Virginia to Frontier Group to redevelop for other industrial purposes. The company indicated that it would continue focusing on its tin plate operations in Weirton, which were exempt from the sale.[11]
	Commerce	The Secretary of Commerce ("Secretary") initiated an investigation to determine the impact on national security of U.S. steel imports under section 232 of the *Trade Expansion Act of 1962*, as amended.[12]
2017	Commerce	The President issued, on April 20, 2017, a Memorandum directing the Secretary to prioritize Commerce's section 232 investigation, submit a report to the President, and, as appropriate, provide remedy recommendations to adjust steel imports so that they will not threaten to impair national security.[13]
	Commerce	The Secretary transmitted to the President, on January 11, 2018, Commerce's report of its findings and remedy recommendations on U.S. steel imports.[15] According to the section 232 statute, the President has 90 days to determine whether to accept the report findings and whether to impose duties or quotas on U.S. imports of specific steel articles.[16]
	Commerce	The Secretary announced, on February 16, 2018,[17] the release of a public version of Commerce's section 232 steel investigation report.[18]
	The White House	The President announced, on March 8, 2018, his decision to impose 25-percent ad valorem duties on U.S. imported steel products classifiable under HTS subheadings 7206.10 through 7216.50, 7216.99 through 7301.10, 7302.10, 7302.40 through 7302.90, and 7304.10 through 7306.90, including any subsequent revisions to these HTS classifications.[19] Canada and Mexico were the only U.S. trade partners that the President explicitly exempted from these section 232 duties on imported steel.[20]
2018	Commerce	Commerce issued, on March 19, 2018 an interim final rule amending the National Security Industrial Base Regulations to allow parties to submit, through the Bureau of Industry and Security, either (1) requests for or (2) objections to granting product-specific (by HTS 10-digt statistical reporting numbers) exclusions from the President's section 232 steel remedies.[21]

Table continued on next page.

Table III-1 – Continued
TCCSS: Important industry events since January 1, 2012

Year	Company/Agency	Description of event
	The White House	Citing important national security relationships with certain U.S. trade partners, the President announced on March 22, 2018, his decision to temporarily suspend the section 232 duties through April 30, 2018, on U.S. imports of subject steel products from Argentina, Australia, Brazil, the European Union member states, and South Korea. The President stated that he would decide whether to continue to exempt these trade partners based on progress in negotiating satisfactory long-term alternatives to address import threats to U.S. national security.[22]
2018	The White House	The President announced on April 30, 2018, his subsequent decisions regarding the temporary section 232 duty exemptions, based on the status of negotiating satisfactory alternative measures to remove the import threat to U.S. national security, posed by U.S. imports of subject steel products from: • Argentina, Australia, and Brazil— citing agreements reached in principle, an expiration date for these continued exemptions was not imposed, but re-imposition of the tariffs will be considered if satisfactory alternative measures are not soon finalized;[23] • Canada, the European Union member states, and Mexico— citing ongoing negotiations, the exemptions would expire after May 31, 2018, unless satisfactory alternative measures are finalized;[24] and • South Korea— citing conclusion of a final agreement, the exemption was extended permanently in exchange for Korea agreeing to product-specific quotas equivalent to 70 percent of average annual import quantities during 2015-17, beginning on January 1, 2019.[25]

[1] *Baltimore Brew*, "New York Hedge Fund Takes Investment Stake in Sparrows Point Owner," January 18, 2012, https://baltimorebrew.com/2012/01/18/new-york-hedge-fund-takes-stake-in-embattled-rg-steel/ (accessed June 7, 2017).
[2] *The Baltimore Sun*, "Sparrows Point Tin Mill to be Temporarily Idled," March 1, 2012, http://www.baltimoresun.com/business/bs-bz-sparrows-point-tinmill-20120301-story.html (accessed June 5, 2017).
[3] TRID LIVE, "Esmark Inc. Buys Ohio Steel Plant," October 12, 2012, http://triblive.com/home/2766780-74/ohio-steel-plant-esmark-coatings-million-yorkville-inc-sam-spatter (accessed June 6, 2017).
[4] *Pittsburgh Business Times*, "USS-Posco Steel warns of Possible 690 Layoffs Due to Low Bookings, But Holds Off," January 6, 2014, https://www.steelmarketupdate.com/news/3011-possible-layoff-of-690-workers-at-uss-posco (accessed June 26, 2017).
[5] *The Baltimore Sun*, "As Sparrows Point Demolition Continues, Plans for Rebuilding Begin," June 22, 2015, http://www.baltimoresun.com/business/bs-bz-sparrows-point-tour-20150622-story.html (accessed June 6, 2017).
[6] *The Northwest Indiana Times*, "U.S. Steel Will Idle East Chicago Tin Mill, Lay Off 369 Workers," January 21, 2015, http://www.nwitimes.com/business/local/u-s-steel-will-idle-east-chicago-tin-mill-lay/article_caae527c-fa4b-5401-a46d-bd9e5c9960ea.html (accessed June 7, 2017).
[7] United Steelworkers Union (USW), "USW Members Vote to Ratify 3-Year Contract with U.S. Steel," February 1, 2016, https://www.usw.org/news/media-center/releases/2016/usw-members-vote-to-ratify-3-year-contract-with-u-s-steel (accessed January 25, 2018).

Notes continued on next page.

Notes continued.

[8] *The Baltimore Sun*, "Former Sparrows Point Steel Mill Gets New Name," January 12, 2016, http://www.baltimoresun.com/business/bs-md-co-sparrows-point-brand-20160112-story.html (accessed June 6, 2017).
[9] *The Northwest Indiana Times*, "Laid-off Workers Recalled at East Chicago Tin," June 27, 2016, http://www.nwitimes.com/business/steel/laid-off-workers-recalled-at-east-chicago-tin/article_8927ac91-6f74-5bff-908c-c7b724581c59.html (accessed June 7, 2017).
[10] United Steelworkers Union (USW), "Steelworkers Announce Tentative Agreement with ArcelorMittal," April 28, 2016, https://www.usw.org/news/media-center/releases/2016/steelworkers-announce-tentative-agreement-with-arcelormittal (accessed January 25, 2018).
[11] *The Intelligencer Wheeling News-Register*, "ArcelorMittal Steel Sells Weirton Property," February 2, 2017, http://www.theintelligencer.net/news/top-headlines/2017/02/arcelormittal-steel-sells-weirton-property/ (accessed June 7, 2017).
[12] 82 FR 19206, April 26, 2017, https://www.gpo.gov/fdsys/pkg/FR-2017-04-26/pdf/2017-08499.pdf (accessed March 16, 2018).
[13] The White House, "Presidential Memorandum Prioritizes Commerce Steel Investigation," April 20, 2017, https://www.commerce.gov/news/press-releases/2017/04/presidential-memorandum-prioritizes-commerce-steel-investigation (accessed March 16, 2018).
[14] 82 FR 19206, April 26, 2017, https://www.gpo.gov/fdsys/pkg/FR-2017-04-26/pdf/2017-08499.pdf (accessed March 16, 2018).
[15] Commerce, Office of Public Affairs, "Statement from the Department of Commerce on Submission of Steel Section 232 Report to the President," Press Release, January 11, 2018. https://www.commerce.gov/news/press-releases/2018/01/statement-department-commerce-submission-steel-section-232-report (accessed March 16, 2018).
[16] See "Purpose and Procedure" in Commerce, Bureau of Industry and Security, Office of Technology Evaluation, *Section 232 Investigations Program Guide, the Effect of Imports on the National Security, Investigations Conducted Under the Trade Expansion Act of 1962, As Amended*, June 2007, p. 1. https://www.bis.doc.gov/index.php/forms-documents/section-232-investigations/86-section-232-booklet/file (accessed March 16, 2018).
[17] Commerce, Office of Public Affairs, "Secretary Ross Releases Steel and Aluminum 232 Reports in Coordination with White House," Press Release, February 16, 2018 https://www.commerce.gov/news/press-releases/2018/02/secretary-ross-releases-steel-and-aluminum-232-reports-coordination (accessed March 16, 2018).
[18] Commerce, *The Effect of Imports of Steel on the National Security, an Investigation Conducted Under Section 232 of the Trade Expansion Act of 1962, as Amended*, January 11, 2018. https://www.commerce.gov/sites/commerce.gov/files/the_effect_of_imports_of_steel_on_the_national_security_-_with_redactions_-_20180111.pdf (accessed March 16, 2018).
[19] See paragraph 8 and paragraph (1) of The White House, "Presidential Proclamation on Adjusting Imports of Steel into the United States," March 8, 2018. https://www.whitehouse.gov/presidential-actions/presidential-proclamation-adjusting-imports-steel-united-states/ (accessed March 16, 2018).
[20] See paragraph 10, Ibid.
[21] Commerce, "U.S. Department of Commerce Announces Steel and Aluminum Tariff Exclusion Process," News Release," March 18, 2018 https://www.commerce.gov/news/press-releases/2018/03/us-department-commerce-announces-steel-and-aluminum-tariff-exclusion (accessed March 17, 2018); and 83 FR 12106, March 19, 2018, https://www.commerce.gov/sites/commerce.gov/files/federal_register_vol_83_no_53_monday_march_19_2018_12106-12112.pdf (accessed March 17, 2018).
[22] See paragraphs 4-9 and 11 of The White House, "Presidential Proclamation on Adjusting Imports of Steel into the United States," March 22, 2018 , https://www.whitehouse.gov/presidential-actions/presidential-proclamation-adjusting-imports-steel-united-states-2/ (accessed March 23, 2018); and The White House, "President Trump Approves Section 232 Tariff Modifications," Statements and Releases, March 22, 2018, https://www.whitehouse.gov/briefings-statements/president-trump-approves-section-232-tariff-modifications/ (accessed March 23, 2018).
[23] See paragraph 5 of The White House, "Presidential Proclamation on Adjusting Imports of Steel into the United States," April 30, 2018, https://www.whitehouse.gov/presidential-actions/presidential-proclamation-adjusting-imports-steel-united-states-3/ (accessed May 7, 2018).
[24] See paragraphs 6 and 7 of The White House, "Presidential Proclamation on Adjusting Imports of Steel into the United States," April 30, 2018, https://www.whitehouse.gov/presidential-actions/presidential-proclamation-adjusting-imports-steel-united-states-3/ (accessed May 7, 2018).

Notes continued on next page.

Notes continued.

[25] See paragraph 4 of The White House, "Presidential Proclamation on Adjusting Imports of Steel into the United States," April 30, 2018, https://www.whitehouse.gov/presidential-actions/presidential-proclamation-adjusting-imports-steel-united-states-3/ (accessed May 7, 2018); Annex, section B, South Korea, quantitative limitations, in 83 FR 20682, "Presidential Documents, Proclamation 9740 of April 30, 2018, Adjusting Imports of Steel Into the United States," May 7, 2018, https://www.gpo.gov/fdsys/pkg/FR-2018-05-07/pdf/2018-09841.pdf (accessed May 8, 2018); Office of the United States Trade Representative (USTR), "Joint Statement by the United States Trade Representative Robert E. Lighthizer and Republic of Korea Minister for Trade Hyun Chong Kim," Press Release, March 28, 2018, https://ustr.gov/about-us/policy-offices/press-office/press-releases/2018/march/joint-statement-united-states-trade (accessed May 7, 2018); USTR, "New U.S. Trade Policy and National Security Outcomes with the Republic of Korea," Fact Sheet, March 28, 2018, https://ustr.gov/about-us/policy-offices/press-office/fact-sheets/2018/march/new-us-trade-policy-and-national (accessed May 7, 2018); and Coyne, Justine, "US Reaches Agreement on Steel, Aluminum Tariffs with 3 Countries," *Platts*, April 30, 2018, https://www.platts.com/latest-news/metals/washington/us-reaches-agreement-on-steel-aluminum-tariffs-27964478 (accessed May 7, 2018).

Changes experienced by the industry

Domestic producers were asked to indicate whether their firm had experienced any plant openings, relocations, expansions, acquisitions, consolidations, closures, or prolonged shutdowns because of strikes or equipment failure; curtailment of production because of shortages of materials or other reasons, including revision of labor agreements; or any other change in the character of their operations or organization relating to the production of TCCSS since January 1, 2012. All four domestic producers indicated that they had experienced such changes and; their responses are presented in table III-2.

Table III-2
TCCSS: Changes in the character of U.S. operations since January 1, 2012

* * * * * * *

Anticipated changes in operations

The Commission asked domestic producers to report anticipated changes in the character of their operations relating to the production of TCCSS. U.S. producers reported no anticipated changes in the character of their operations.

U.S. PRODUCTION, CAPACITY, AND CAPACITY UTILIZATION

U.S. producers' production, capacity, and capacity utilization are presented in table III-3. U.S. producers' capacity remained unchanged 3.1 million short tons from 2014 to 2016. U.S. producers' production of TCCSS decreased by 25.1 percent from 2014 to 2016. Domestic producers' production was 9.5 percent lower in January-September 2017 than during January-September 2016. Two U.S. producers, ***, reported prolonged shutdowns or production curtailments. ***. ***. ***. Overall, U.S. producers' capacity utilization decreased by 15.0 percentage points from 2014 to 2016. Domestic producers' capacity utilization was 4.5 percentage points lower in January-September 2017 than during January-September 2016. ***.

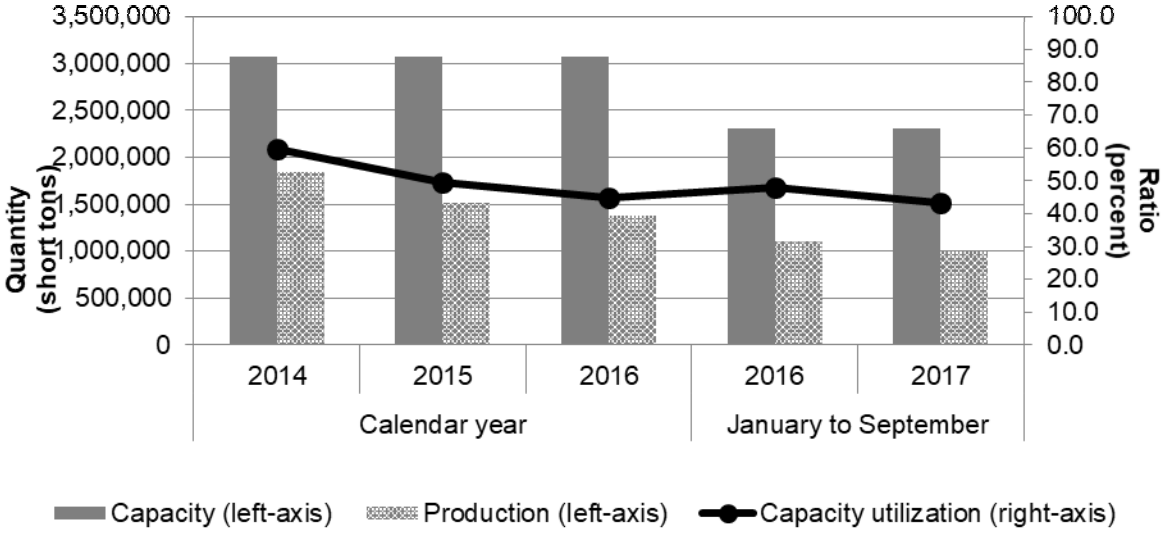
Table III-3

TCCSS: U.S. producers' capacity and production, 2014-16, January to September 2016, and January to September 2017

Item	Calendar year			January to September	
	2014	2015	2016	2016	2017
	Capacity short tons)				
AMUSA	***	***	***	***	***
Ohio Coatings	***	***	***	***	***
U.S. Steel	***	***	***	***	***
UPI	***	***	***	***	***
Total capacity	3,068,000	3,068,000	3,068,000	2,301,000	2,301,000
	Production (short tons)				
AMUSA	***	***	***	***	***
Ohio Coatings	***	***	***	***	***
U.S. Steel	***	***	***	***	***
UPI	***	***	***	***	***
Total production	1,835,936	1,515,670	1,374,409	1,102,314	997,687
	Capacity utilization (percent)				
AMUSA	***	***	***	***	***
Ohio Coatings	***	***	***	***	***
U.S. Steel	***	***	***	***	***
UPI	***	***	***	***	***
Average capacity utilization	59.8	49.4	44.8	47.9	43.4

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

Figure III-1
TCCSS: U.S. producers' capacity, production, and capacity utilization, 2014-16, January to September 2016, and January to September 2017



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

Constraints on capacity

U.S. producers reported constraints in the manufacturing process. ***. ***. ***. ***.

Alternative products

U.S. producers reported no production of excluded TCCSS products, or out-of-scope products using the same machinery and/or labor as TCCSS.

Table III-4
TCCSS: U.S. producers' production, capacity, and capacity utilization, 2014 to 2016, January to September 2016, and January to September 2017

Item	Calendar year			January to September	
	2014	2015	2016	2016	2017
	Quantity (short tons)				
Overall capacity	3,068,000	3,068,000	3,068,000	2,301,000	2,301,000
Production: TCCSS	1,835,936	1,515,670	1,374,409	1,102,314	997,687
Excluded TCCSS products	-	-	-	-	-
Other products	-	-	-	-	-
Total out-of-scope merchandise	-	-	-	-	-
Total production	1,835,936	1,515,670	1,374,409	1,102,314	997,687
	Ratios and shares (percent)				
Capacity utilization	59.8	49.4	44.8	47.9	43.4
Production: TCCSS	100.0	100.0	100.0	100.0	100.0
Excluded TCCSS products	-	-	-	-	-
Other products	-	-	-	-	-
Total out-of-scope merchandise	-	-	-	-	-
Total production	100.0	100.0	100.0	100.0	100.0

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

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

Table III-5 presents U.S. producers' U.S. shipments, export shipments, and total shipments. The quantity of U.S. producers' U.S. shipments decreased by 23.2 percent from 2014 to 2016. U.S. producers' U.S. shipments were 11.9 percent lower in January-September 2017 than during January-September 2016. One U.S. producer, ***, reported an increase, ***, of U.S. shipments from 2014 to 2016. The value of U.S. producers' U.S. shipments decreased by 32.7 percent from 2014 to 2016. The value of domestic producers' U.S. shipments were 7.3 percent lower in January-September 2017 than during January-September 2016. ***. U.S. shipments accounted for between 99.6 and 100.0 percent of total shipments during the period for which data was collected.

U.S. producers' exports, by quantity, were between *** from 2014 to 2016 and represented a small share of total U.S. shipments.[5]

[5] ***.

Table III-5
TCCSS: U.S. producers' U.S. shipments, export shipments, and total shipments, 2014 to 2016, January to September 2016, and January to September 2017

Item	Calendar year			January to September	
	2014	2015	2016	2016	2017
	Quantity (short tons)				
U.S. shipments	1,817,063	1,577,987	1,396,119	1,100,477	969,676
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***
	Value (1,000 dollars)				
U.S. shipments	1,908,661	1,636,195	1,285,394	1,006,743	933,342
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***
	Unit value (dollars per short ton)				
U.S. shipments	1,050	1,037	921	915	963
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***
	Share of quantity (percent)				
U.S. shipments	***	***	***	***	***
Export shipments	***	***	***	***	***
Total shipments	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)				
U.S. shipments	***	***	***	***	***
Export shipments	***	***	***	***	***
Total shipments	100.0	100.0	100.0	100.0	100.0

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

U.S. PRODUCERS' INVENTORIES

Table III-6 presents U.S. producers' end-of-period inventories and the ratio of these inventories to U.S. producers' production, U.S. shipments, and total shipments**.** U.S. producers' end-of-period inventories decreased by 33.8 percent from 2014 to 2016, as *** U.S. producers reduced inventory holdings. *** reduction in holdings accounted for nearly *** of the overall reduction. End-of-period inventories were 0.4 percent higher in January-September 2017 than during January-September 2016. U.S. producers' ratio of inventories to total shipments decreased from *** percent to *** percent from 2014 to 2016 but was *** percent during January-September 2017.

Table III-6
TCCSS: U.S. producers' inventories, 2014 to 2016, January to September 2016, and January to September 2017

Item	Calendar year			January to September	
	2014	2015	2016	2016	2017
	Quantity (short tons)				
U.S. producers' end-of-period inventories	253,038	190,001	167,428	191,108	191,931
	Ratio (percent)				
Ratio of inventories to.--					
U.S. production	13.8	12.5	12.2	13.0	14.4
U.S. shipments	13.9	12.0	12.0	13.0	14.8
Total shipments	***	***	***	***	***

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

U.S. PRODUCERS' IMPORTS AND PURCHASES

No U.S. producer reported either direct imports or purchases of subject TCCSS from Japan. U.S. producers' U.S. imports are shown in table III-7. ***. AMUSA stated that because it no longer produces drawn and iron (D&I) tin mill products in the United States at the Weirton facility, its customers purchase the D&I from AM Dofasco instead.[6]

Table III-7
TCCSS: U.S. producers' U.S. imports, 2014 to 2016, January to September 2016, and January to September 2017

* * * * * *

U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

Data provided by U.S. producers on the number of production and related workers ("PRWs") engaged on the production of TCCSS, the total hours worked by such workers, and wages paid to such PRWs are presented in table III-8.

[6] Hearing transcript, p. 28 (Mull).

The number of PRWs decreased by 18.0 percent from 2014 to 2016, but was 5.3 percent higher in January-September 2017 than during January-September 2016. Total hours worked decreased by 18.5 percent from 2014 to 2016, but were 7.3 percent higher in January-September 2017 than during January-September 2016. Total hours worked per PRW decreased by 11.1 percent from 2014 to 2016, but was 26.7 percent higher in January-September 2017 than during January-September 2016. Wages paid decreased by 17.8 percent from 2014 to 2016 but were 3.1 percent higher in January-September 2017 than during January-September 2016.

Hourly wages paid increased by 0.8 percent from 2014 to 2016, but was 3.9 percent lower in January-September 2017 than during January-September 2017. Unit labor costs increased by 9.8 percent from 2014 to 2016 and was 13.9 percent higher in January-September 2017 than during January-September 2016.

Table III-8
TCCSS: Average number of production and related workers, hours worked, wages paid to such employees, hourly wages, productivity, and unit labor costs, 2014 to 2016, January to September 2016, and January to September 2017

Item	Calendar year			January to September	
	2014	2015	2016	2016	2017
Production and related workers (PRWs) (number)	2,857	2,670	2,343	2,349	2,474
Total hours worked (1,000 hours)	5,564	5,044	4,537	3,417	3,665
Hours worked per PRW (hours)	1,947	1,889	1,936	1,455	1,481
Wages paid ($1,000)	246,839	207,385	202,886	154,431	159,158
Hourly wages (dollars per hour)	$44.36	$41.12	$44.72	$45.19	$43.43
Productivity (short tons per 1,000 hours)	330.0	300.5	302.9	322.6	272.2
Unit labor costs (dollars per short tons)	$134	$137	$148	$140	$160

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

FINANCIAL EXPERIENCE OF U.S. PRODUCERS

Background

Four firms, AMUSA,[7] Ohio Coatings, U.S. Steel, and UPI, provided financial data on their operations on TCCSS. [8] Each of these firms has a fiscal year ending on December 31; there are only small differences between the trade and financial sections of the Commission's questionnaire, which are due to rounding. These data accounted for all known U.S. production of TCCSS in 2016.

Although each of the four companies produced TCCSS, their production processes, and therefore their cost structures, differ to some extent. U.S. Steel is an integrated producer that makes the hot-rolled steel for processing and coating. Both UPI and Ohio Coatings purchase their steel inputs (UPI purchases hot-rolled steel while Ohio Coatings purchases black plate, levels and pickles each coil, and then plates and anneals the product). AMUSA's plant at Weirton, West Virginia, receives hot-rolled steel from other AMUSA facilities, processes it, and coats it.

Operations on TCCSS

Table III-9 presents aggregated data on U.S. producers' operations in relation to TCCSS from January 1, 2014 through September 30, 2017. Table III-10 presents calculations for the changes in average unit values of sales, costs, and profitability corresponding to table III-9. Table III-11 presents selected company-specific financial data. The responding firms reported only commercial sales. In brief, sales and costs were substantially lower in 2016 than in 2014, and moderately lower in January-September 2017 ("interim 2017") compared with January-September 2016 ("interim 2016"). Quantity and unit value declined, reducing the sales value between each yearly period. Total operating costs and expenses, total cost of goods sold ("COGS") plus selling, general and administrative ("SG&A") expenses, also were sharply lower in 2016 than in 2014 and were lower in interim 2017 than in interim 2016. On a per-unit basis

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[7] AMUSA owns and operates the facility at Weirton, West Virginia (formerly known as Weirton Steel Corp.). Weirton was the petitioner in the original investigation in 1999. Weirton filed for bankruptcy in 2003; its Weirton, West Virginia, mill was acquired by International Steel Group (ISG) in 2004. ISG was itself acquired by Mittal Steel in 2005. Mittal Steel and Arcelor announced an agreement to merge in June 2006 and to create a new entity ArcelorMittal (the United States entity is called ArcelorMittal USA or AMUSA). AMUSA announced the closing of steelmaking in November 2005 and the hot-strip mill operated for the last time in December 2007, although the tin mill and certain other facilities continued to operate. ArcelorMittal began to supply hot-rolled steel to the TCCSS facility from other AMUSA mills in Indiana. ***.

[8] Neither Ohio Coatings nor USS-POSCO (UPI) make their own steel and are dependent upon the purchase of upstream steel products. Ohio Coatings sources its black plate from ***. UPI has traditionally sourced its purchases of ***. U.S. Steel produces its input to TCCSS at mills in Gary, East Chicago, and Portage, Indiana (formerly National Steel). U.S. Steel stated that ***.

however, sales and costs were higher in interim 2017 than in interim 2016. Gross profit, operating income, and net income before taxes fell from January 1, 2014 through September 30, 2017 as revenue declined more than costs and expenses. The reporting firms together recorded a gross loss in interim 2017, and operating and net losses in 2014 onwards. Cash flows fell and were negative in 2016 and in interim 2017.

Table III-9
TCCSS: Results of operations of U.S. producers, 2014-16, January-September 2016, and January-September 2017

Item	Calendar year			January-September	
	2014	2015	2016	2016	2017
	Quantity (short tons)				
Total net sales	1,817,123	1,578,707	1,396,982	1,101,207	973,185
	Value (1,000 dollars)				
Total net sales	1,908,724	1,636,990	1,286,257	1,007,472	936,494
Cost of goods sold.-- Raw materials	1,185,680	953,620	638,113	493,334	507,864
Direct labor	295,226	300,411	245,350	188,203	190,573
Other factory costs	384,971	350,010	395,667	308,099	263,885
Total COGS	1,865,877	1,604,041	1,279,130	989,636	962,322
Gross profit	42,847	32,949	7,127	17,836	(25,828)
SG&A expense	55,228	49,272	34,180	27,831	23,809
Operating income or (loss)	(12,381)	(16,323)	(27,053)	(9,995)	(49,637)
Interest expense	***	***	***	***	***
All other expenses	***	***	***	***	***
All other income	***	***	***	***	***
Net income or (loss)	(21,788)	(48,474)	(43,869)	(23,524)	(70,851)
Depreciation/amortization	40,879	50,428	39,691	30,928	26,532
Cash flow	19,091	1,954	(4,178)	7,404	(44,319)
	Unit value (dollars per short ton)				
Total net sales	1,050	1,037	921	915	962
Cost of goods sold.-- Raw materials	653	604	457	448	522
Direct labor	162	190	176	171	196
Other factory costs	212	222	283	280	271
Average COGS	1,027	1,016	916	899	989
Gross profit	24	21	5	16	(27)
SG&A expense	30	31	24	25	24
Operating income or (loss)	(7)	(10)	(19)	(9)	(51)
Net income or (loss)	(12)	(31)	(31)	(21)	(73)

Table continued on next page.

Table III-9--Continued
TCCSS: Results of operations of U.S. producers, 2014-16, January-September 2016, and January-September 2017

Item	Calendar year			January-September	
	2014	2015	2016	2016	2017
	Ratio to COGS (percent)				
Cost of goods sold.-- Raw materials	63.5	59.5	49.9	49.9	52.8
Direct labor	15.8	18.7	19.2	19.0	19.8
Other factory costs	20.6	21.8	30.9	31.1	27.4
Total COGS	100.0	100.0	100.0	100.0	100.0
	Ratio to net sales (percent)				
Cost of goods sold.-- Raw materials	62.1	58.3	49.6	49.0	54.2
Direct labor	15.5	18.4	19.1	18.7	20.3
Other factory costs	20.2	21.4	30.8	30.6	28.2
Total COGS	97.8	98.0	99.4	98.2	102.8
Gross profit	2.2	2.0	0.6	1.8	(2.8)
SG&A expense	2.9	3.0	2.7	2.8	2.5
Operating income or (loss)	(0.6)	(1.0)	(2.1)	(1.0)	(5.3)
Net income or (loss)	(1.1)	(3.0)	(3.4)	(2.3)	(7.6)
	Number of firms reporting				
Operating losses	***	***	***	***	***
Net losses	***	***	***	***	***
Data	4	4	4	4	4

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

Table III-10
TCCSS: Changes in average unit values for all firms, between 2014-16, January-September 2016, and January-September 2017

Item	Between calendar years			Between partial year period
	2014-16	2014-15	2015-16	2016-17
	Changes in average unit values (dollars per short ton)			
Total net sales	(130)	(13)	(116)	47
Cost of goods sold.-- Raw materials	(196)	(48)	(147)	74
Direct labor	13	28	(15)	25
Other factory costs	71	10	62	(9)
Average COGS	(111)	(11)	(100)	90
Gross profit	(18)	(3)	(16)	(43)
SG&A expense	(6)	1	(7)	(1)
Operating income or (loss)	(13)	(4)	(9)	(42)
Net income or (loss)	(19)	(19)	(1)	(51)

Source: Calculated from the data in table III-9.

Table III-11
TCCSS: Results of operations of U.S. producers, by firm, 2014-16, January-September 2016, and January-September 2017

* * * * * * *

Total net sales

Total net sales (table III-9) are the commercial sales of the responding firms. Total sales fell between 2014 and 2016, mostly due to the lower quantity and average unit value. Overall, net sales quantity and value were lower and the average unit value of sales was higher in interim 2017 compared with interim 2016. As shown in table III-11, ***. Producers' sales declined from 2014 to 2016 (***); producers' sales were lower in interim 2017 compared with interim 2016 (***); the average unit value of sales was higher for *** reporting firms in interim 2017 compared with interim 2016.

Costs and expenses

As shown in table III-9, raw material costs represent the single largest component of overall COGS and represented a high proportion of sales value as well. ***.[9] The value and per-unit value of ***.[10]

After raw materials, the largest component of reported COGS is other factory costs, which as a ratio to sales increased between 2014 and 2016 (generally, increased as production and sales declined); the ratio was *** smaller in interim 2017 compared with interim 2016 (table III-9).[11] Direct labor costs, the smallest component of COGS, declined irregularly between 2014 and 2016 and was slightly higher in interim 2017 compared with interim 2016 in value; direct labor costs rose irregularly between the yearly periods and was higher in interim 2017 as a ratio to sales and on a per-unit basis. Total SG&A expenses decreased irregularly in value, as a ratio to sales, and on a per-unit basis between the yearly periods and were lower in interim 2017.

[9] UPI stated that ***. Email from *** (EDIS document 635444).

[10] U.S. Steel's ***. Email from *** (EDIS document 635533).

[11] AMUSA reported for the mill at Weirton. Although raw steelmaking and the hot-strip mill were shut down as noted earlier, steel sheet used as an input for the coating line has been sourced from other mills within AMUSA. AMUSA ***. Questionnaire revision of AMUSA, February 7, 2018 (EDIS document 635943).

Profitability[12]

Tables III-9 and III-11 show a similar pattern for operating income or loss. Table III-9 shows that the industry's gross profit fell substantially from 2014 to 2016 and was a loss in interim 2017. Likewise, the industry reported increasing operating and net losses during the periods investigated. Table III-11 shows that performance varied between firms. Between 2014 and 2016, operating income fell ***. In interim 2017, ***.[13] That table also shows that ***.[14]

Variance analysis

A variance analysis is not presented for the operations of U.S. producers of TCCSS. The discussion of COGS, gross profit, SG&A expenses, and operating income, which reflects differences in cost structures among the firms, as shown in tables III-9 through III-11, mirrors the results of a variance analysis in this review. That is, the decline in operating income from 2014 to 2016 reflects a larger decline in average revenue compared to average operating costs and expenses, and volume declined. The lower operating income between the comparable interim periods reflects an increase in average revenues that was smaller than the increase in average costs/expenses. In addition, volume was lower.

Capital expenditures and research and development expenses

Table III-12 presents capital expenditures and research and development ("R&D") expenses by firm. Total capital expenditures declined from 2014 to 2015 and fell noticeably in 2016; capital expenditures were *** greater in interim 2017 compared with interim 2016, which reflected data reported by ***. Reported R&D expenses increased from 2014 to 2016 and were *** in interim 2017 as in interim 2016.

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[12] From 1997 through 2011, the reporting firms collectively were not profitable in the original investigation or in the first and second reviews, except 2003 and 2009. Together they reported operating losses in nearly every year from 1997 through 2011, ranging from $11.8 million (0.6 percent of sales) in 2002 to $198.8 million (9.1 percent of sales) in 2011. Operating profits in 2003 and 2009 were $22.6 million (1.3 percent of sales) and $173.4 million (6.7 percent of sales), respectively. See historical data in appendix C table C-2. Also, see *Tin- and Chromium-Coated Steel Sheet from Japan, Investigation No. 731-TA-860 (Final)*, USITC Publication 3337, August 2000, table VI-1; and tables III-8 in TCCSS (Review), Publication 3860 (June 2006) and TCCSS (Second Review), Publication 4325 (May 2012).

[13] As noted earlier ***. Email from ***.

[14] Tables in the staff reports in the previous TCCSS investigations indicate that firm-by-firm profitability varies considerably. ***. See, table VI-3 in staff report INV-X-160 (Final), July 8, 2000; table III-9 in staff report INV-DD-073 (Review), May 30, 2006; and table III-9 in staff report INV-KK-084 (Second Review), May 3, 2012.

Table III-12
TCCSS: Capital expenditures and research and development expenses of U.S. producers, 2014-16, January-September 2016, and January-September 2017

* * * * * * *

U.S. Steel reported that the focus of its capital expenditures was *** and its R&D spending was ***. UPI stated ***. [15] AMUSA stated that its present and future investments ***.[16]

At the Commission's hearing, U.S. Steel presented information regarding its "Can Do" Program. A spokesman for U.S. Steel testified that the firm is investing in shape systems at the Gary and Midwest Mills, levelers and induction melters in the tin coating lines, and other upgraded equipment and monitoring systems to improve the quality, reliability, and on-time delivery performance of U.S. Steel's TCCSS.[17] This program ***. [18]

Assets and return on assets

Table III-13 presents data on the U.S. producers' total assets as well as the ratio of operating income (or loss) to total assets ("ROA"). The total value of net assets declined between 2014 and 2016. ROA was ***.

Table III-13
TCCSS: U.S. producers' total assets and return on investment, 2014-16

* * * * * * *

[15] U.S. producers' questionnaire response of U.S. Steel, section III-13; and U.S. producers' questionnaire response of UPI, section III-13.

[16] Posthearing brief of AMUSA, exh. 1 (answers to Commissioner questions), p. 48 and exh. 3.

[17] Hearing transcript, p. 21 (Smith-Yoder).

[18] Posthearing brief of U.S. Steel, ***

PART IV: U.S. IMPORTS AND THE FOREIGN INDUSTRIES

U.S. IMPORTS

Overview

The Commission issued questionnaires to 32 firms believed to have imported TCCSS (broadly defined, including merchandise excluded from the subject order) since 2014. Ten firms provided data and information in response to the questionnaires, while two firms indicated that they had not imported TCCSS since 2014.[1] Based on official Commerce statistics and proprietary Customs records for imports of TCCSS, importers' questionnaire data accounted for three-fifths of total U.S. imports from all sources during 2016.[2]

In light of the data coverage by the Commission's questionnaires, import data in this report are based on official import statistics for TCCSS.[3]

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. TCCSS from five nonsubject countries account for substantial shares of U.S. imports of TCCSS include Canada, China, Germany, Korea, and the Netherlands. U.S. imports from nonsubject sources increased by 21.6 percent from 2014 to 2016 and were 3.2 percent higher in January-September 2017 than during January-September 2016.

[1] As noted previously, the subject order excludes certain TCCSS primarily imported from Japan. The quantity (in short tons) in each year and interim period of non-scope or excluded imports from Japan was 35,848 (2014), 20,937 (2015), 44,157 (2016), 33,013 (January-September 2016), 34,729 (January-September 2017).

[2] Staff believes there have been no imports of TCCSS from Japan.

[3] Official Commerce import statistics for HTS subheadings 7210.11.00, 7210.12.00, 7210.50.00, and 7212.10.00 are used in the report. Commerce's scope also includes imports entering under subheading 7212.50.00 and statistical reporting numbers 7225.99.0090 and 7226.99.0180. Staff believes that the great majority of imports entering under these broad HTS numbers are outside the scope of this review.

Table IV-1
TCCSS: U.S. imports by source, 2014 to 2016, January to September 2016, and January to September 2017

Item	Calendar year			January to September	
	2014	2015	2016	2016	2017
	Quantity (short tons)				
U.S. imports from.--					
Japan	---	---	---	---	---
Netherlands	283,946	272,352	309,996	220,580	212,922
Canada	212,299	216,295	259,546	196,883	183,479
Germany	109,478	182,717	188,800	145,859	163,723
Korea	100,001	96,200	126,400	90,449	90,007
China	97,713	82,669	107,134	71,458	104,503
All other sources	40,645	70,231	66,213	45,019	75,666
Nonsubject sources	844,082	920,463	1,058,090	770,248	830,300
All import sources	844,082	920,463	1,058,090	770,248	830,300
	Value (1,000 dollars)				
U.S. imports from.--					
Japan	---	---	---	---	---
Netherlands	290,009	267,356	265,444	188,533	190,629
Canada	248,545	234,808	239,577	181,788	179,936
Germany	117,128	180,761	169,658	130,397	154,823
Korea	103,858	97,421	101,117	72,486	77,682
China	91,432	74,865	81,471	54,699	87,460
All other sources	42,681	70,404	56,759	38,783	66,027
Nonsubject sources	893,654	925,615	914,025	666,687	756,556
All import sources	893,654	925,615	914,025	666,687	756,556
	Unit value (dollars per short ton)				
U.S. imports from.--					
Japan	---	---	---	---	---
Netherlands	1,021	982	856	855	895
Canada	1,171	1,086	923	923	981
Germany	1,070	989	899	894	946
Korea	1,039	1,013	800	801	863
China	936	906	760	765	837
All other sources	1,050	1,002	857	861	873
Nonsubject sources	1,059	1,006	864	866	911
All import sources	1,059	1,006	864	866	911

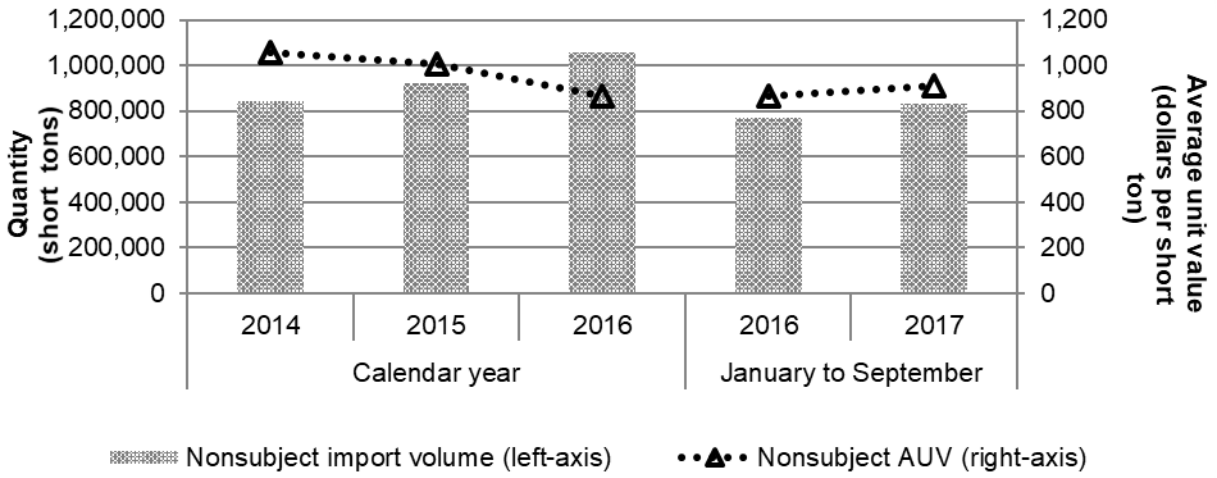
Table continued on next page.

Table IV-1--Continued
TCCSS: U.S. imports by source, 2014 to 2016, January to September 2016, and January to September 2017

Item	Calendar year			January to September	
	2014	2015	2016	2016	2017
	Share of quantity (percent)				
U.S. imports from.--					
Japan	---	---	---	---	---
Netherlands	33.6	29.6	29.3	28.6	25.6
Canada	25.2	23.5	24.5	25.6	22.1
Germany	13.0	19.9	17.8	18.9	19.7
Korea	11.8	10.5	11.9	11.7	10.8
China	11.6	9.0	10.1	9.3	12.6
All other sources	4.8	7.6	6.3	5.8	9.1
Nonsubject sources	100.0	100.0	100.0	100.0	100.0
All import sources	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)				
U.S. imports from.--					
Japan	---	---	---	---	---
Netherlands	32.5	28.9	29.0	28.3	25.2
Canada	27.8	25.4	26.2	27.3	23.8
Germany	13.1	19.5	18.6	19.6	20.5
Korea	11.6	10.5	11.1	10.9	10.3
China	10.2	8.1	8.9	8.2	11.6
All other sources	4.8	7.6	6.2	5.8	8.7
Nonsubject sources	100.0	100.0	100.0	100.0	100.0
All import sources	100.0	100.0	100.0	100.0	100.0
	Ratio to U.S. production (percent)				
U.S. imports from.--					
Japan	***	***	***	***	***
Netherlands	***	***	***	***	***
Canada	***	***	***	***	***
Germany	***	***	***	***	***
Korea	***	***	***	***	***
China	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***

Source: 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.

Figure IV-1
TCCSS: U.S. import volumes and prices, 2014-16, January to September 2016, and January to September 2017



Source: 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.

U.S. IMPORTERS' IMPORTS SUBSEQUENT TO SEPTEMBER 30, 2017

The Commission requested importers to indicate whether they had imported or arranged for the importation of TCCSS from Japan for delivery after September 30, 2017. Eight of the 10 firms reported arranging imports after September 30, 2017 (table IV-2).

Table IV-2
TCCSS: U.S. importers' arranged imports

Item	Period			
	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018	Jul-Sep 2018
Imports arranged from Japan	-	-	-	-
Imports arranged from all other sources	203,520	96,022	65,346	64,172
Total arranged imports	203,520	96,022	65,346	64,172

Note.--Data for October-December 2017 are 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.

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

U.S. IMPORTERS' INVENTORIES

Table IV-3 presents data for inventories of U.S. imports of TCCSS from Japan and all other sources held in the United States. U.S. importers' end-of-period inventories of TCCSS from nonsubject sources decreased by 34.5 percent from 2014 to 2016, but were 11.8 percent higher during January-September 2017 than during January-September 2016.

Table IV-3
TCCSS: U.S. importers' end-of-period inventories of imports, by source, 2014 to 2016, January to September 2016, and January to September 2017

* * * * * *

THE INDUSTRY IN JAPAN

Overview

Three firms producing TCCSS in Japan submitted responses to the Commission's questionnaire. Information on the operations of the three firms; JFE Steel Corporation ("JFE Steel"), Nippon Steel & Sumitomo Metal Corporation ("NSSMC"), and Toyo Kohan Co., Ltd. ("Toyo") are presented in table IV-4.

Table IV-4
TCCSS: Summary data for producers in Japan, 2016

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	***	***	***	***	***	***
NSSMC	***	***	***	***	***	***
Toyo	***	***	***	***	***	***
Total	1,583,677	100.0	***	***	1,614,267	***

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

Changes in operations

As presented in table IV-5, *** and *** reported operational and organizational changes since January 1, 2014.

Table IV-5
TCCSS: Japanese producers' reported changes in operations, since January 1, 2014

* * * * * * *

Operations on TCCSS

Table IV-6 presents data on operations of the three responding Japanese firms. Japanese producers' reported capacity decreased by 2.6 percent from 2014 to 2016, but was 1.8 percent higher during January-September 2017 than during January-September 2016. Production, in contrast, increased by 3.4 percent from 2014 to 2016, but was 3.6 percent lower during January-September 2017 than during January-September 2016. Japanese firms' capacity utilization increased by 5.3 percentage points from 2014 to 2016, but was 4.8 percentage points lower during January-September 2017 than during January-September 2016. *** reported revised capacity data in its prehearing brief that increased its capacity utilization to *** percent in 2014, *** percent in 2015, *** percent in 2016, *** percent during January-September 2016, and *** percent during January-September 2017.[4]

Japanese firms' home market shipments decreased by 11.1 percent from 2014 to 2016 and were 1.8 percent lower during January-September 2017 than during January-September 2016. Exports from Japan to non-U.S. markets increased by 20.0 percent, but were 12.7 percent lower during January-September 2017 than during January-September 2016. The export markets included the European Union, where exports increased by 2.3 percent from 2014 to 2016, and Asian markets, where exports increased by 13.1 percent from 2014 to 2016. Japanese exports to all other markets increased by 24.5 percent from 2014 to 2016. ***. ***. ***. Ending inventories decreased by 11.5 percent from 2014 to 2016, but were 25.9 percent higher during January-September 2017 than during January-September 2016.

[4] Respondent Interested Parties' Prehearing Brief, pp. 25-26.

Table IV-6

TCCSS: Japanese capacity, production, shipments, and inventories, 2014 to 2016, January to September 2016, and January to September 2017

Item	Calendar year			January to September	
	2014	2015	2016	2016	2017
	Quantity (short tons)				
Capacity	1,782,011	1,787,459	1,735,539	1,307,193	1,330,123
Production	1,531,675	1,565,693	1,583,677	1,191,478	1,148,760
End-of-period inventories	149,537	162,909	132,318	113,019	142,259
Shipments: Internal consumption/ transfers	-	-	-	-	-
Commercial home market shipments	759,118	678,924	674,845	504,034	495,097
Total home market shipments	759,118	678,924	674,845	504,034	495,097
Export shipments to: United States	-	-	-	-	-
European Union	75,383	64,349	77,154	65,950	38,212
Asia	161,375	162,024	182,556	139,905	123,464
All other markets	545,943	647,024	679,712	531,480	482,046
Total exports	782,701	873,397	939,422	737,335	643,722
Total shipments	1,541,819	1,552,321	1,614,267	1,241,369	1,138,819
	Value (1,000 dollars)				
Shipments: Internal consumption/ transfers	-	-	-	-	-
Commercial home market shipments	924,620	760,991	773,394	580,457	573,274
Total home market shipments	924,620	760,991	773,394	580,457	573,274
Export shipments to: United States	-	-	-	-	-
European Union	65,665	47,484	45,916	38,306	29,130
Asia	147,519	130,357	117,535	89,613	94,090
All other markets	451,974	479,145	410,089	316,010	347,029
Total exports	665,158	656,986	573,540	443,929	470,249
Total shipments	1,589,778	1,417,977	1,346,934	1,024,386	1,043,523

Table continued on next page.

Table IV-6—Continued

TCCSS: Japanese capacity, production, shipments, and inventories, 2014 to 2016, January to September 2016, and January to September 2017

Item	Calendar year			January to September	
	2014	2015	2016	2016	2017
	Unit value (dollars per short ton)				
Shipments: Internal consumption/ transfers	-	-	-	-	-
Commercial home market shipments	1,218	1,121	1,146	1,152	1,158
Total home market shipments	1,218	1,121	1,146	1,152	1,158
Export shipments to: United States	-	-	-	-	-
European Union	871	738	595	581	762
Asia	914	805	644	641	762
All other markets	828	741	603	595	720
Total exports	850	752	611	602	731
Total shipments	1,031	913	834	825	916
	Ratios and shares (percent)				
Capacity utilization	86.0	87.6	91.2	91.1	86.4
Inventories/production	9.8	10.4	8.4	7.1	9.3
Inventories/total shipments	9.7	10.5	8.2	6.8	9.4
Share of total shipments: Internal consumption/ transfers	-	-	-	-	-
Commercial home market shipments	49.2	43.7	41.8	40.6	43.5
Total home market shipments	49.2	43.7	41.8	40.6	43.5
Export shipments to: United States	-	-	-	-	-
European Union	4.9	4.1	4.8	5.3	3.4
Asia	10.5	10.4	11.3	11.3	10.8
All other markets	35.4	41.7	42.1	42.8	42.3
Total exports	50.8	56.3	58.2	59.4	56.5
Total shipments	100.0	100.0	100.0	100.0	100.0

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

Alternative products

As shown in table IV-7, responding Japanese firms produced other products on the same equipment and machinery used to produce TCCSS. ***. Production of other products by responding Japanese firms increased by *** from 2014 to 2016 and was *** lower during January-September 2017 than during January-September 2016.

Table IV-7
TCCSS: Japanese producers' overall capacity and production on the same equipment as subject production, 2014 to 2016, January to September 2016, January to September 2017

* * * * * * *

Exports

According to GTA data, the leading export markets for tin mill products from Japan are Mexico, the Philippines, and Saudi Arabia (table IV-8). During 2016, Mexico was the top export market for product from Japan, accounting for 21.7 percent, followed by the Philippines, accounting for 15.5 percent, and Saudi Arabia, accounting for 8.5 percent. Average unit values of exports to the United States were consistently higher than those of exports to non-U.S. markets, particularly in 2016.

Table IV-8
TCCSS: Exports from Japan, 2014-16

Item	Calendar year		
	2014	2015	2016
	Quantity (short tons)		
Exports from Japan to the United States	6,353	3,673	1,271
Exports from Japan to other major destination markets.--			
Mexico	202,735	195,184	228,129
Philippines	142,042	145,677	162,940
Saudi Arabia	50,527	90,305	89,598
Brazil	29,638	62,685	55,549
Australia	44,018	37,925	48,222
India	54,523	53,167	45,603
Indonesia	29,112	29,727	34,844
United Arab Emirates	46,438	33,997	33,505
All other destination markets	301,895	320,828	350,605
Total exports from Japan	907,281	973,169	1,050,265
	Value (1,000 dollars)		
Exports from Japan to the United States	7,220	4,093	1,313
Exports from Japan to other major destination markets.--			
Mexico	176,158	152,744	149,090
Philippines	145,686	134,041	122,461
Saudi Arabia	42,447	66,738	47,270
Brazil	25,853	53,178	38,764
Australia	39,283	30,283	31,528
India	40,402	34,659	23,782
Indonesia	30,045	25,340	24,590
United Arab Emirates	39,439	25,344	20,184
All other destination markets	274,723	256,371	227,788
Total exports from Japan	821,256	782,791	686,769

Table continued on next page.

Table IV-8--Continued
TCCSS: Exports from Japan, 2014-16

Item	Calendar year		
	2014	2015	2016
	Unit value (dollars per short ton)		
Exports from Japan to the United States	1,137	1,114	1,033
Exports from Japan to other major destination markets.--			
Mexico	869	783	654
Philippines	1,026	920	752
Saudi Arabia	840	739	528
Brazil	872	848	698
Australia	892	798	654
India	741	652	522
Indonesia	1,032	852	706
United Arab Emirates	849	745	602
All other destination markets	910	799	650
Total exports from Japan	905	804	654
	Share of quantity (percent)		
Exports from Japan to the United States	0.7	0.4	0.1
Exports from Japan to other major destination markets.--			
Mexico	22.3	20.1	21.7
Philippines	15.7	15.0	15.5
Saudi Arabia	5.6	9.3	8.5
Brazil	3.3	6.4	5.3
Australia	4.9	3.9	4.6
India	6.0	5.5	4.3
Indonesia	3.2	3.1	3.3
United Arab Emirates	5.1	3.5	3.2
All other destination markets	33.3	33.0	33.4
Total exports from Japan	100.0	100.0	100.0

Source: Official Japanese exports statistics under HTS subheadings 7210.11, 7210.12, 7210.50, and 7212.10, as reported by Japanese Ministry of Finance in the IHS/GTA database, accessed January 3, 2018.

ANTIDUMPING OR COUNTERVAILING DUTY ORDERS IN THIRD-COUNTRY MARKETS

Based on information available, TCCSS from Japan has not been subject to other antidumping or countervailing duty investigations outside the United States.

GLOBAL MARKET

Capacity

Certain information about production capacities of tin-mill products manufacturing countries is available for 2014 (table IV-9). The distribution of global production and capacity is concentrated in China, where *** operating firms account for *** percent of all tinplate and tin-free steel capacity worldwide in 2014. The industries in the United States[5] and Japan[6] each accounted for more than *** percent of the global total. The next three largest countries—Germany, Korea, and Thailand— together accounted for only *** percent of the global total. There is usually only one firm operating tin-coated and tin-free steel production lines in most nonsubject countries. *** firms operated tin-coated steel production lines but only *** of them (in ***) also operated tin-free steel lines.

Table IV-9
TCCSS: Tinplate and tin-free steel production lines and capacities, world summary, 2014

* * * * * * *

Production

Available data suggest that global production of tin mill products (table IV-10) declined during 2011-16 by 10.7 percent. The largest production decrease of 54.1 percent occurred in South America. In North America, production decreased by 21.8 percent, while in Asia (excluding China) production increased by 3.6 percent. Production data for China during the period were not available.

[5] The four domestic firms producing TSSCS in the United States together reported combined overall capacity of *** short tons in 2014 (table III-4) which is *** the *** short tons of combined capacity shown in table IV-9.

[6] The three firms producing TSSCS in Japan together reported combined overall capacity of *** short tons in 2014 (table IV-7), which is *** the *** short tons of the combined capacity shown in table IV-9.

Table IV-10

TCCSS: Global production of tin mill products, by countries and regions, 2011-16 (1,000 short tons)

Country or region	2011	2012	2013	2014	2015	2016
	Quantity (1,000 short tons)					
European Union	2,609	2,633	2,748	2,773	2,798	2,744
North America	2,698	2,583	2,412	2,301	2,064	2,111
South America	1,273	1,200	956	810	853	584
Asia (excluding China)	3,782	3,714	4,058	3,734	3,403	3,919
All other	369	316	267	251	299	230
Total	10,732	10,447	10,440	9,869	9,416	9,588

Note.—Because of rounding, figures may not add to total shown. Production data for China during the period were not available.

Source: World Steel Association, *Steel Statistical Yearbook 2017*, November 2017.

Global production statistics for tin mill products, available from a subscription source, are limited to selected major economies of the world, as shown in table IV-11.

Table IV-11

TCCSS: Production of tin mill products, by major economies, 2012-17

* * * * * * *

Consumption

Global apparent consumption statistics for tin mill products, available from a subscription source, are limited to selected major economies of the world, as shown in table IV-12.

Table IV-12

TCCSS: Apparent consumption of tin mill products,[1] by major economies, 2012-17

* * * * * * *

Prices

Both the domestic interested parties[7] and Japanese respondent interested parties[8] acknowledge that they are not aware of any reliable publicly-available pricing data for TCCSS in either the U.S. or foreign country markets. In the United States, information is closely held about prices for TCCSS that are negotiated on an annual or long-term contract basis between can manufacturers and tin mill steel suppliers.[9]

Firms (U.S. producers, importers, and foreign producers) were asked to compare TCCSS prices in the U.S. market and other markets. Most firms, including all U.S. producers and all Japanese producers, did not answer the question or stated that they were unable to compare prices in the U.S. market to prices in other markets. The few importers that provided comparisons stated that prices in the U.S. market were similar to or higher than prices in other markets. Importer *** stated that TCCSS prices in the U.S. market are about 9-percent higher than in other markets because of the limited number of U.S. suppliers. Likewise, importer *** stated that U.S. prices are currently slightly above those in the Europe, and are higher than prices in Asia, Latin America, and Africa. However, importer *** stated that U.S. prices are similar to those in Canada. Moreover, importer *** stated that the Asian market is the lowest-priced market in the world. Finally, foreign producers *** stated that the Japanese market is higher priced than other markets, but did not have knowledge of TCCSS prices in the U.S. market.

[7] *Domestic Interested Parties' Response to the Notice of Institution,* May 31, 2017, p. 14.

[8] *JFE Steel's Responses to the Notice of Institution,* May 31, 2017, pp. 7 and 8; *NSSMC's Responses to the Notice of Institution,* May 31, 2017, pp. 7 and 8; and *Toyo's Responses to the Notice of Institution,* May 31, 2017, p. 7.

[9] *Domestic Interested Parties' Response to the Notice of Institution,* May 31, 2017, p. 14; and *Japanese Interested Parties' Responses to the Notice of Institution,* May 31, 2017, p. 7.

PART V: PRICING DATA

FACTORS AFFECTING PRICES

Raw material costs

U.S. producers' raw material costs decreased as a share of cost of goods sold from *** percent in 2014 to *** percent in 2016. The cost of steel, rather than tin or chromium, is the single largest raw material cost in producing TCCSS. Prices for cold-rolled steel (in particular tin mill black plate) and hot-rolled steel (used to produce tin mill black plate) fluctuated between January 2012 and December 2017 (figure V-1). Prices declined in 2012, increased in 2013, decreased in 2014 and 2015, increased in 2016, and showed mixed trends in 2017.[1] Between January 2012 and December 2013, hot-rolled coiled prices decreased by *** percent and cold-rolled coil prices decreased by *** percent. Between January 2014 and December 2017, hot-rolled coil prices decreased by *** percent and cold-rolled coil prices increased by *** percent.

Two of four U.S. producers and six of nine importers reported that raw material prices had fluctuated since January 2012, and two U.S. producers and two importers reported that raw material prices had increased. U.S. producer *** reported that it has been unable to pass on increased hot-rolled steel prices to its customers, and Ohio Coatings reported that black plate prices had increased.[2] Three U.S. producers and seven of nine importers reported that they anticipate that raw material prices will continue to fluctuate. Two importers reported that they anticipate increased raw material costs because of limited hot-rolled coil supply from suppliers in Asia and rising energy costs. U.S. Steel stated that there was a one year lag between falling steel prices and the decline in TCCSS prices because of fixed-price annual contracts for TCCSS.[3]

Figure V-1
Raw materials: Hot-rolled and cold-rolled coil, monthly average prices, January 2012-December 2017

* * * * * * *

U.S. inland transportation costs

All responding U.S. producers and importers reported that they typically arrange transportation to their customers. U.S. producer *** and importer *** reported U.S. inland transportation costs of approximately 4 percent, and importer *** reported 7 percent.

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[1] In 2017, prices of hot-rolled coil increased slightly and prices of cold-rolled coil decreased slightly.

[2] As discussed in greater detail in Part I, imports of hot-rolled and cold-rolled steel from several countries have been subject to antidumping and countervailing duty orders since 2016.

[3] Hearing transcript, p. 110 (Kopf).

PRICING PRACTICES

Pricing methods

U.S. producers' prices for TCCSS are typically negotiated on a contract basis, although two U.S. producers also reported transaction-by-transaction negotiations and one reported use of price lists.[4] Nearly all U.S. producers' sales are on an annual or longer-term contract basis.[5] In 2016, *** percent of U.S. producers' sales were on an annual contract basis, *** percent were on a longer term basis, and *** percent was on a spot basis. Most (three of four) U.S. producers reported that their annual contracts fix price, do not allow for price renegotiation, and do not have meet-or-release provisions. U.S. producers' long-term contracts reportedly last three to six years, include price renegotiation, but do not include meet-or-release provisions. U.S. Steel indicated that its annual contracts do not mandate that customers purchase the quantities specified in the contract.[6]

***.[7] ***.[8] ***.[9]

Of the ten responding importers, six reported setting pricing on a transaction-by-transaction basis, six reported using contracts, and three reported other methods.[10] Importer *** stated that it sets prices quarterly or annually, but that its customers often request annual contracts because of their arrangements with domestic mills. Two importers reported that their short-term contracts were for ***.

Nearly all responding purchases (10 of 11) indicated that their purchases of TCCSS usually involve negotiations with their suppliers. Firms stated that these negotiations include price, volume, delivery, and quality. Only one firm (***), indicated that it occasionally shares competing prices during negotiations. Other purchasers including *** stated that they do not quote competing prices, although *** stated that it will tell a supplier when its pricing is not competitive. U.S. Steel, however, stated that ***.[11]

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[4] U.S. Steel, AMUSA, and UPI publish price lists for steel products including TCCSS on their webpages, but actual prices are typically set through contract negotiations with their customers.

[5] Importer *** stated that the U.S. and European markets typically are based on annual contracts, whereas the Asian market tends to be based on spot and short-term contracts. It further stated that "the Asian market is highly volatile with over capacity which structurally makes it the lowest priced market globally. This means imports to Europe and the USA are often attractive versus the domestic sale at several points in the cycle."

[6] Hearing transcript, p. 43 (Kopf).

[7] ***. Respondent interested parties' prehearing brief, exh. 8.

[8] Respondent interested parties' prehearing brief, exh. 8. ***. U.S. Steel's posthearing brief, exh. 3, attach. B.

[9] U.S. Steel's posthearing brief, exh. 3, p. 5.

[10] Some firms reported more than one method. ***.

[11] U.S. Steel's posthearing brief, exh. 3, pp. 6-7.

Three purchasers reported that they purchase product daily, three purchase weekly, two purchase monthly, and four purchase annually. All responding purchasers reported that they did not expect their purchasing patterns to change in the next two years. Eight of the 11 responding purchasers reported contacting at least 4 suppliers before making a purchase. The five largest responding purchasers reported contacting at least 5, and up to 12 suppliers.

Sales terms and discounts

U.S. producers typically quote prices on an f.o.b basis while the three responding importers typically quote on a delivered basis. Most U.S. producers and importers reported no set discount policy. U.S. producers *** stated that although they have no set discount policy, their contracts may include volume discounts.[12] Two importers (***) indicated that they offer annual volume discounts. Producers and importers reported sales terms of net 30 days and net 60 days.

Price leadership

Purchasers reported that U.S. Steel (nine purchasers) and Arcelor Mittal (three purchasers) were price leaders. Purchasers reported that U.S. Steel is the "dominant" supplier in the U.S. market with the greatest capacity, and is usually the first to announce price changes. Purchaser *** reported that domestic and foreign producers often wait for U.S. Steel to change its prices, although final prices negotiated with other suppliers are often lower. Purchaser *** reported that due to "slightly longer lead times" from importers, it usually receives proposals from importers before U.S. producers.

PRICE DATA

The Commission requested U.S. producers and importers to provide quarterly data for the total quantity and f.o.b. value of the following TCCSS products shipped to unrelated U.S. customers during January 2014-September 2017.

Product 1.-- Single reduced, electrolytic tin plate with base box weights of 75 lbs.-95 lbs. inclusive, in coils.

Product 2.-- Double reduced, electrolytic tin plate with base box weights of 50 lbs.-60 lbs. inclusive, in coils.

[12] ***.

Product 3.-- Single reduced, electrolytic chromium-coated steel with base box weights of 65 lbs.-80 lbs. inclusive, in coils.

Product 4.-- Double reduced, electrolytic chromium-coated steel with base box weights of 55 lbs.-65 lbs. inclusive, in coils.

Four U.S. producers provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.[13] Pricing data reported by these firms accounted for approximately 44.6 percent of U.S. producers' commercial shipments of TCCSS in 2016. There were no imports from Japan during the period for which data were collected.

Price data for products 1-4 are presented in table V-1 and figure V-2.

Price trends

U.S. producers' prices decreased overall from January 2014 through September 2017. Table V-2 summarizes the price trends, by product. As shown in the table, domestic price decreases ranged from 5.3 to *** percent during January 2014-September 2017.

[13] 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.

Table V-1
TCCSS: Weighted-average f.o.b. prices and quantities of domestic products 1-4,[1] by quarters, January 2014-September 2017

Period	Product 1		Product 2		Product 3		Product 4	
	Price (dollars per short ton)	Quantity (short tons)	Price (dollars per short ton)	Quantity (short tons)	Price (dollars per short ton)	Quantity (short tons)	Price (dollars per short ton)	Quantity (short tons)
2014:								
Jan.-Mar.	1,019	77,215	1,121	58,058	***	***	***	***
Apr.-Jun.	1,057	92,024	1,197	75,470	***	***	***	***
Jul.-Sep.	***	***	1,169	78,732	***	***	***	***
Oct.-Dec.	***	***	1,142	61,330	***	***	***	***
2015:								
Jan.-Mar.	1,039	75,173	1,147	43,757	***	***	***	***
Apr.-Jun.	1,041	76,954	1,122	64,676	***	***	***	***
Jul.-Sep.	1,040	70,508	1,128	68,062	***	***	***	***
Oct.-Dec.	1,024	56,437	1,110	44,739	***	***	***	***
2016:								
Jan.-Mar.	889	66,304	1,014	47,385	***	***	***	***
Apr.-Jun.	905	72,950	1,001	60,289	***	***	***	***
Jul.-Sep.	928	64,393	1,000	60,490	***	***	***	***
Oct.-Dec.	893	61,686	977	43,880	***	***	***	***
2017:								
Jan.-Mar.	958	40,934	1,054	40,048	***	***	***	***
Apr.-Jun.	961	62,855	1,053	54,800	***	***	***	***
Jul.-Sep.	965	50,162	1,047	53,055	***	***	***	***

[1] Product 1.-- Single reduced, electrolytic tin plate with base box weights of 75 lbs.-95 lbs. inclusive, in coils. Product 2.-- Double reduced, electrolytic tin plate with base box weights of 50 lbs.-60 lbs. inclusive, in coils. Product 3.-- Single reduced, electrolytic chromium-coated steel with base box weights of 65 lbs.-80 lbs. inclusive, in coils. Product 4.-- Double reduced, electrolytic chromium-coated steel with base box weights of 55 lbs.-65 lbs. inclusive, in coils.

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

Figure V-2
TCCSS: Weighted-average prices and quantities of domestic products 1-4, by quarters, January 2014-September 2017

* * * * * * *

Table V-2
TCCSS: Summary of weighted-average f.o.b. prices for products 1-4 from the United States

Product	Number of quarters	Low price (dollars per short ton)	High price (dollars per short ton)	Change in price[1] (percent)
Product 1	15	889	1,057	(5.3)
Product 2	15	977	1,197	(6.6)
Product 3	15	***	***	***
Product 4	15	***	***	***

[1] Percentage change from first quarter 2014 to third quarter 2017.

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

Price comparisons

There were no price comparisons available in this review.[14]

Purchasers' perceptions of relative price trends

Purchasers were asked how the prices of TCCSS from the United States had changed relative to the prices of product from Japan since 2012. One purchaser reported no change in price, while four purchasers reported that prices changed by the same amount.

[14] In the original investigation 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. Confidential staff report for the original investigation (memorandum INV-X-160), p. V-22. 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 (Views on Remand)*, second remand, USITC Publication 3674, February 2004, p. 13.

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. *Tin-and Chromium-Coated Steel Sheet from Japan, Investigation No. 731-TA-860 (Final)*, USITC Publication 3860, June 2006, p. V-7. In the second review, there were no price comparisons available. *Tin-and Chromium-Coated Steel Sheet from Japan, Investigation No. 731-TA-860 (Final),* USITC Publication 4325, May 2012, p. V-9.

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
82 FR 20314 May 1, 2017	*Initiation of Five-Year ("Sunset") Review*	https://www.gpo.gov/fdsys/pkg/FR-2017-05-01/pdf/2017-08731.pdf
82 FR 20378 May 1, 2017	*Tin- and Chromium-Coated Steel Sheet From Japan; Institution of a Five-Year Review*	https://www.gpo.gov/fdsys/pkg/FR-2017-05-01/pdf/2017-08507.pdf
82 FR 40168 August 4, 2017	*Tin- and Chromium-Coated Steel Sheet From Japan: Notice of Commission to Conduct a Full Five-Year Review*	https://www.gpo.gov/fdsys/pkg/FR-2017-08-24/pdf/2017-17884.pdf
82 FR 41933 August 25, 2017	*Certain Tin Mill Products From Japan: Final Results of the Expedited Third Sunset Review of the Antidumping Duty Order*	https://www.gpo.gov/fdsys/pkg/FR-2017-09-05/pdf/2017-18729.pdf
82 FR 49661 October 20, 2017	*Tin- and Chromium-Coated Steel Sheet From Japan; Scheduling of a Full Five-Year Review*	https://www.gpo.gov/fdsys/pkg/FR-2017-10-26/pdf/2017-23314.pdf
82 FR 54412 November 7, 2017	*Tin- and Chromium-Coated Steel Sheet From Japan; Notice of revised schedule for five-year review*	https://www.gpo.gov/fdsys/pkg/FR-2017-11-17/pdf/2017-24980.pdf
82 FR 221 November 17, 2017	*Tin- and Chromium-Coated Steel Sheet From Japan; Revised schedule for full five-year review*	https://www.gpo.gov/fdsys/pkg/FR-2017-11-17/pdf/2017-24980.pdf
83 FR 14887 April 6, 2018	*Tin- and Chromium-Coated Steel Sheet From Japan; Revised schedule for full five-year review*	https://www.gpo.gov/fdsys/pkg/FR-2018-04-06/pdf/2018-07098.pdf

Note.–The press release announcing the Commission's determinations concerning adequacy and the conduct of a full or expedited review can be found at http://usitc.gov/press_room/news_release/2012/er0409kk1.htm. A summary of the Commission's votes concerning adequacy and the conduct of a full or expedited review can be found at http://pubapps2.usitc.gov/sunset/caseProfSuppAttmnt/download/11452. The Commission's explanation of its determinations can be found at http://pubapps2.usitc.gov/sunset/caseProfSuppAttmnt/download/11453.

APPENDIX B

LIST OF HEARING WITNESSES

CALENDAR OF PUBLIC HEARING

Those listed below are scheduled to appear as witnesses at the United States International Trade Commission's hearing:

Subject: Tin- and Chromium-Coated Steel Sheet from Japan

Inv. No.: 731-TA-860 (Third Review)

Date and Time: February 27, 2018 - 9:30 a.m.

Sessions will be held in connection with this investigation in the Main Hearing Room (Room 101), 500 E Street, SW., Washington, DC.

OPENING REMARKS:	**TIME ALLOCATION:**
In Support of Continuation (**Jeffrey D. Gerrish**, **Skadden**, Arps, Slate, Meagher & Flom LLP)	5 minutes
In Opposition to Continuation (**Daniel L. Porter**, Curtis, Mallet-Prevost, Colt & Mosle LLP)	5 minutes

In Support of the Continuation of Antidumping Duty Order:	**TIME ALLOCATION:**
	60 minutes total

Kelley Drye & Warren LLP
Washington, DC
on behalf of

ArcelorMittal USA LLC ("AMUSA")

Daniel Mull, Executive Vice President for Sales and Marketing, AMUSA

Thomas Goedeke, Director, Tin Mill Products, Sales and Marketing, AMUSA

In Support of the Continuation of
Antidumping Duty Order (continued):

Gina E. Beck, Economic Consultant, Georgetown Economic Services

Paul C. Rosenthal)
Kathleen W. Cannon)
) – OF COUNSEL
R. Alan Luberda)
Brooke M. Ringel)

Skadden, Arps, Slate, Meagher & Flom LLP
Washington, DC
on behalf of

United States Steel Corporation

Amy B. Smith-Yoder, Packaging General Manager, Consumer Solutions, United States Steel Corporation

Robert Y. Kopf, General Manager, Business Support, United States Steel Corporation

Michael P. Young, President, United Steelworkers Local 6103

Jeffrey D. Gerrish)
) – OF COUNSEL
Luke A. Meisner)

INTERESTED PARTY IN SUPPORT OF CONTINUATION:

USS-POSCO Industries ("UPI")
Pittsburg, CA

Lynnette Giacobazzi, Vice President, Supply Chain, UPI

Brent Lerno, General Manager, Sales, UPI

Cory S. Anderson, General Counsel, UPI

In Opposition to the Continuation of Antidumping Duty Order: **TIME ALLOCATION:**

Curtis, Mallet-Prevost, Colt & Mosle LLP — 60 minutes
Washington, DC
on behalf of

JFE Steel Corporation
Nippon Steel & Sumitomo Metal Corporation
Toyo Kohan Co., Ltd.

Michael Arena, Vice President for Logistics and Operations Support, Silgan Containers

Daniel L. Porter)
Tung Nguyen) – OF COUNSEL
Kimberly Reynolds)

REBUTTAL/CLOSING REMARKS:

In Support of Continuation (**Paul C. Rosenthal**, Kelley Drye & Warren LLP *and* **Luke A. Meisner,** Skadden, Arps, Slate, Meagher & Flom LLP)
In Opposition to Continuation (**Daniel L. Porter**, Curtis, Mallet-Prevost, Colt & Mosle LLP)

-END-

APPENDIX C

SUMMARY DATA

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.

Historical Data

Table C-2
TCCSS: Comparative data from the original investigation and the first review and current review

(Quantity=*short tons*; value=*1,000 dollars*; unit values, unit labor costs, and unit expenses are *per short ton*; and period changes=*percent*, except where noted)

Item	1997	1998	1999	2000	2001	2002
U.S. consumption quantity:						
Amount	***	***	***	3,730,105	3,313,671	3,396,584
Producers' share[1]	***	***	***	85.8	85.6	88.9
Importers' share:[1]						
Japan [2]	***	***	***	2.6	0.0	0.0
Other sources[3]	***	***	***	11.6	14.4	11.1
Total	***	***	***	14.2	14.4	11.1
U.S. consumption value:						
Amount	***	***	***	2,190,903	1,960,275	2,030,780
Producers' share[1]	***	***	***	85.6	85.9	89.3
Importers' share:[1]						
Japan [2]	***	***	***	2.7	0.0	0.0
Other sources[3]	***	***	***	11.7	14.1	10.7
Total	***	***	***	14.4	14.1	10.7
U.S. imports from--						
Japan:[2]						
Quantity	182,157	242,081	329,645	95,533	0	0
Value	120,997	154,488	196,185	58,990	0	0
Unit value	$664	$638	$595	$617	([4])	([4])
Other sources:[3]						
Quantity	***	***	***	433,139	476,063	375,797
Value	***	***	***	256,462	277,161	216,736
Unit value	$***	$***	$***	$592	$582	$577
All sources						
Quantity	***	***	***	528,672	476,063	375,797
Value	***	***	***	315,452	277,161	216,736
Unit value	$***	$***	$***	$597	$582	$577
U.S. producers'--						
Capacity quantity	4,855,145	4,869,145	4,607,145	4,591,145	3,777,878	3,629,045
Production quantity	3,728,441	3,425,572	3,433,592	3,333,869	2,916,110	3,125,623
Capacity utilization[1]	76.8	70.4	74.5	72.6	77.2	86.1
U.S. shipments:						
Quantity	3,554,766	3,283,424	3,227,134	3,201,433	2,837,608	3,020,787
Value	2,192,160	2,003,321	1,898,063	1,875,451	1,683,114	1,814,044
Unit value	$617	$610	$588	$586	$593	$601
Ending inventory quantity	360,768	354,047	346,375	349,202	331,964	324,275
Inventories/total shipments[1]	9.6	10.2	10.0	10.3	11.3	10.4
Production workers	6,922	6,224	6,004	5,794	5,256	4,637
Hours worked (*1,000 hours*)	15,287	13,854	13,297	15,399	10,918	9,874
Wages paid (*1,000 dollars*)	380,470	346,345	344,320	334,330	287,189	265,145

Table C-1--*Continued*

2003	2004	2005	2006	2007	2008	2009	2010	2011
3,213,793	3,366,940	3,089,023	3,283,229	3,159,210	3,139,040	2,749,044	3,212,052	2,683,441
88.2	86.8	83.8	80.5	80.6	87.4	85.6	80.2	80.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11.8	13.2	16.2	19.5	19.4	12.6	14.4	19.8	19.3
11.8	13.2	16.2	19.5	19.4	12.6	14.4	19.8	19.3
1,953,562	2,226,330	2,312,653	2,424,428	2,400,865	2,724,437	3,026,986	3,164,231	2,778,297
88.3	87.3	83.5	80.6	80.2	86.7	84.6	78.8	78.9
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11.7	12.7	16.5	19.4	19.8	13.3	15.4	21.2	21.1
11.7	12.7	16.5	19.4	19.8	13.3	15.4	21.2	21.1
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
([4])	([4])	([4])	([4])	([4])	([4])	([4])	([4])	([4])
378,237	443,508	501,668	639,023	613,755	396,448	394,514	636,373	518,383
229,490	282,991	380,475	471,015	475,101	362,537	465,472	671,825	586,977
$607	$638	$758	$737	$774	$914	$1,180	$1,056	$1,132
378,237	443,508	501,668	639,023	613,755	396,448	394,514	636,373	518,383
229,490	282,991	380,475	471,015	475,101	362,537	465,472	671,825	586,977
$607	$638	$758	$737	$774	$914	$1,180	$1,056	$1,132
3,670,240	3,670,240	3,670,240	3,653,000	3,653,000	3,627,720	3,543,000	3,543,000	3,543,000
2,934,465	2,946,392	2,738,382	2,631,713	2,546,797	2,714,429	2,442,402	2,594,982	2,168,240
80.0	80.3	74.6	72.0	69.7	74.8	68.9	73.2	61.2
2,835,556	2,923,432	2,587,355	2,644,206	2,545,455	2,742,592	2,354,530	2,575,679	2,165,058
1,724,072	1,943,339	1,932,178	1,953,413	1,925,764	2,361,900	2,561,514	2,492,406	2,191,320
$608	$665	$747	$739	$757	$861	$1,088	$968	$1,012
363,429	262,974	307,218	249,005	234,647	249,449	341,928	319,182	297,562
12.4	8.6	11.4	***	***	***	***	***	***
4,331	3,857	3,769	***	***	3,648	3,150	3,200	2,984
8,609	8,136	7,665	***	***	7,013	6,247	6,455	6,183
222,495	223,492	232,355	***	***	197,843	183,735	199,460	191,594

Table C-2--*Continued*
TCCSS: Comparative data from the original investigation and the first review and current review

(Quantity=*short tons*; value=*1,000 dollars*; unit values, unit labor costs, and unit expenses are *per short ton*; and period changes=*percent*, except where noted)

Item	1997	1998	1999	2000	2001	2002
Hourly wages	$24.89	$25.37	$25.89	$21.71	$26.30	$26.85
Productivity (*short tons per 1,000 hours*)	243.9	250.9	258.2	216.5	267.1	316.6
Net sales:						
Quantity	3,742,829	3,476,048	3,472,054	3,358,878	2,940,949	3,132,312
Value	2,308,486	2,120,926	2,034,967	1,975,725	1,740,481	1,872,924
Unit value	$617	$610	$586	$588	$592	$598
Cost of goods sold	2,224,570	2,075,245	2,061,471	1,958,057	1,732,228	1,805,419
Gross profit or (loss)	83,916	45,681	(26,504)	17,668	8,253	67,505
Operating income or (loss)	(20,977)	(64,125)	(132,484)	(79,653)	(73,712)	(11,766)
Unit cost of goods sold	$594	$597	$594	$583	$589	$576
Unit operating income or (loss)	($6)	($18)	($38)	($24)	($25)	($4)
Cost of goods sold/sales[1]	96.4	97.8	101.3	99.1	99.5	96.4
Operating income or (loss)/sales[1]	(0.9)	(3.0)	(6.5)	(4.0)	(4.2)	(0.6)

[1] In *percent*.
[2] To maintain a public presentation of data, subject imports are treated as zero during 2006-11 but actually are ***. The actual share of U.S. consumption is ***.
[3] To maintain a public presentation of data, official Commerce statistics are used for nonsubject imports even though a small amount of excluded tin mill products in 2010 of *** short tons and in 2011 of *** short tons is included.
[4] Not applicable.

Table C-1--*Continued*

2003	2004	2005	2006	2007	2008	2009	2010	2011
$25.84	$27.47	$30.31	$***	$***	$28.21	$29.41	$30.90	$30.99
340.9	362.1	357.3	***	***	387.1	391.0	402.0	350.7
2,936,145	3,048,847	2,695,138	2,678,947	2,561,155	2,763,295	2,364,130	2,590,379	2,166,858
1,778,843	2,016,042	2,016,252	1,979,671	1,937,407	2,377,902	2,571,572	2,507,635	2,193,349
$606	$661	$748	$739	$756	$861	$1,088	$968	$1,012
1,622,522	1,923,537	1,920,750	1,974,716	1,984,764	2,491,823	2,337,536	2,498,443	2,283,740
156,321	92,505	95,502	4,955	(47,357)	(113,921)	234,036	9,192	(90,391)
22,643	(18,460)	(14,742)	(106,478)	(161,234)	(229,202)	173,408	(78,230)	(198,794)
$553	$631	$713	$737	$775	$902	$989	$965	$1,054
$8	($6)	($5)	($40)	($63)	($83)	$73	($30)	($92)
91.2	95.4	95.3	99.7	102.4	104.8	90.9	99.6	104.1
1.3	(0.9)	(0.7)	(5.4)	(8.3)	(9.6)	6.7	(3.1)	(9.1)

Note.--During 1997-99, U.S. imports from sources other than Japan were obtained from official Commerce import statistics modified by deducting excluded tin mill products.

Source: Data for 1997-99 compiled from data in the original confidential staff report (INV-X-160), table C-1; data for 2000-05 are compiled from data in *Tin-and Chromium-Coated Steel Sheet From Japan, Inv. No. 731-TA-860 (Review)*, USITC Publication 3860, June 2006, table C-1; and data for 2006-11 are compiled from data submitted in response to Commission questionnaires and official Commerce statistics.

APPENDIX D

U.S. PRODUCERS, IMPORTERS, PURCHASERS, AND FOREIGN PRODUCERS REGARDING THE EFFECT OF THE ORDER AND THE LIKELY EFFECTS OF REVOCATION

Table D-1

TCCSS: Firms' narratives on the impact of the order and the likely impact of revocation

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Table D-1--Continued

TCCSS: Firms' narratives on the impact of the order and the likely impact of revocation

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APPENDIX E

Excluded Tin Mill Products

Excluded Tin Mill Products

- Single reduced electrolytically chromium coated steel with a thickness 0.238 mm (85 pound base box) (± 10%) or 0.251 mm (90 pound base box) (± 10%) or 0.255 mm (± 10%) with 770 mm (minimum width) (± 1.588 mm) by 900 mm (maximum length if sheared) sheet size or 30.6875 inches (minimum width) (± 1/16 inch) and 35.4 inches (maximum length if sheared) sheet size; with type MR or higher (per ASTM) A623 steel chemistry; batch annealed at T2 1/2 anneal temper, with a yield strength of 31 to 42 kpsi (214 to 290 Mpa); with a tensile strength of 43 to 58 kpsi (296 to 400 Mpa); with a chrome coating restricted to 32 to 150 mg/m^2; with a chrome oxide coating restricted to 6 to 25 mg/m^2 with a modified 7B ground roll finish or blasted roll finish; with roughness average (Ra) 0.10 to 0.35 micrometers, measured with a stylus instrument with a stylus radius of 2 to 5 microns, a trace length of 5.6 mm, and a cut-off of 0.8 mm, and the measurement traces shall be made perpendicular to the rolling direction; with an oil level of 0.17 to 0.37 grams/base box as type BSO, or 2.5 to 5.5 mg/m^2as type DOS, or 3.5 to 6.5 mg/m^2 as type ATBC; with electrical conductivity of static probe voltage drop of 0.46 volts drop maximum, and with electrical conductivity degradation to 0.70 volts drop maximum after stoving (heating to 400 degrees F for 100 minutes followed by a cool to room temperature).
- Single reduced electrolytically chromium-or tin-coated steel in the gauges of 0.0040 inch nominal, 0.0045 inch nominal, 0.0050 inch nominal, 0.0061 inch nominal (55 pound base box weight), 0.0066 inch nominal (60 pound base box weight), and 0.0072 inch nominal (65 pound base box weight), regardless of width, temper, finish, coating or other properties.
- Single reduced electrolytically chromium coated steel in the gauge of 0.024 inch, with widths of 27.0 inches or 31.5 inches, and with T-1 temper properties.
- Single reduced electrolytically chromium coated steel, with a chemical composition of 0.005% max carbon, 0.030% max silicon, 0.25% max manganese, 0.025% max phosphorous, 0.025% max sulfur, 0.070% max aluminum, and the balance iron, with a metallic chromium layer of 70-130 mg/m^2, with a chromium oxide layer of 5-30 mg/m^2, with a tensile strength of 260-440 N/mm^2, 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/m^2 and chromium oxide of 10 mg/m^2, with a chemistry of 0.13% maximum carbon, 0.60% maximum manganese, 0.15% maximum silicon, 0.20% maximum copper, 0.04% maximum phosphorous, 0.05% maximum sulfur, and 0.20% maximum aluminum, with a surface finish of Stone Finish 7C, with a DOS-A oil at an aim level of 2 mg/square meter, with not more than 15 inclusions/foreign matter in 15 feet (4.6 meters) (with inclusions not to exceed 1/32 inch (0.8 mm) in width and 3/64 inch (1.2 mm) in length), with thickness/temper combinations of either 60 pound base box (0.0066 inch) double reduced CADR8 temper in widths of 25.00 inches, 27.00 inches, 27.50 inches, 28.00 inches, 28.25 inches, 28.50 inches, 29.50 inches, 29.75 inches, 30.25 inches, 31.00 inches, 32.75 inches, 33.75 inches, 35.75 inches, 36.25 inches, 39.00 inches, or 43.00 inches, or 85 pound base box (0.0094 inch) single reduced CAT4 temper in widths of 25.00 inches, 27.00 inches, 28.00 inches, 30.00 inches, 33.00 inches, 33.75 inches, 35.75 inches, 36.25 inches, or 43.00 inches, with width tolerance of #1/8 inch, with a thickness tolerance of #0.0005 inch, with a maximum coil weight of 20,000 pounds (9071.0 kg), with a minimum coil weight of 18,000 pounds (8164.8 kg) with a coil inside diameter of 16 inches (40.64 cm) with a steel core, with a coil maximum outside diameter of 59.5 inches (151.13 cm), with a maximum of one weld (identified with a paper flag) per coil, with a surface free of scratches, holes, and rust.

- Electrolytically tin coated steel having differential coating with 1.00 pound/base box equivalent on the heavy side, with varied coating equivalents in the lighter side (detailed below), with a continuous cast steel chemistry of type MR, with a surface finish of type 7B or 7C, with a surface passivation of 0.7 mg/square foot of chromium applied as a cathodic dichromate treatment, with coil form having restricted oil film weights of 0.3-0.4 grams/base box of type DOS-A oil, coil inside diameter ranging from 15.5 to 17 inches, coil outside diameter of a maximum 64 inches, with a maximum coil weight of 25,000 pounds, and with temper/coating/dimension combinations of: (1) 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/$m^2$and a chromium oxide layer between 5-30 mg/m^2; chemical composition of 0.05% maximum carbon, 0.03% maximum silicon, 0.60% maximum manganese, 0.02% maximum phosphorous, and 0.02% maximum sulfur; magnetic flux density ("Br") of 10 kg minimum and a coercive force ("Hc") of 3.8 Oe minimum.
- Tin-free steel laminated on one or both sides of the surface with a polyester film, consisting of two layers (an amorphous layer and an outer crystal layer), that contains no more than the indicated amounts of the following environmental hormones: 1 mg/kg BADGE (BisPhenol—A Di-glycidyl Ether), 1 mg/kg BFDGE (BisPhenol—F Di-glycidyl Ether), and 3 mg/kg BPA (BisPhenol—A). [1]

[1] *Certain Tin Mill Products from Japan: Final Results of the Expedited Third Sunset Review of the Antidumping Duty Order*, 77 FR 34938, August 25, 2017.