Stainless Steel Sheet and Strip from Japan, Korea, and Taiwan

Investigation Nos. 701-TA-382 and 731-TA-800, 801, and 803 (Third Review)

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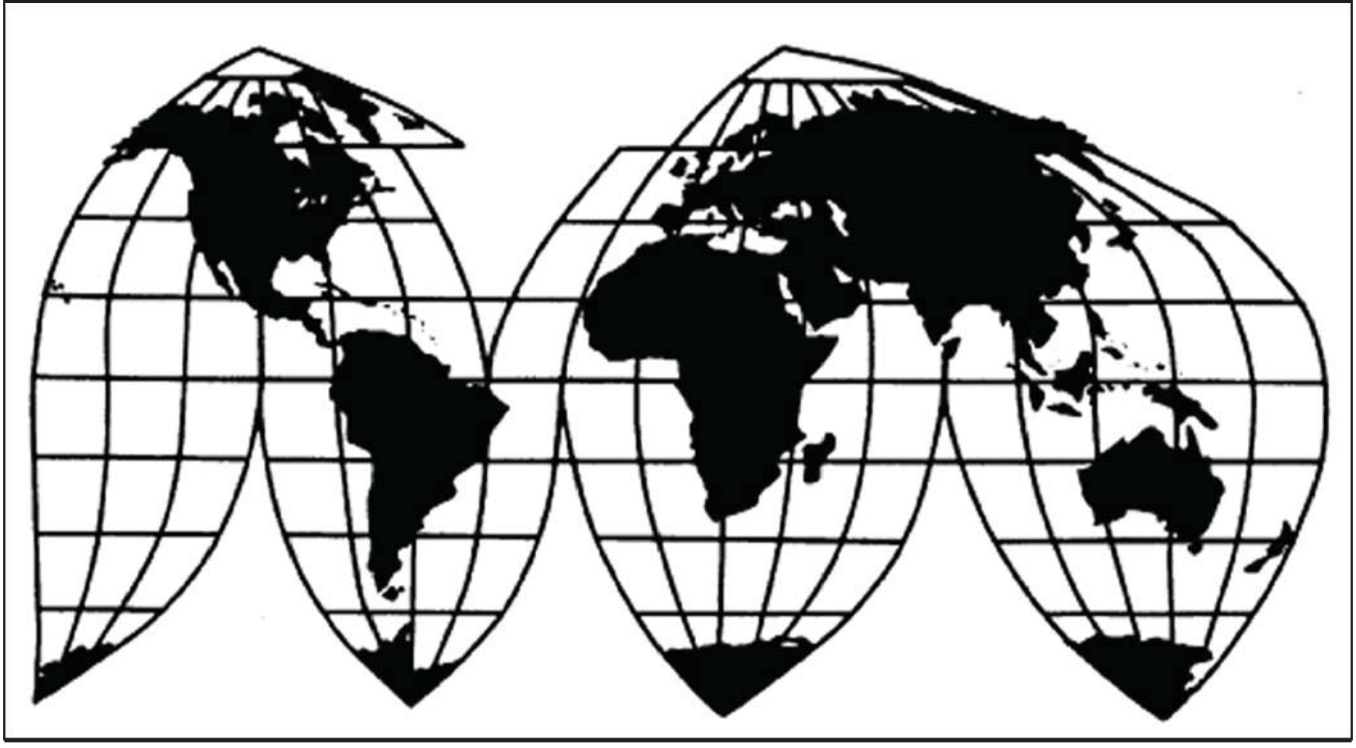

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UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 701-TA-382 and 731-TA-800, 801, and 803 (Third Review)

Stainless Steel Sheet and Strip from Japan, Korea, and Taiwan

DETERMINATIONS

On the basis of the record[1] developed in the subject five-year reviews, the United States International Trade Commission ("Commission") determines, pursuant to the Tariff Act of 1930 ("the Act"), that revocation of the countervailing duty order on imports of stainless steel sheet and strip from Korea and the antidumping duty orders on imports of stainless steel sheet and strip from Japan, Korea, and Taiwan 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 these reviews on July 1, 2016 (81 F.R. 43238) and determined on October 4, 2016 that it would conduct full reviews (81 F.R. 71533, October 17, 2016). 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 March 7, 2017 (82 F.R. 12843). The hearing was held in Washington, DC, on July 25, 2017, 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 these five-year reviews, we determine under section 751(c) of the Tariff Act of 1930, as amended ("the Tariff Act"), that revocation of the countervailing duty order on stainless steel sheet and strip from Korea and the antidumping duty orders on stainless steel sheet and strip from Japan, Korea, and Taiwan 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 Investigations. In July 1999, the Commission determined than an industry in the United States was materially injured by reason of imports of certain stainless steel sheet and strip from France, Italy, and Korea that the Department of Commerce ("Commerce") found to be subsidized and by reason of certain stainless steel sheet and strip from France, Germany, Italy, Japan, Korea, Mexico, Taiwan, and the United Kingdom that Commerce found to be sold at less than fair value ("LTFV").[1] Commerce issued antidumping duty orders on July 27, 1999, and countervailing duty orders on August 6, 1999.[2]

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[1] *Certain Stainless Steel Sheet and Strip from France, Germany, Italy, Japan, The Republic of Korea, Mexico, Taiwan, and the United Kingdom*, Inv. Nos. 701-TA-380-382 and 731-TA-797-804 (Final), USITC Pub. 3208 (July 1999) ("Original Determinations") at 1. Korean producer Inchon (the predecessor to Hyundai Steel) was excluded from the antidumping duty order after receiving a *de minimis* dumping margin. Korean producer POSCO was excluded from the countervailing duty order after receiving a *de minimis* subsidy margin. Subsequent to the second reviews, POSCO was excluded from the antidumping duty order as a result of a Section 129 proceeding. Confidential Report, INV-PP-110 (Aug. 17, 2017) (as amended by INV-PP-114, August 22, 2017) ("CR") at I-7, I-20, Public Report ("PR") at I-6, I-17.

Producers Chang Mien and Tung Mung of Taiwan were excluded from the antidumping duty order because they received *de minimis* dumping margins. CR at I-11, PR at I-12.

[2] *Notice of Antidumping Duty Order; Stainless Steel Sheet and Strip in Coils from United Kingdom, Taiwan, and South Korea*, 64 Fed. Reg. 40555 (July 27, 1999); *Notice of Amended Final Determination of Sales at Less Than Fair Value and Antidumping Duty Order; Stainless Steel Sheet and Strip in Coils from Germany*, 64 Fed. Reg. 40557 (July 27, 1999); *Notice of Amended Final Determination of Sales at Less Than Fair Value and Antidumping Duty Order; Stainless Steel Sheet and Strip in Coils from Mexico*, 64 Fed. Reg. 40560 (July 27, 1999); *Notice of Amended Final Determination of Sales at Less Than Fair Value and Antidumping Duty Order; Stainless Steel Sheet and Strip in Coils from France*, 64 Fed. Reg. 40562 (July 27, 1999); *Notice of Amended Final Determination of Sales at Less Than Fair Value and Antidumping Duty Order; Stainless Steel Sheet and Strip in Coils from Japan*, 64 Fed. Reg. 40565 (July 27, 1999); *Notice of Amended Final Determination of Sales at Less Than Fair Value and Antidumping Duty Order; Stainless Steel Sheet and Strip in Coils from Italy*, 64 Fed. Reg. 40567 (July 27, 1999); *Amended Final Determination: Stainless Steel Sheet and Strip in Coils from the Republic of Korea; and Notice of Countervailing Duty Orders: Stainless Steel Sheet and Strip in Coils from France, Italy, and the Republic of Korea*, 64 Fed. Reg. 42923 (Aug. 6, 1999).

First Reviews. On June 1, 2004, the Commission instituted its first five-year reviews of the countervailing duty orders on certain stainless steel sheet and strip from France, Italy, and Korea and the antidumping duty orders on certain stainless steel sheet and strip from France, Germany, Italy, Japan, Korea, Mexico, Taiwan, and the United Kingdom.[3] [4] On September 7, 2004, the Commission determined to conduct full reviews of the orders.[5] In July 2005, the Commission determined that revocation of the countervailing duty orders on stainless steel sheet and strip from Italy and Korea and revocation of the antidumping duty orders on stainless steel sheet and strip from Germany, Italy, Japan, Korea, Mexico, and Taiwan would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[6] Commerce continued the orders in August 2005.[7] The Commission also determined that revocation of the antidumping duty orders on stainless steel sheet and strip from France and the United Kingdom would not be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[8]

Second Reviews. On June 1, 2010, the Commission instituted its second five-year reviews of the countervailing duty order on stainless steel sheet and strip from Korea and the antidumping duty orders on stainless steel sheet and strip from Germany, Italy, Japan, Korea, Mexico, and Taiwan.[9] On September 10, 2010, the Commission determined to conduct full

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[3] *Stainless Steel Sheet and Strip from France, Germany, Italy, Japan, Korea, Mexico, Taiwan, and the United Kingdom*, Inv. Nos. 701-TA-381-382 and 731-TA-797-804 (Review), USITC Pub. 3788 (July 2005) ("First Five-Year Reviews") at 1.

[4] Commerce revoked the countervailing duty order on stainless steel sheet and strip from France on November 7, 2003. *Notice of Implementation Under Section 129 of the Uruguay Round Agreements Act; Countervailing Measures Concerning Certain Steel Products From the European Communities;* 68 Fed. Reg. 64858 (Nov. 17, 2003). Notwithstanding the order's revocation, Commerce initiated and concurrently rescinded its five-year review of the order on June 1, 2004. *Initiation of Five-Year ("Sunset") Reviews,* 69 Fed. Reg. 30874 (June 1, 2004); *Countervailing Duty Order on Stainless Steel Sheet and Strip in Coils from France: Rescission of Five-Year ("Sunset") Review*, 69 Fed. Reg. 35585 (June 25, 2004). Accordingly, the Commission rescinded its five-year review of the countervailing duty order on stainless steel sheet and strip from France on June 25, 2004. *Rescission of Five-year Review Concerning the Countervailing Duty Order on Stainless Steel Sheet and Strip from France*, 69 Fed. Reg. 35678 (June 25, 2004).

[5] *Stainless Steel Sheet and Strip from France, Germany, Italy, Japan, Korea, Mexico, Taiwan, and the United Kingdom*, 69 Fed. Reg. 56460 (Sept. 21, 2004).

[6] First Five-Year Reviews, USITC Pub. 3788 at 3.

[7] *Continuation of Antidumping Duty Orders on Stainless Steel Sheet and Strip in Coils from Germany, Italy, Japan, the Republic of Korea, Mexico, and Taiwan, and Countervailing Duty Orders on Stainless Steel Sheet and Strip in Coils from Italy and the Republic of Korea*, 70 Fed. Reg. 44886 (Aug. 4, 2005).

[8] First Five-Year Reviews, USITC Pub. 3788 at 3.

[9] *Stainless Steel Sheet and Strip from Germany, Italy, Japan, Korea, Mexico, and Taiwan,* Inv. Nos. 701-TA-382 and 731-TA-798-803 (Second Review), USITC Pub. 3842 at 3 (Mar. 2006) ("Second Five-Year Reviews"). Commerce revoked the countervailing duty order on stainless steel sheet and strip from (Continued…)

reviews of the orders.[10] In July 2011, the Commission determined that revocation of the countervailing duty order on stainless steel sheet and strip from Korea and the antidumping duty orders on stainless steel sheet and strip from Japan, Korea, and Taiwan would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[11] Commerce continued the orders on subject imports from Japan, Korea, and Taiwan in August 2011.[12] It also determined that revocation of the antidumping duty orders on stainless steel sheet and strip from Germany, Italy, and Mexico would not be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[13]

Current Reviews. On July 1, 2016, the Commission instituted the current reviews on the countervailing duty order on subject imports of stainless steel sheet and strip from Korea and the antidumping duty orders on subject imports of stainless steel sheet and strip from Japan, Korea, and Taiwan.[14] The Commission received a joint response to its notice of institution from domestic producers AK Steel Corporation ("AK Steel"), Allegheny Ludlum, LLC d/b/a ATI Flat Rolled Products ("ATI"), North American Stainless ("NAS"), and Outokumpu Stainless USA, LLC ("Outokumpu")(collectively "domestic interested parties" or "domestic producers"). Two respondent interested party groups responded to the Commission's notice of institution: Hitachi Metals, Ltd. and Hitachi Metals America LLC (collectively "Hitachi"), respectively a producer and importer of subject merchandise from Japan, and Hyundai BNG Steel Co., Ltd. ("Hyundai BNG"), a producer of subject merchandise from Korea. On October 4, 2016, the Commission determined to conduct full reviews pursuant to section 751(c)(5) of the Act.[15] Domestic producers filed prehearing and posthearing briefs and appeared at the Commission's

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(…Continued)
Italy on March 28, 2006, following a changed circumstances review. *Stainless Steel Sheet and Strip in Coils from Italy: Final Results of Countervailing Duty Changed Circumstances Review and Revocation of Countervailing Duty Order, in Whole*, 71 Fed. Reg. 15382 (Mar. 28, 2006).

[10] *Stainless Steel Sheet and Strip from Germany, Italy, Japan, Korea, Mexico, and Taiwan*, 75 Fed. Reg. 59744 (Sept. 28, 2010).

[11] Second Five-Year Reviews, USITC Pub. 4244 at 3.

[12] *Continuation of Antidumping and Countervailing Duty Orders: Stainless Steel Sheet and Strip in Coils from Japan, Korea, and Taiwan*, 76 Fed. Reg. 49726 (Aug. 11, 2011).

[13] Second Five-Year Reviews, USITC Pub. 4244 at 3.

[14] *Stainless Steel Sheet and Strip from Japan, Korea, and Taiwan; Institution of Five-Year Reviews*, 81 Fed. Reg. 43238 (July 1, 2016).

[15] *Stainless Steel Sheet and Strip from Japan, Korea, and Taiwan: Notice of Commission Determination to Conduct Full Five-Year Reviews*, 81 Fed Reg. 71533 (Oct. 17, 2016). The Commission found that the domestic interested party group response was adequate. It found that the respondent interested party group response with respect to the orders on subject imports from Korea was adequate and the respondent interested party group responses with respect to the orders on subject imports from Japan and Taiwan were inadequate. The Commission determined to conduct a full review with respect to Korea, as well as with respect to Japan and Taiwan to promote administrative efficiency. *Explanation of Commission Determination on Adequacy*, EDIS Doc. 592394 (Oct. 11, 2016).

hearing accompanied by counsel, as did representatives from Hyundai BNG. Hitachi did not participate in these reviews following the adequacy phase.

U.S. industry data in these reviews are based on the questionnaire responses of four domestic producers that are believed to account for all domestic production of stainless steel sheet and strip in 2016. The Commission received importer questionnaire responses from 19 importers believed to accounted for *** percent of subject imports and 51.3 percent of nonsubject imports in 2016. In light of the coverage of the Commission's questionnaires, U.S. import data and related information are based on proprietary Customs records for subject imports and Commerce's official import statistics for nonsubject imports. Foreign industry data and related information are based on the questionnaire responses of one responding producer of subject merchandise in Japan, Hitachi; one responding producer of subject merchandise in Korea, Hyundai BNG; data from the *** monitoring source for 2016; and official export statistics.[16]

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."[17] 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."[18] 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.[19]

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

> The products covered by these reviews are stainless steel sheet and strip in coils. Stainless steel is an alloy steel containing, by weight, 1.2 percent or less of carbon and 10.5 percent or more of chromium, with or without other elements. The subject sheet and

[16] CR at I-17-18, PR at I-22.

[17] 19 U.S.C. § 1677(4)(A).

[18] 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).

[19] *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).

strip is a flat-rolled product in coils that is greater than 9.5 mm in width and less than 4.75 mm in thickness, and that is annealed or otherwise heat treated and pickled or otherwise descaled. The subject sheet and strip may also be further processed (*i.e.*, cold-rolled, polished, aluminized, coated, *etc.*), provided that it maintains the specific dimensions of sheet and strip following such processing.

The merchandise subject to these *Orders* is classified in the Harmonized Tariff Schedule of the United States (HTSUS) at subheadings: 7219.13.00.31; 7219.13.00.51, 7219.13.00.71, 7219.13.00.81, 7219.14.00.30, 7219.14.00.65, 7219.14.00.90, 7219.32.00.05, 7219.32.00.20, 7219.32.00.25, 7219.32.00.35, 7219.32.00.36, 7219.32.00.38, 7219.32.00.42, 7219.32.00.44, 7219.33.00.05, 7219.33.00.20, 7219.33.00.25, 7219.33.00.35, 7219.33.00.36, 7219.33.00.38, 7219.33.00.42, 7219.33.00.44, 7219.34.00.05, 7219.34.00.20, 7219.34.00.25, 7219.34.00.30, 7219.34.00.35, 7219.35.00.05, 7219.35.00.15, 7219.35.00.30, 7219.35.00.35, 7219.90.00.10, 7219.90.00.20, 7219.90.00.25, 7219.90.00.60, 7219.90.00.80, 7220.12.10.00, 7220.12.50.00, 7220.20.10.10, 7220.20.10.15, 7220.20.1 0.60, 7220.20.10.80, 7220.20.60.05, 7220.20.60.10, 7220.20.60.15, 7220.20.60.60, 7220.20.60.80, 7220.20.70.05, 7220.20.70.1 0, 7220.20.70.15, 7220.20.70.60, 7220.20.70.80, 7220.20.80.00, 7220.20.90.30, 7220.20.90.60, 7220.90.00.10, 7220.90.00.15, 7220.90.00.60, and 7220.90.00.80. (Prior to 2001, U.S. imports under HTSUS statistical reporting numbers 219.13.00.31, 7219.13.00.51, 7219.13.00.71, 7219.13.00.81 were entered under HTSUS statistical reporting numbers 7219.13.00.30, 7219.13.00.50, 7219.13.00.70, 7219.13.00.80.) Although the HTSUS subheadings are provided for convenience and customs purposes, the Department's written description of the merchandise subject to these orders is dispositive.

Excluded from the scope of these *Orders* are the following: (1) sheet and strip that is not annealed or otherwise heat treated and pickled or otherwise descaled, (2) sheet and strip that is cut to length, (3) plate (*i.e.*, flat-rolled stainless steel products of a thickness of 4.75 mm or more), (4) flat wire (*i.e.*, cold-rolled sections, with a prepared edge, rectangular in shape, of a width of not more than 9.5 mm), and (5) razor blade steel, (6) flapper valve steel, (7) suspension foil, (8) certain stainless steel foil for automotive catalytic converters, (9) permanent magnet iron-chromium-cobalt alloy stainless strip, (10) certain electrical

resistance ally steel, (11) certain martensitic precipitation-hardenable stainless steel, and (12) three specialty stainless steels typically used in certain industrial blades and surgical and medication instruments. Items 5 through 12 are further described below. Razor blade steel is a flat-rolled product of stainless steel, not further worked than cold-rolled (cold-reduced), in coils, of a width of not more than 23 mm and a thickness of 0.266 mm or less, containing, by weight, 12.5 to 14.5 percent chromium, and certified at the time of entry to be used in the manufacture of razor blades. *See* Chapter 72 of the HTSUS, "Additional U.S. Note" 1(d).

Flapper valve steel is also excluded from the scope: This product is defined as stainless steel strip in coils containing, by weight, between 0.37 and 0.43 percent carbon, between 1.15 and 1.35 percent molybdenum, and between 0.20 and 0.80 percent manganese. This steel also contains, by weight, phosphorus of 0.025 percent or less, silicon of between 0.20 and 0.50 percent, and sulfur of 0.020 percent or less. The product is manufactured by means of vacuum arc re-melting, with inclusion controls for sulphide of no more than 0.04 percent and for oxide of no more than 0.05 percent. Flapper valve steel has a tensile strength of between 210 and 300 ksi, yield strength of between 170 and 270 ksi, plus or minus 8 ksi, and a hardness CRV of between 460 and 590. Flapper valve steel is most commonly used to produce specialty flapper valves in compressors.

Suspension foil excluded from the scope is a specialty steel product used in the manufacture of suspension assemblies for computer disk drives. Suspension foil is described as 302/304 grade or 202 grade stainless steel of a thickness between 14 and 127 microns, with a thickness tolerance of plus-or-minus 2.01 microns, and surface glossiness of 200 to 700 percent Gs. Suspension foil must be supplied in coil widths of not more than 407 mm, and with a mass of 225 kg or less. Roll marks may only be visible on one side, with no scratches of measurable depth. The material must exhibit residual stresses of 2 mm maximum deflection, and flatness of 1.6 mm over 685 mm length.

Certain stainless steel foil for automotive catalytic converters is also excluded from the scope. This stainless steel strip in coils is a specialty foil with a thickness of between 20 and 110 microns used to produce a metallic substrate with a honeycomb structure for use in automotive catalytic converters. The steel contains, by

weight, carbon of no more than 0.030 percent, silicon of no more than 1.0 percent, manganese of no more than 1.0 percent, chromium of between 19 and 22 percent, aluminum of no less than 5.0 percent, phosphorus of no more than 0.045 percent, sulfur of no more than 0.03 percent, lanthanum of less than 0.002 or greater than 0.05 percent, and total rare earth elements of more than 0.06 percent, with the balance iron.

Permanent magnet iron-chromium-cobalt alloy stainless strip is also excluded from the scope. This ductile stainless steel strip contains, by weight, 26 to 30 percent chromium, and 7 to 10 percent cobalt, with the remainder of iron, in widths 228.6 mm or less, and a thickness between 0.127 and 1.270 mm. It exhibits magnetic remanence between 9,000 and 12,000 gauss, and a coercivity of between 50 and 300 oersteds. This product is most commonly used in electronic sensors and is currently available under proprietary trade names such as "Arnokrome III."

Certain electrical resistance alloy steel is also excluded from the scope. This product is defined as a non-magnetic stainless steel manufactured to American Society of Testing and Materials (ASTM) specification B344 and containing, by weight, 36 percent nickel, 18 percent chromium, and 46 percent iron, and is most notable for its resistance to high temperature corrosion. It has a melting point of 1390 degrees Celsius and displays a creep rupture limit of 4 kilograms per square millimeter at 1000 degrees Celsius. This steel is most commonly used in the production of heating ribbons for circuit breakers and industrial furnaces, and in rheostats for railway locomotives. The product is currently available under proprietary trade names such as "Gilphy 36."

Certain martensitic precipitation-hardenable stainless steel is also excluded from the scope. This high-strength, ductile stainless steel product is designated under the Unified Numbering System (UNS) as S45500-grade steel, and contains, by weight, 11 to 13 percent chromium, and 7 to 10 percent nickel. Carbon, manganese, silicon and molybdenum each comprise, by weight, 0.05 percent or less, with phosphorus and sulfur each comprising, by weight, 0.03 percent or less. This steel has copper, niobium, and titanium added to achieve aging, and will exhibit yield strengths as high as 1700 Mpa and ultimate tensile strengths as high as 1750 Mpa after aging, with elongation percentages of 3 percent or less in 50 mm. It is generally provided in thicknesses between 0.635 and 0.787 mm, and in widths of 25.4 mm. This product is most commonly

> used in the manufacture of television tubes and is currently available under proprietary trade names such as "Durphynox 17."
>
> Three specialty stainless steels typically used in certain industrial blades and surgical and medical instruments are also excluded from the scope. These include stainless steel strip in coils used in the production of textile cutting tools (*e.g.*, carpet knives). This steel is similar to AISI grade 420 but containing, by weight, 0.5 to 0.7 percent of molybdenum. The steel also contains, by weight, carbon of between 1.0 and 1.1 percent, sulfur of 0.020 percent or less, and includes between 0.20 and 0.30 percent copper and between 0.20 and 0.50 percent cobalt. This steel is sold under proprietary names such as "GIN4 Mo." The second excluded stainless steel strip in coils is similar to AISI 420-J2 and contains, by weight, carbon of between 0.62 and 0.70 percent, silicon of between 0.20 and 0.50 percent, manganese of between 0.45 and 0.80 percent, phosphorus of no more than 0.025 percent and sulfur of no more than 0.020 percent. This steel has a carbide density on average of 100 carbide particles per 100 square microns. An example of this product is "GIN5" steel. The third specialty steel has a chemical composition similar to AISI 420 F, with carbon of between 0.37 and 0.43 percent, molybdenum of between 1.15 and 1.35 percent, but lower manganese of between 0.20 and 0.80 percent, phosphorus of no more than 0.025 percent, silicon of between 0.20 and 0:50 percent, and sulfur of no more than 0.020 percent. This product is supplied with a hardness of more than Bv 500 guaranteed after customer processing, and is supplied as, for example, "GIN6."[20]

The merchandise subject to these orders are flat-rolled stainless steel products in coils, less than 4.75 mm in thickness, at least 9.5 mm in width, that are annealed (heat-treated) and pickled (subjected to an acid rinse to remove surface scale).[21] Sheet and strip are distinguished from one another by width.[22] Stainless steel is a low carbon steel which contains 10.5 percent

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[20] *Issues and Decision Memorandum for the Final Results of Expedited Third Sunset Reviews of the Antidumping Duty Orders on Certain Stainless Steel Sheet and Strip in Coils from Japan, the Republic of Korea, and Taiwan* (Oct. 31, 2016)*; Issues and Decision Memorandum for the Final Results of Expedited Sunset Review of the Countervailing Duty Order on Stainless Steel Sheet and Strip in Coils from the Republic of Korea* (Oct. 31, 2016).

[21] CR at I-26, PR at I-22.

[22] CR at I-28, PR at I-23-24. Sheet is 24 inches or greater in width; strip is less than 24 inches in width. *Id.*

or more chromium by weight.[23] There are many different stainless steel alloys, each with different characteristics.[24] The most commonly used steels are grades 304 and 316.[25]

Many consumer and industrial applications utilize stainless steel sheet and strip products, especially where corrosion resistance, heat resistance, or stainless steel's aesthetic characteristics are desired. For example, the automotive industry uses sheet and strip to manufacture trim, exhaust- and emission-control systems, and wheel covers. The pipe and tube industry uses slit coil as its raw material and produces pipe and tube by welding the lengthwise edges together. Stainless steel sheet and strip are also used by the chemical and construction industries, as well as by appliance and industrial equipment manufacturers, among others.[26]

1. The Prior Proceedings

In the original investigations, the Commission considered whether the domestic like product should include stainless steel plate and whether Grade 409 stainless steel sheet constituted a separate domestic like product.[27] The Commission determined not to define the domestic like product more broadly in accordance with a prior determination regarding stainless steel plate.[28] It found that there was not a clear dividing line between Grade 409 stainless steel sheet and other stainless steel sheet and strip.[29] Accordingly, the Commission found a single domestic like product consisting of stainless steel sheet and strip in coils, corresponding to Commerce's scope.[30]

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[23] CR at I-28, PR at I-23. The addition of chromium gives the steel its corrosion resisting properties. Other alloying elements can be added to impart various characteristics, but all stainless steels contain chromium at a minimum. *Id*.

[24] CR at I-29, PR at I-24. The broad metallurgical groupings are austenitic, ferritic, martensitic, precipitation-hardening, and duplex. The precipitation-hardening and duplex types are less widely used than the others. Each alloying element imparts certain characteristics to the steel. *Id.*

[25] CR at I-29, PR at I-24.

[26] CR at I-31, PR at I-26.

[27] Original Determinations, USITC Pub. 3208 at 5-6.

[28] Original Determinations, USITC Pub. 3208 at 5. The prior determination was *Certain Stainless Steel Plate from Belgium, Canada, Italy, Korea, South Africa, and Taiwan*, Inv. Nos. 701-TA-376, 377, and 379 and 731-TA-788-793 (Final), USITC Pub. 3188 (May 1999).

[29] Original Determinations, USITC Pub. 3208 at 8. The Commission found that Grade 409 stainless steel sheet shared the essential physical characteristics of other stainless steel sheet and strip; that it was interchangeable with other low chromium grades of stainless steel sheet and strip; that most Grade 409 stainless steel was sold directly to end users, similar to half of all stainless steel sheet and strip produced domestically; that it was produced using the same facilities, equipment, and employees as other grades of stainless steel sheet and strip; that producers and customers did not distinguish Grade 409 from other specialty steel products; and that Grade 409 stainless steel sheet and strip was sold in the same range of prices as other grades of stainless steel sheet and strip. *Id.* at 6-7.

[30] Original Determinations, USITC Pub. 3208 at 5.

In the first reviews, the Commission continued to define the domestic like product as stainless steel sheet and strip, coextensive with Commerce's scope.[31] In the second five-year reviews, the Commission again defined the domestic like product as all stainless steel sheet and strip corresponding to Commerce's scope.[32]

2. The Current Reviews

In the current reviews, domestic producers agree with continuing to define the domestic like product to encompass all stainless steel sheet and strip in coils corresponding to the scope of the reviews.[33] There is no new information on the record indicating that the characteristics of the product at issue have changed since the prior proceedings.[34] Hyundai BNG and Hitachi did not contest the definition of the domestic like product in their responses to the notice of institution and did not provide further argument on this issue.[35] Therefore, we again define the domestic like product to consist of stainless steel sheet and strip in coils corresponding to the scope of the orders under 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."[36] 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 determinations and prior reviews, the Commission defined the domestic industry to encompass all U.S. producers of stainless steel sheet and strip.[37] There are no

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[31] First Five-Year Reviews, USITC Pub. 3788 at 6. No information developed in the reviews suggested revisiting the definition of domestic like product and no party advocated that the Commission define the domestic like product differently. *Id.*

[32] Second Five-Year Reviews, USITC Pub. 4244 at 8. As in the first reviews, there was neither contrary argument nor any information in the record suggesting any changes in the factors the Commission traditionally evaluates in defining the domestic like product. *Id.*

[33] *Domestic Producers Prehearing Brief* (July 14, 2017) ("Domestic Producers' Prehearing Br.") at 3.

[34] *See generally* CR at I-24-34, PR at I-20-31.

[35] *Hyundai BNG Response to the Notice of Institution* (Aug.1, 2016) at 8; *Hitachi Metals Response to the Notice of Institution* (Aug. 1, 2016) ("Hitachi Response") at 13.

[36] 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.

[37] Original Determinations, USITC Pub. 3208 at 9; First Five-Year Reviews, USITC Pub. 3788 at 8; Second Five-Year Reviews, USITC Pub. 4244 at 9.

related party or other domestic industry issues in these reviews.[38] No party argued for a different definition of domestic industry in these reviews. Consequently, we define the domestic industry as consisting of all domestic producers of stainless steel sheet and strip.

III. Cumulation

A. Legal Standard

> With respect to five-year reviews, section 752(a) of the Tariff Act provides as follows: the Commission may cumulatively assess the volume and effect of imports of the subject merchandise from all countries with respect to which reviews under section 1675(b) or (c) of this title were initiated on the same day, if such imports would be likely to compete with each other and with domestic like products in the United States market. The Commission shall not cumulatively assess the volume and effects of imports of the subject merchandise in a case in which it determines that such imports are likely to have no discernible adverse impact on the domestic industry.[39]

Cumulation therefore is discretionary in five-year reviews, unlike original investigations, which are governed by section 771(7)(G)(i) of the Tariff Act.[40] The Commission may exercise its discretion to cumulate, however, only if the reviews are initiated on the same day, the Commission determines that the subject imports are likely to compete with each other and the domestic like product in the U.S. market, and imports from each such subject country are not likely to have no discernible adverse impact on the domestic industry in the event of revocation. Our focus in five-year reviews is not only on present conditions of competition, but also on likely conditions of competition in the reasonably foreseeable future.

Original Investigations. In the original investigations, the Commission cumulated imports from all eight subject countries: France, Germany, Italy, Japan, Korea, Mexico, Taiwan, and the United Kingdom.[41] The parties did not dispute that subject imports from all eight countries were present in the U.S. market throughout the period of investigation and that they

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[38] No domestic producer imported or purchased subject merchandise, and none was related to an exporter of subject merchandise. *See* CR at I-41, PR at I-33.

[39] 19 U.S.C. § 1675a(a)(7).

[40] 19 U.S.C. § 1677(7)(G)(i); *see also*, *e.g.*, *Nucor Corp. v. United States*, 601 F.3d 1291, 1293 (Fed. Cir. 2010) (Commission may reasonably consider likely differing conditions of competition in deciding whether to cumulate subject imports in five-year reviews); *Allegheny Ludlum Corp. v. United States*, 475 F. Supp. 2d 1370, 1378 (Ct. Int'l Trade 2006) (recognizing the wide latitude the Commission has in selecting the types of factors it considers relevant in deciding whether to exercise discretion to cumulate subject imports in five-year reviews); *Nucor Corp. v. United States*, 569 F. Supp. 2d 1328, 1337-38 (Ct. Int'l Trade 2008).

[41] Original Determinations, USITC Pub. 3208 at 12.

competed in the same geographic markets.[42] The record showed that there was an overlap in the channels of distribution of the subject imports and the domestic like product and a sufficient degree of fungibility among subject import from all eight countries and with the domestic like product to warrant cumulating subject imports from each subject country.[43]

In the first reviews, the Commission exercised its discretion to cumulate subject imports from Germany, Italy, Japan, Korea, Mexico, and Taiwan, and not to cumulate subject imports from France or the United Kingdom.[44] It did not find that subject imports from any of the eight countries would be likely to have no discernable adverse impact on the domestic industry if the orders were revoked. It further found that there was a likely reasonable overlap of competition among imports from the subject countries and between subject imports and the domestic like product.[45] However, the Commission found that significant differences in likely conditions of competition existed with respect to subject imports from France and the United Kingdom.[46]

In the second reviews, the Commission exercised its discretion to cumulate subject imports from Germany, Italy, and Mexico in one group, and to cumulate subject imports from Japan, Korea, and Taiwan in another.[47] It found that subject imports from each of the six subject countries were not likely to have no discernable adverse impact on the domestic industry and that there was a likely reasonable overlap of competition among imports from each country and between the subject imports and the domestic like product.[48] However, it found that subject imports from Germany, Italy, and Mexico were likely to compete under conditions of competition that were similar to each other but different from the conditions that applied to subject imports from Japan, Korea, and Taiwan.[49]

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[42] Original Determinations, USITC Pub. 3208 at 11.

[43] Original Determinations, USITC Pub. 3208 at 11.

[44] First Five-Year Reviews, USITC Pub. 3788 at 9.

[45] First Five-Year Reviews, USITC Pub. 3788 at 9.

[46] First Five-Year Reviews, USITC Pub. 3788 at 9. The record indicated that subject imports from France displayed different pricing behavior than other subject imports both before and after the orders took effect. The Commission considered that the volume of subject imports from France declined annually during the original period of investigation. *Id.* at 19. It also considered that subject imports from France oversold the domestic like product during the original period of investigation and that their average unit values ("AUVs") increased during the period in which the domestic industry's unit sales values and operating profits declined the most. *Id.* at 18-19. Moreover, it found that the record during the period of review indicated that subject imports from France continued to oversell the domestic like product. *Id.* at 19.

The Commission found that the volume of subject imports from the United Kingdom declined each year of the original period of investigation, sales of these imports were concentrated in a specialty product with high AUVs, and the sole producer in the United Kingdom did not add production capacity during the period of review. *Id.* at 19.

[47] Second Five-Year Reviews, USITC Pub. 4244 at 11.

[48] Second Five-Year Reviews, USITC Pub. 4244 at 11.

[49] Second Five-Year Reviews, USITC Pub. 4244 at 18. The Commission found that almost all subject imports from Germany, Italy, and Mexico were controlled by ThyssenKrupp, and would likely be coordinated pursuant to a local supply strategy calculated to ensure the success of ThyssenKrupp's (Continued…)

Current Reviews. The statutory threshold for cumulation is satisfied in these reviews, because all reviews were initiated on the same day: July 1, 2016.[50]

B. Arguments of the Parties

Domestic Producers. Domestic producers argue that the Commission should exercise its discretion to cumulate imports from all three subject countries. They contend that subject imports from Japan, Korea, and Taiwan are likely to reenter the U.S. market in substantial volumes and that imports from each subject country are likely to have a discernible adverse impact in the event of revocation.[51] They point to the behavior of the subject producers in the original investigations and the Commission's findings in the prior reviews, where it found subject imports from each country were not likely to have no discernible adverse impact.[52] They contend that each of the three subject industries producing stainless steel sheet and strip has excess capacity and is export oriented.[53] According to domestic producers, the relatively higher prices available in the U.S. market would act as an incentive for subject producers from all three countries to direct exports to the United States if the orders were revoked.[54]

Domestic producers argue that there would likely be a reasonable overlap of competition between subject imports from each country and between subject imports and the domestic like product. They argue that the record in the current reviews indicates that the domestic like product and stainless steel sheet and strip from each subject country continue to be fungible and that there continues to be an overlap in channels of distribution.[55] According to domestic producers, there continues to be geographic overlap in sales of subject imports from each country and the domestic like product, and imports from each subject country were present in the U.S. market during each year of the January 2014 to March 2017 period of review.[56]

(…Continued)
investment in domestic producer SL-USA. *Id*. at 20. By contrast, no subject imports from Japan, Korea, or Taiwan were related to each other or to a major domestic producer. *Id.*

The Commission found that the cold-rolled stainless steel sheet and strip industries in Japan, Korea, and Taiwan each possessed excess capacity, were export oriented to a significant degree, and were focused on serving markets in Asia. *Id.* at 21. The Commission rejected respondent POSCO's argument that subject imports from Korea would likely compete in the U.S. market under different conditions of competition. *Id.* The Commission observed that POSCO's argument was predicated almost entirely on the conditions of competition that its own exports would likely compete under rather than those of the overall industry producing stainless steel sheet and strip in Korea. *Id.* at 21-22.

[50] *Initiation of Five-Year ("Sunset") Reviews*, 81 Fed. Reg. 43185 (July 1, 2016).

[51] Domestic Producers' Prehearing Br. at 5-10; *Posthearing Brief of Domestic Producers* ("Domestic Producers' Posthearing Br.") (Aug. 3, 2017) at 8-10.

[52] Domestic Producers' Prehearing Br. at 5-6, 10-11, 15-16.

[53] Domestic Producers' Prehearing Br. at 6-10, 12-14, 16-19.

[54] Domestic Producers' Prehearing Br. at 10, 14-15, 20.

[55] Domestic Producers' Prehearing Br. at 20-24.

[56] Domestic Producers' Prehearing Br. at 22, 24-25.

Domestic producers argue that subject imports from all three countries would likely compete in the U.S. market under similar conditions of competition in the event of revocation of the orders. They note that the Commission found no differences in the likely conditions of competition for imports from all three subject countries in the prior reviews, and assert that the conditions the Commission identified in the second five-year reviews continue to apply to the current reviews.[57]

Respondents. Hyundai BNG argues that the Commission should not cumulate subject imports from Korea with those from any other subject country. It first contends that revocation of the orders on subject imports from Korea will have no discernible adverse impact on the domestic industry. It asserts that the *** data for the industry in Korea are unreliable for this analysis, and that the Commission should instead rely on information reported to the Korean Steel Association ("KOSA").[58] It asserts that the current volume of imports from Korea indicates that Korean producers have little incentive to direct substantial exports to the U.S. market, as the volume of imports from nonsubject producers in Korea and subject producers with minimal duty deposit rates has remained small despite those firms' excess capacity. According to Hyundai BNG, producers of subject merchandise in Korea are focused on home market sales to longstanding customers and on export markets outside of the United States.[59]

Hyundai BNG additionally argues that producers of subject merchandise in Korea face different likely conditions of competition than producers of subject merchandise in Japan or Taiwan. It argues that unlike in Japan and Taiwan, all subject producers in Korea are re-rollers and that re-rollers are not dependent on a high capacity utilization rate to maintain profitability.[60] It also argues that a substantial portion of Hyundai BNG's own sales of stainless steel sheet and strip are to Korean companies that supply components to its affiliate, Hyundai Motor, making it difficult for it to pursue new opportunities.[61]

Hitachi argues (in its response to the notice of institution) that the revocation of the order on subject imports from Japan would likely have no discernible adverse impact on the domestic industry. It contends that subject imports from Japan have historically been low and are concentrated in niche markets. It asserts that future subject import volumes are also likely to be low, as neither it nor Japanese producer Nippon has shipped significant quantities of subject merchandise to the United States despite having low or zero antidumping duty deposit rates. According to Hitachi, the fact that no pricing data were reported for subject imports from Japan in the prior and current five-year reviews demonstrates that subject imports from

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[57] Domestic Producers' Prehearing Br. at 25-26.

[58] *Posthearing Brief of Hyundai BNG* (Aug. 3, 2017) ("Hyundai BNG Posthearing Br.") at 4. Hyundai BNG also asserts that the KOSA data overstate capacity by failing to take into account the effect of increasing demand for thinner products. *Id.*

[59] *Prehearing Brief of Hyundai BNG* (July 14, 2017) ("Hyundai Prehearing Br.") at 4-6; Hyundai BNG Posthearing Br. at 11-12. Hyundai BNG asserts that its main export market is Europe and that oceanic freight costs from Korea to Europe are significantly lower than those from Korea to the United States. Hyundai Posthearing Br. at 11-12.

[60] Hyundai BNG Posthearing Br. at 9-11.

[61] Hyundai BNG Prehearing Br. at 5-6; Hyundai BNG Posthearing Br. at 13-14.

Japan did not compete with the domestic like product and that subject Japanese producers were not focused on the U.S. market.[62] It contends that there have been changes in the conditions of competition since the prior five-year review, including acquisitions and capital investments by domestic producers, the merger of Hitachi Metals and Hitachi Cable, Ltd., price increases and improvement in the domestic industry's condition, and faster demand growth in Asia than in the United States.[63]

C. Likelihood of No Discernible Adverse Impact

The statute precludes cumulation if the Commission finds that subject imports from a country are likely to have no discernible adverse impact on the domestic industry.[64] Neither the statute nor the Uruguay Round Agreements Act ("URAA") Statement of Administrative Action ("SAA") provides specific guidance on what factors the Commission is to consider in determining that imports "are likely to have no discernible adverse impact" on the domestic industry.[65] With respect to this provision, the Commission generally considers the likely volume of subject imports and the likely impact of those imports on the domestic industry within a reasonably foreseeable time if an order is revoked. Our analysis for each of the subject countries takes into account, among other things, the nature of the product and the behavior of subject imports in the original investigations.

Japan: In the original investigations, the volume of subject imports from Japan increased from *** short tons in 1996 to *** short tons in 1998.[66] During the first reviews, subject imports from Japan declined from *** short tons in 1999 to *** short tons in 2000, and remained below that figure for the remainder of the period of review.[67] During the second reviews, subject imports from Japan fluctuated, increasing from *** short tons in 2005 to *** short tons in 2007 before declining to *** short tons in 2010.[68] During the current period of review, imports from Japan decreased from *** short tons in 2014 to *** short tons in 2015, and then increased slightly to *** short tons in 2016; they were lower in January to March ("interim") 2017, at *** short tons, than in interim 2016, at *** short tons.[69] During the current period of review, the market penetration of subject imports from Japan never reached *** percent.[70]

The Commission received usable data from one firm, Hitachi Metals, a low-volume producer of specialty stainless steel sheet and strip products in Japan.[71] In light of the limited

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[62] Hitachi Response at 7-8.
[63] Hitachi Response at 3-6.
[64] 19 U.S.C. § 1675a(a)(7).
[65] SAA, H.R. Rep. No. 103-316, vol. I at 887 (1994).
[66] Original Determinations, USITC Pub. 3208 at Table C-2.
[67] First Five-Year Reviews, USITC Pub. 3788 at Table D-1.
[68] Second Five-Year Reviews, USITC Pub. 4222 at Table C-1.
[69] CR/PR at Table IV-1.
[70] CR/PR at Table I-12.
[71] CR at IV-15, PR at IV-12.

coverage provided by the questionnaire data, we rely on *** data and official statistics for information regarding the industry in Japan.[72] *** data indicate that the capacity to produce cold-rolled stainless steel sheet and strip in Japan was stable at *** short tons from 2014 to 2016.[73] Total shipments of this product by Japanese producers decreased over the period of review from *** short tons in 2014 to *** short tons in 2015 and to *** short tons in 2016.[74] Using total shipments as a proxy for production yields a capacity utilization rate of *** percent in 2014, *** percent in 2015, and *** percent in 2016.[75] According to official Japanese statistics, Japan's exports of cold-rolled stainless steel sheet and strip declined from 757,309 short tons in 2014 to 670,644 short tons in 2015 and 670,229 short tons in 2016.[76]

The information available indicates that the industry producing subject merchandise in Japan is export oriented and has significant capacity and excess capacity. We are not persuaded by Hitachi's argument that subject imports from Japan are likely to have no discernible adverse impact because they have historically been low and that producers of subject merchandise in Japan generally focus on niche markets.[77] Even assuming *arguendo* that Hitachi's exports of stainless steel sheet and strip to the United States are limited to niche products, Hitachi alone does not constitute the subject industry in Japan. To the contrary, Hitachi is one of many producers of subject merchandise in Japan.[78] Moreover, subject producers in Japan exported substantial volumes of stainless steel sheet and strip over the period of review. The AUVs of exports from Japan overall were substantially below the AUVs for exports to the United States, suggesting that exports of stainless steel sheet and strip from Japan are not strictly limited to specialty products.[79] Given evidence that the Japanese industry is export oriented, has excess capacity, and is not limited to producing specialty products, we are not persuaded that imports from Japan will remain low upon revocation of the order.[80]

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[72] CR/PR at Table IV-9. We acknowledge that *** data for cold-rolled capacity, shipments, and consumption may be somewhat overstated, as they include certain out-of-scope products. Given that the majority of stainless steel sheet and strip is cold-rolled, in light of the lack of comprehensive foreign producer questionnaire data, we find that the available information from *** for cold-rolled products provides a reasonable basis to estimate capacity, capacity utilization, and export orientation. CR/PR at Table IV-9 nn.1-3.

[73] CR/PR at Table IV-9.

[74] CR/PR at Table IV-9.

[75] *See* CR/PR at Table IV-9.

[76] CR/PR at Table IV-9.

[77] Hitachi Response at 7. As previously discussed, Hitachi did not participate in these reviews following the adequacy phase. We expect parties that intend to participate actively in reviews to file prehearing and posthearing briefs to permit the Commission to evaluate properly arguments raised, including those at the hearing.

[78] Domestic Producers' Posthearing Br. at Exhibit 2 (listing 10 subject producers in Japan).

[79] CR/PR at Table IV-11.

[80] CR/PR at Table IV-11. Hitachi argues that the lack of subject imports from Japan with the order in place, notwithstanding low or zero antidumping duty deposit rates, indicates that subject producers in Japan will not participate in the U.S. market upon revocation. Hitachi Response at 7. (Continued…)

Based on the foregoing, we do not find that subject imports from Japan would likely have no discernible adverse impact on the domestic industry if the antidumping duty order on these imports were revoked.

Korea: In prior reviews, the Commission separately examined discernible adverse impact for subject imports from Korea subject to the antidumping duty order and subject imports from Korea subject to the countervailing duty order, which are not coextensive.[81] Such an analysis is not possible here because Hyundai BNG was the only producer in Korea to submit a questionnaire response and other available data concerning the industry in Korea are not generally furnished on a firm-specific basis. Hyundai BNG is subject to both the antidumping and countervailing duty orders.[82]

In the original investigations, the volume of subject imports from Korea increased from *** short tons in 1996 to *** short tons in 1997, and then decreased slightly to *** short tons in 1998.[83] In the first reviews, the volume of subject imports from Korea fluctuated but decreased overall from *** short tons in 1999 to *** short tons in 2004.[84] In the second reviews, the volume of subject imports from Korea fluctuated but increased overall from *** short tons in 2005 to *** short tons in 2010.[85]

The record indicates that imports from Korea subject to an order under review increased from *** short tons in 2014 to *** short tons in 2015 and *** short tons in 2016;

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However, not all Japanese companies received low cash deposit rates as a result of administrative reviews, and multiple Japanese entities have remained subject to duty rates of up to 57.89 percent since the orders were imposed. CR/PR at Table I-4, CR at I-19, PR at I-16. We note that regardless of current deposit rates, the existence of an order may have a disciplining effect on subject imports, as the deposit rate remains subject to future administrative reviews.

[81] Second Review, USITC Pub. 4244 at 13; First Review, USITC Pub. 3788 at 13.

[82] *See* CR at I-19, PR at I-16. We observe that Commerce has neither calculated a separate dumping margin for Hyundai BNG nor determined that Hyundai BNG is excluded from the antidumping duty order. *See* CR/PR at Table I-4 & n.5.

[83] Original Determinations, USITC Pub. 3208 at Table C-1.

[84] CR/PR at Appx. C (referencing the First Five-Year Reviews at Table D-1). The volume of imports from Korea subject to the antidumping duty order fluctuated but decreased overall from *** short tons in 1999 to *** short tons in 2004. Confidential First Five-Year Reviews Opinion, EDIS Doc. 589858 at 13; First Five-Year Reviews, USITC Pub. 3788 at 13. Imports from Korea subject to the countervailing duty order declined from *** short tons in 1999 to *** short tons in 2004. Confidential First Five-Year Reviews Opinion at 14; First Five-Year Reviews, USITC Pub. 3788 at 14.

[85] CR/PR at Appx. C. (referencing the Second Five-Year Reviews at Table C-1). The volume of imports from Korea subject to the antidumping duty order increased irregularly from *** short tons in 2005 to *** short tons in 2008, before declining to *** short tons in 2010. Confidential Second Five-Year Reviews Opinion, EDIS Doc. 589859 at 18-19; Second Five-Year Reviews, USITC Pub. 4244 at 13. Imports from Korea subject to the countervailing duty order increased from *** short tons in 2005 to *** short tons in 2006, before declining irregularly to *** short tons in 2010. Confidential Second Five-Year Reviews at 20; Second Five-Year Reviews, USITC Pub. 4244 at 14.

they were higher in interim 2017, at *** short tons, than in interim 2016, at *** short tons.[86] The market penetration of these imports never exceeded *** percent during the period of review.[87] Hyundai BNG, the sole Korean producer to submit a foreign producer questionnaire response, reported stable capacity; its capacity utilization was *** percent in 2014, *** percent in 2015, *** percent in 2016, *** percent in interim 2016 and *** percent in interim 2017. Its export shipments as a percentage of total shipments ranged between *** percent (interim 2017) and *** percent (interim 2016).[88]

The other information in the record concerning the subject industry in Korea includes *** data and official statistics.[89] *** data indicate that the industry producing cold-rolled stainless steel sheet and strip in Korea, excluding POSCO, had capacity to produce *** short tons in each year of the period of review (the industry including POSCO had capacity of *** short tons in each year).[90] Total shipments (including POSCO) increased overall over the period of review, increasing from *** short tons in 2014 to *** short tons in 2015 and 2016.[91] Using total shipments as a proxy for production yields a capacity utilization rate (for the industry including POSCO) of *** percent in 2014, *** percent in 2015, and *** percent in 2016.[92] According to official Korean statistics, exports of stainless steel sheet and strip from Korea increased over the period of review, from roughly 1.2 million short tons in 2014 to roughly 1.3 million short tons in 2015 and 2016.[93]

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[86] CR/PR at Table IV-1. The proprietary customs data available in the current reviews do not permit the Commission to distinguish between the volumes of subject imports subject to each order.

[87] CR/PR at Table I-12.

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

[89] As observed above, *** data may include certain out-of-scope products. With respect to Korea, *** data also include nonsubject producer POSCO, which accounted for *** short tons of Korean cold-rolled capacity from 2014 to 2016. CR/PR at Table IV-13 n.2.

Hyundai BNG argues that the Commission should rely on data provided by the Korean Steel Association ("KOSA") for production capacity and total sales for cold-rolled stainless steel from Korea, rather than *** data. Hyundai BNG Posthearing Br. at 2-5. We have primarily relied on *** data because they are based on publicly available sources of information. By contrast, KOSA data are based on unverified information provided by the individual members of the association. Nevertheless, as indicated below, we have examined the available KOSA data and find that they support the same general conclusions as the *** data.

[90] CR/PR at Table IV-13. KOSA data show a greater level of capacity for the industry, excluding POSCO, *** short tons. Hyundai BNG Posthearing Br. at 4.

[91] CR/PR at Table IV-13. POSCO did not provide separate information on its shipments.

[92] *See* CR/PR at Table IV-13. KOSA data similarly establish that producers of subject merchandise in Korea have excess capacity to produce cold-rolled stainless steel sheet and strip. Using sales as a proxy for production, the KOSA data indicate that the industry in Korea, excluding POSCO, had an overall capacity utilization rate of *** percent. Although Hyundai BNG argues that KOSA's capacity data are overstated, it offers little support for this argument and only with respect to its own capacity. Even if we make Hyundai BNG's adjustment for its own capacity, overall capacity utilization for the industry in Korea is still under *** percent. Hyundai BNG Posthearing Br. at 4, Attachment 2.

[93] CR at Tables IV-13, 15. These data would include exports from nonsubject producer POSCO.

We are not persuaded by Hyundai BNG's argument that subject producers in Korea are uninterested in the U.S. market. We observe that small quantities of subject imports from Korea were not only present in the U.S. market, but increasing in volume during the period of review, despite the orders and that merchandise from nonsubject Korean producers were also present in non-trivial quantities.[94] The information on the record indicates that producers in Korea have sufficient interest in the U.S. market that likely imports upon revocation will increase beyond current levels. Accordingly, we do not find that subject imports from Korea would likely have no discernible adverse impact on the domestic industry if the orders on these imports were revoked.[95]

Taiwan: In the original investigations, the volume of subject imports from Taiwan increased from *** short tons in 1996 to *** short tons in 1997 and *** short tons in 1998.[96] During the first reviews, subject imports from Taiwan fluctuated but declined overall from *** short tons in 1999 to *** short tons in 2004.[97] In the second reviews, these subject imports fluctuated but increased overall from *** short tons in 2005 to *** short tons in 2010.[98] During the current period of review, imports from Taiwan increased from *** short tons in 2014 to *** short tons in 2015, and then declined slightly to *** short tons in 2016.[99] Imports from Taiwan were higher in interim 2017, at *** short tons, than in interim 2016, at *** short tons.[100] The market share of imports from Taiwan never reached *** percent during the period of review.[101]

No producers in Taiwan responded to the Commission's questionnaire in the current reviews; accordingly, data on the industry in Taiwan are limited to *** data and official statistics.[102] *** data indicate that capacity to produce cold-rolled stainless steel sheet and strip in Taiwan remained stable at *** short tons from 2014 to 2016.[103] Total shipments of

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[94] CR/PR at Tables I-11, IV-2. Nonsubject imports from Korea increased over the period of review from *** short tons in 2014 to *** short tons in 2015 and *** short tons in 2016; they were *** short tons in interim 2016 and *** short tons in interim 2017. CR/PR at IV-2.

[95] Further, whether volumes of nonsubject imports from POSCO are not currently having an adverse impact on the domestic industry, as Hyundai BMG suggests, is not pertinent to our inquiry here. Commerce has found that subject imports upon revocation will likely be unfairly traded. This distinguishes their likely effects from current POSCO imports, which are fairly traded.

[96] Original Determinations at Table C-1. As discussed above, Commerce excluded two producers in Taiwan, Chang Mien and Tung Mung, in the original investigations because they received *de minimis* dumping margins. CR at I-11, PR at I-12.

[97] First Five-Year Reviews, USITC Pub. 3788 at Table D-1.

[98] Second Five-Year Reviews, USITC Pub. 4244 at 22.

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

[100] CR/PR at Table IV-1. These data may include merchandise produced by nonsubject producers in Taiwan. *See id.*

[101] CR/PR at Table I-12.

[102] As observed above, *** data for Taiwan may include certain out-of-scope products. *** data include nonsubject producers Chang Mien and Tung Mung. Tung Mung accounted for *** short tons of total cold-rolled capacity in Taiwan from 2014 to 2016. *** for Chang Mien. CR/PR at Table IV-16 n.2.

[103] CR/PR at Table IV-16. We observe that *** data may be overstated as they include products outside the scope of these investigations and data for producer Chang Mien, which is not subject to the (Continued…)

cold-rolled stainless steel sheet and strip fluctuated, but increased overall, declining from *** short tons in 2014 to *** short tons in 2015, and then increasing to *** short tons in 2016.[104] Using shipments as a proxy for production yields a capacity utilization rate of *** percent in 2014, *** percent in 2015, and *** percent in 2016.[105] Exports of cold-rolled stainless steel sheet and strip fluctuated but decreased overall, decreasing from 947,602 short tons in 2014 to 763,317 short tons in 2015, and then increasing to 904,508 short tons in 2016.[106] According to official statistics from Taiwan, the largest export markets for stainless steel sheet and strip from Taiwan in 2016 were, in order, Italy, Korea, Turkey, Russia, and the United States.[107]

Based on the foregoing, we do not find that subject imports from Taiwan would likely have no discernible adverse impact on the domestic industry if the antidumping duty order on these imports were revoked.

D. Likelihood of a Reasonable Overlap of Competition

The Commission generally has considered four factors intended to provide a framework for determining whether subject imports compete with each other and with the domestic like product.[108] Only a "reasonable overlap" of competition is required.[109] In five-year reviews, the

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antidumping duty order. Chang Mien accounted for *** short tons, or *** percent, of capacity for cold-rolled stainless steel sheet and strip in Taiwan from 2014 to 2016. *Id.* at Table IV-16 nn.1-4.

[104] CR/PR at Table IV-16.

[105] *See* CR/PR at Table IV-16.

[106] CR/PR at Table IV-16.

[107] CR at IV-31, PR at IV-22, CR/PR at Table IV-17.

[108] The four factors generally considered by the Commission in assessing whether imports compete with each other and with the domestic like product are as follows: (1) the degree of fungibility between subject imports from different countries and between subject imports and the domestic like product, including consideration of specific customer requirements and other quality-related questions; (2) the presence of sales or offers to sell in the same geographical markets of imports from different countries and the domestic like product; (3) the existence of common or similar channels of distribution for subject imports from different countries and the domestic like product; and (4) whether subject imports are simultaneously present in the market with one another and the domestic like product. *See, e.g., Wieland Werke, AG v. United States*, 718 F. Supp. 50 (Ct. Int'l Trade 1989).

[109] *See Mukand Ltd. v. United States*, 937 F. Supp. 910, 916 (Ct. Int'l Trade 1996); *Wieland Werke,* 718 F. Supp. at 52 ("Completely overlapping markets are not required."); *United States Steel Group v. United States,* 873 F. Supp. 673, 685 (Ct. Int'l Trade 1994), *aff'd*, 96 F.3d 1352 (Fed. Cir. 1996). We note, however, that there have been investigations where the Commission has found an insufficient overlap in competition and has declined to cumulate subject imports. *See, e.g*., *Live Cattle from Canada and Mexico*, Inv. Nos. 701-TA-386 and 731-TA-812-13 (Preliminary), USITC Pub. 3155 at 15 (Feb. 1999), *aff'd sub nom, Ranchers-Cattlemen Action Legal Foundation v. United States*, 74 F. Supp. 2d 1353 (Ct. Int'l Trade 1999); *Static Random Access Memory Semiconductors from the Republic of Korea and Taiwan*, Inv. Nos. 731-TA-761-62 (Final), USITC Pub. 3098 at 13-15 (Apr. 1998).

relevant inquiry is whether there likely would be competition even if none currently exists because the subject imports are absent from the U.S. market.[110]

Fungibility. All four U.S. producers reported that stainless steel sheet and strip from domestic and all subject sources can always be used interchangeably.[111] Importer responses were mixed, with majorities finding products from different sources frequently or sometimes interchangeable, while a majority or plurality of purchasers reported that the domestic product and imports from each subject country are frequently interchangeable.[112] In comparing the domestic like product and imports from the subject countries, most purchasers rated the domestic product as comparable to imports from each subject country with regard to most factors.[113] In comparisons between imports from different subject countries, purchasers reported that subject merchandise from different sources was comparable with respect to most factors.[114]

Channels of Distribution. In the current reviews, domestic producers sold to both distributors and end users, with a slight majority of sales to distributors.[115] Throughout the period of review, subject imports from Japan were sold almost exclusively to end users, sales of subject imports from Korea shifted from end users to distributors, and sales of subject imports from Taiwan were sold *** to distributors.[116]

Geographic Overlap. In the current reviews, domestic producers reported selling stainless steel sheet and strip to all regions in the contiguous United States.[117] Importers of subject merchandise reported selling in selected regions; subject imports from both Japan and Korea were present in three regions, and subject imports from both Korea and Taiwan were present in the Pacific Coast region.[118]

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[110] *See generally*, *Chefline Corp. v. United States*, 219 F. Supp. 2d 1313, 1314 (Ct. Int'l Trade 2002).

[111] CR at II-24, PR at II-11, CR/PR at Table II-11.

[112] CR/PR at Table II-11.

[113] CR/PR at Table II-10. Purchasers reported that the domestic product was superior to imports from each subject country in terms of delivery time and transportation costs and provided mixed responses regarding availability, delivery terms, minimum quantity requirements, and technical support, rating the domestic product as comparable or superior to the imported product depending on the subject country. *Id.*

[114] *See* CR at II-24, PR at II-14. All six purchasers that compared subject merchandise from Korea to that from Taiwan reported that the products were comparable on all factors, the majority of the five purchasers that compared subject merchandise from Japan to that from Korea indicated that the products were comparable on 14 of 15 factors, the exception being product range, and of the three purchasers that compared subject merchandise from Japan to that from Taiwan, the majority of firms indicated that the products were comparable on all factors except for product range and reliability of supply. *Id.*

[115] CR at II-2, PR at II-1, CR/PR at Table II-1.

[116] CR at II-2 ,PR at II-1, CR/PR at Table II-1.

[117] CR at II-3, PR at II-2, CR/PR at Table II-2.

[118] CR at II-3, PR at II-2, CR/PR at Table II-2. Importers of subject merchandise from Japan reported selling in ***; importers of subject merchandise from Korea reported selling in the Pacific

(Continued…)

Simultaneous Presence in Market. In the current reviews, subject imports from each subject country were present in the U.S. market during each year of the period of review.[119]

Conclusion. We find that there will be a likely reasonable overlap of competition between the domestic like product and imports from each subject country, and among imports from the three subject countries, should the orders be revoked. The domestic like product and imports from each subject country remain fungible and have been simultaneously present in the market. Upon revocation, subject imports from each source would likely have geographic overlap as they did prior to imposition of the orders and during the prior reviews.[120] To the extent that subject imports from Japan and Taiwan were sold in different channels of distribution during the period of review, there was considerable overlap in channels of distribution between subject imports from those countries and the domestic like product, as well as with subject imports from Korea. Absent the discipline of the orders, subject imports would likely have common channels of distribution as they did either before imposition of the orders or when during prior reviews they were present in the market in greater quantities than during the current period of review.[121] In light of these factors, and the absence of any contrary arguments, we find a likely reasonable overlap of competition between the domestic like product and imports from each subject country, and among imports from the three subject countries, should the orders be revoked.

E. Likely Conditions of Competition

In determining whether to exercise our discretion to cumulate the subject imports, we assess whether subject imports from Japan, Korea, and Taiwan would likely compete under similar or different conditions of competition. Domestic producers argue that subject imports from Japan, Korea, and Taiwan would likely compete under similar conditions of competition in the event of revocation of the orders.[122] Hyundai BNG argues that subject imports from Korea and subject imports from Japan and Taiwan are likely to compete under different conditions of

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(…Continued)
Coast, Central Southwest, Northeast, Midwest, and Southeast; importers of subject merchandise from Taiwan reported selling in only the Pacific Coast region. *Id.*

[119] CR/PR at Table C-1. Although subject imports from Taiwan were not present in interim 2016, they were in interim 2017 and during 2016 as a whole. *Id.*

[120] Original Determinations, USITC Pub. 3208 at 11 (observing that the parties did not dispute that subject imports from all eight countries were simultaneously present in the U.S. market and competed in the same geographic markets nationwide); First Five-Year Reviews, USITC Pub. 3788 at 17-18; Second Five-Year Reviews, USITC Pub. 4244 at 17-18 (finding that domestic producers and importers reported selling to all regions in the contiguous United States and that subject imports from Germany, Japan, Korea, Mexico, and Taiwan were present in the U.S. market in every month of the period of review).

[121] Original Determinations, USITC Pub. 3209 at 11 (finding that most domestic producers and importers sold stainless steel sheet and strip to a combination of service centers/distributors and end users); First Five-Year Reviews, USITB Pub. 3788 at 18; Second Five-Year Reviews, USTIC Pub. 4244 at 17.

[122] *Domestic Producers' Prehearing Brief* (July 14, 2017) at 25-26.

competition upon revocation.[123] Hitachi argues that subject imports from Japan and subject imports from Korea and Taiwan are likely to compete under different conditions of competition upon revocation, but offered no support for this contention.[124]

The stainless steel sheet and strip industries in Japan, Korea, and Taiwan are similar in several respects. The industries in all three subject countries have substantial capacity and excess capacity.[125] The industries in all three subject countries are export oriented.[126] Imports of stainless steel sheet and strip from all three subject countries are subject to trade remedy measures in a number of other markets, particularly markets in Asia.[127]

The record does not support Hyundai BNG's contention that subject imports from Korea will compete under different conditions of competition from the other subject imports because a substantial portion of its sales are made to Korean companies that supply components to its affiliate Hyundai Motors.[128] We observe that these sales account for a minority of Hyundai BNG's shipments.[129] Moreover, there is no information in the record that suggests the Korean industry as a whole maintains similar relationships.

The record also does not support Hyundai BNG's argument that subject imports from Korea are likely to compete under different conditions of competition from other subject imports because the Korean producers subject to the orders are re-rollers rather than integrated producers.[130] Even assuming arguendo that Hyundai BNG is correct in its claim that

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[123] Hyundai BNG Posthearing Br. at 13-14.

[124] Hitachi Response at 6.

[125] *** data indicate that cold-rolled production capacity in Japan was *** short tons in 2016 and the industry in Japan had a capacity utilization rate of *** percent (using total shipments as a proxy for production). CR/PR at Table IV-9. *** data indicate that cold-rolled production capacity in Korea (excluding POSCO) was *** short tons in 2016, and that the industry in Korea had a capacity utilization rate of *** percent (using total shipments as a proxy for production). CR/PR at Table IV-13. *** data indicate that cold-rolled production capacity in Taiwan was *** short tons in 2016 and the industry in Taiwan had a capacity utilization rate of *** percent (using total shipments as a proxy for production). CR/ PR at Table IV-16.

[126] According to official export statistics, producers in each subject country exported substantial quantities of stainless steel sheet and strip during the period of review. In 2016, Japanese exports of stainless sheet and strip were 670,229 short tons; Korean exports of stainless steel sheet and strip were 1.3 million short tons; and exports of stainless steel sheet and strip from Taiwan were 904,508 short tons. CR/PR at Tables IV-9, 13, 16. As previously discussed, these data may include out-of-scope product and data for Korea and Taiwan include exports of nonsubject producers.

[127] There are trade remedy measures in effect against imports of certain stainless steel sheet and strip products from Japan in Thailand. There are trade remedy measures in effect against imports of certain stainless steel sheet products from Korea in Brazil, India, Taiwan, and Thailand. There are trade remedy measures in effect against imports of certain stainless steel sheet and strip products from Taiwan in Brazil, the European Union, India, Thailand, and Vietnam. CR/PR at Table IV-18.

[128] Hyundai BNG Posthearing Br. at 13.

[129] Hyundai BNG states that roughly *** percent of its sales are to such Korean companies. Hyundai Posthearing Br. at 13.

[130] Hyundai BNG Posthearing Br. at 13.

achieving high capacity utilization is less significant for re-rollers than for integrated producers, there is nothing in the record indicating that subject re-rollers lack incentives to use their available capacity for export. Moreover, the record indicates that there are re-rollers in Japan and Taiwan; therefore the presence of re-rollers does not entirely distinguish the industry in Korea from those in Japan and Taiwan.[131]

F. Conclusion

In sum, we determine that subject imports from all three countries are not likely to have no discernible adverse impact on the domestic industry in the event of revocation of the pertinent order and that there would likely be a reasonable overlap of competition among and between the subject imports from each country and the domestic like product. We also determine that subject imports from all three countries would be likely to compete under similar conditions of competition upon revocation of the orders. Accordingly, for the reasons discussed above, we exercise our discretion to cumulate subject imports from Japan, Korea, and Taiwan.

IV. Revocation of the Antidumping and Countervailing Duty Orders 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."[132] 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

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[131] *** data for Japan indicate there are at least three subject producers that reported only cold-rolled capacity. Derived from CR/PR at Table IV-9. *** data for Taiwan indicate there are at least two producers that reported only cold-rolled capacity. Derived from CR/PR at Table IV-16.

Additionally, at the hearing domestic producers provided a list of subject producers in Japan and Taiwan that includes two other producers from Japan and two other producers from Taiwan not accounted for by *** data. These are not among the producers Hyundai BNG identified as producing hot-rolled products. Derived from CR/PR at Tables IV-9, 16; *See* Hyundai BNG Posthearing Br. at 13 n.24.

[132] 19 U.S.C. § 1675a(a).

elimination of its restraining effects on volumes and prices of imports."[133] Thus, the likelihood standard is prospective in nature.[134] 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.[135]

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."[136] According to the SAA, a "'reasonably foreseeable time' will vary from case-to-case, but normally will exceed the 'imminent' timeframe applicable in a threat of injury analysis in original investigations."[137]

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."[138] 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

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[133] 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.

[134] 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.

[135] *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'").

[136] 19 U.S.C. § 1675a(a)(5).

[137] 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*.

[138] 19 U.S.C. § 1675a(a)(1).

regarding duty absorption pursuant to 19 U.S.C. § 1675(a)(4).[139] 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.[140]

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.[141] 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.[142]

In evaluating the likely price effects of subject imports if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider whether there is likely to be significant underselling by the subject imports as compared to the domestic like product and whether the subject imports are likely to enter the United States at prices that otherwise would have a significant depressing or suppressing effect on the price of the domestic like product.[143]

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.[144] All relevant economic factors are to be

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[139] 19 U.S.C. § 1675a(a)(1). Commerce made one duty absorption finding concerning stainless steel sheet and strip in coils from Taiwan. In the fourth administrative review, cover the period July 1, 2002 through June 30, 2003, Commerce determined that Chia Far absorbed antidumping duties for all U.S. sales through its affiliated importer. CR at I-22; PR at I-18.

[140] 19 U.S.C. § 1675a(a)(5). Although the Commission must consider all factors, no one factor is necessarily dispositive. SAA at 886.

[141] 19 U.S.C. § 1675a(a)(2).

[142] 19 U.S.C. § 1675a(a)(2)(A-D).

[143] *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.

[144] 19 U.S.C. § 1675a(a)(4).

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.[145]

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."[146] The following conditions of competition inform our determinations.

1. The Original Investigations and Prior Five-Year Reviews

In the original investigations, the Commission identified a number of conditions of competition as relevant to its analysis. It found that apparent U.S. consumption of stainless steel sheet and strip increased by 5 or 6 percent per year throughout the period of investigation. It also found there to be "general substitutability" among different grades of stainless steel sheet and strip. Although stainless steel sheet and strip was produced according to customer specifications, there was a broad overlap of certain standard grades. Further, most stainless steel sheet and strip producers were capable of producing a wide range of products to meet specific customer demands and these products were typically produced to order. Even though substitutability was limited among certain specialty products, a sizeable portion of the volume of both domestic production and subject imports consisted of commodity grades. The Commission also found price to be among the most important factors in purchasing decisions, along with product quality, consistency, and availability.[147]

In the first reviews, the Commission found that the conditions of competition remained largely unchanged from those in the original investigations, with a few notable exceptions. Apparent U.S. consumption declined in 2000 and 2001 due to an economic recession and then rebounded through 2004 to a level that remained below that in 1999. There was at least a moderate degree of substitutability between subject imports and the domestic like product, with a greater percentage of domestic producers' sales concentrated in commodity grades than during the original investigations. The domestic industry had restructured since the original investigations, leaving only three major domestic producers: AK Steel, Allegheny Ludlum, and NAS. Raw materials were a significant cost in the production of stainless steel sheet and strip,

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[145] 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.

[146] 19 U.S.C. § 1675a(a)(4).

[147] Original Determination, USITC Pub. 3208 at 13-14.

and domestic producers and some importers passed on increases in raw material costs to purchasers through surcharges. Global consumption of stainless steel sheet and strip increased during the period of review, particularly in Asia and China, although capacity growth was projected to outstrip demand growth over the following several years.[148]

In the second reviews, the Commission found that apparent U.S. consumption fluctuated over the period of review, but declined overall as a result of the economic downturn in 2008 and 2009.[149] It observed that the domestic industry supplied the bulk of U.S. demand. It found that the domestic industry's capacity fluctuated, but increased overall and that it was poised to make significant additions and enhancements to its capacity.[150] According to the Commission, there was a moderate-to-high degree of substitutability between subject imports from each source and the domestic like product and price was an important factor in purchasing decisions, along with availability and reliability. The Commission observed that purchaser demands for shorter lead times forced domestic producers to carry larger inventories and increased their inventory carrying costs. It also observed that most sales were made on a spot basis or pursuant to short-term contracts. Domestic producers and importers reported adding surcharges to their base prices for stainless steel sheet and strip as a means of passing through increased raw material, energy, and other costs to purchasers.[151]

2. The Current Reviews

Demand Conditions. Demand for stainless steel sheet and strip depends on overall economic conditions as well as the demand in end-use markets, the most common of which are automobiles, housing, and home appliances.[152] Overall, these downstream industries experienced steady growth since 2011, with the strongest growth in construction, followed by vehicle production and sales, and then household appliances.[153] All responding U.S. and foreign producers and a plurality of purchasers reported that U.S. demand had increased since January 1, 2011, while a plurality of importers reported no change in demand.[154]

Apparent U.S. consumption fluctuated during the period of review, decreasing from 2.0 million short tons in 2014 to 1.8 million short tons in 2015, and then returning to 2.0 million short tons in 2016; it was higher in interim 2017, at 480,373 short tons, than in interim 2016, at 467,986 short tons.[155]

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[148] First Five-Year Reviews, USITC Pub. 3788 at 23-26.

[149] Second Five-Year Reviews, USITC Pub. 4244 at 28.

[150] Second Five-Year Reviews, USITC Pub. 4244 at 29. The domestic industry's capacity increased irregularly from 2005 to 2008 before increasing significantly in 2009. It then declined in 2010 due in part to Allegheny Ludlum's closure of its melt shop in Natrona, Pennsylvania. *Id.*

[151] Second Five-Year Reviews, USITC Pub. 4244 at 28-31.

[152] CR at II-1, II-12-13, PR at II-1, II-7.

[153] CR at II-13, PR at II-7.

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

[155] CR/PR at Table I-12.

Supply Conditions. The domestic industry was the largest source of supply to the U.S. market during the period of review. Its market share decreased from 82.0 percent in 2014 to 80.7 percent in 2015, and then increased to 82.5 percent in 2016; it was lower in interim 2017, at 82.3 percent, than in interim 2016, at 84.1 percent.[156] The domestic industry's capacity increased from 2.5 million short tons in 2014 to 2.7 million short tons in 2015 and 2016; its capacity was higher in interim 2017, at 690,849 short tons, than in interim 2016, at 679,740 short tons.[157] Three of the four domestic producers reported experiencing supply constraints since January 1, 2011, but did not report experiencing supply constraints in 2017.[158] Notwithstanding these supply constraints, the domestic industry had available capacity to supply apparent U.S. consumption over the period of review.[159]

Nonsubject imports were the second largest source of supply to the U.S. market during the period of review. Their market share increased from *** percent in 2014 to *** percent in 2015, and then decreased to *** percent in 2016; it was higher in interim 2017, at *** percent, than in interim 2016, at *** percent.[160] The four largest sources of nonsubject imports in 2016 were, in descending order of volume, Mexico, France, China, and Vietnam.[161] Commerce issued antidumping duty and countervailing duty orders on imports of stainless steel sheet and strip from China on April 3, 2017.[162]

Subject imports were the smallest source of supply during the period of review. The market share of subject imports was below *** percent throughout the period of review, reaching a period high of *** percent in 2016; it was *** in interim 2016 and *** in interim 2017.[163]

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[156] CR/PR at Table I-12.

[157] CR/PR at Table III-2. ATI experienced a number of plant openings and closures during the period of review. In the first quarter of 2015 it completed commissioning a new hot-rolling and processing facility at its Brackenridge, Pennsylvania site. In December 2015 it announced that it was idling the stainless melt shop and sheet finishing operations at its Midland, Pennsylvania facility; it announced the permanent closure of this facility in October 2016. In addition, ATI closed two other facilities in 2013 and 2014, in New Castle, Indiana and Wallingford, Connecticut, respectively. CR at III-6, PR at III-5. Outokumpu acquired the stainless steel operations of ThyssenKrupp AG in December 2012. CR at III-4, PR at III-4.

[158] CR at II-7, PR at II-4. *** reported a surge in demand for ***. *** reported a temporary supply disruption in late 2014 ***. *** reported implementing a controlled order entry system during January and February 2015 following extended lead times in 2014, and that a similar situation occurred during portions 2016. While *** did not report experiencing supply constraints, we observe that ***. CR at II-7 & n.6, PR at II-4 & n.6.

[159] *See* CR/PR at Tables I-11, III-2.

[160] CR/PR at Table I-12.

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

[162] *Stainless Steel Sheet and Strip From the People's Republic of China: Antidumping Duty Order*, 82 Fed. Reg. 16160 (Apr. 3, 2017); *Stainless Steel Sheet and Strip From the People's Republic of China: Countervailing Duty Order*, 82 Fed. Reg. 16166 (Apr. 3, 2017). China was the largest source of nonsubject imports in 2014 and 2015. CR/PR at Table IV-2.

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

Substitutability and Other Considerations. Most responding purchasers reported the U.S. product and imports from subject countries to be comparable on most purchasing factors.[164] Responding purchasers ranked quality and price as the most important factors in purchasing decisions, and 19 of 23 responding purchasers reported that price was a very important factor in purchasing decisions.[165] Accordingly, we find that price is an import factor in purchasing decisions for stainless steel sheet and strip, and that there is a moderate-to-high degree of substitutability between domestically produced stainless steel sheet and strip and stainless steel sheet and strip imported from subject sources.[166]

The primary raw materials used in the production of stainless steel sheet and strip include alloy materials (particularly chromium, nickel, and molybdenum), stainless steel scrap, and iron scrap.[167] Domestic producers' raw material costs as a share of the cost of goods sold ("COGS") decreased from 65.8 percent in 2014 to 60.1 percent in 2016; raw materials accounted for 58.2 percent of COGS in interim 2016 and 64.6 percent of COGS in interim 2017.[168] Prices for the primary raw materials used in the production of stainless steel sheet and strip fluctuated but decreased overall over the period of review by 28 percent, with most of the decline occurring in 2014 and 2015. The costs of alloying agents ***.[169]

Prices for stainless steel sheet and strip generally consist of a base price and a surcharge. Surcharges are typically adjusted monthly and reflect the cost of alloying materials, among other things. Base prices consist, in part, of all other inputs to produce stainless steel sheet and strip.[170]

C. Likely Volume of Subject Imports

1. The Original Investigations and Prior Five-Year Reviews

In the original investigations, the Commission found that the volume of subject imports increased significantly over the period of investigation, growing by 18.4 percent from 1996 to 1998. The market share of cumulated subject imports increased from 14.9 percent in 1996 to 15.9 percent in 1998. By contrast, nonsubject imports' share of the market remained steady during the period. U.S. producers increased capacity by 9.3 percent during the original period of investigation, but their share of the market did not grow. Their market share remained relatively stable in 1996 and 1997, at 80.8 percent and 81.3 percent respectively, but dropped to 79.6 percent in 1998. The Commission observed that despite a 10 percent increase in the

[164] CR at II-22, PR at II-14; CR/PR at Table II-10.
[165] CR at II-19, PR at II-12; CR/PR at Tables II-7-8.
[166] CR at II-16, PR at II-10.
[167] CR/PR at V-1.
[168] CR/PR at Table III-8.
[169] CR at V-1-4, PR at V-1-3.
[170] CR at V-5-8, PR at V-3-6.

volume of U.S. producers' shipments during the period of investigation, the value of their shipments fell by 10 percent.[171]

In the first reviews, the Commission determined that cumulated subject import volume from Germany, Italy, Japan, Korea, Mexico, and Taiwan would likely be significant after revocation of the orders. It found that subject foreign producers would have the ability to increase exports to the United States given the continued presence of subject imports in the U.S. market, existing distribution networks, and a significant increase in capacity and excess capacity to produce stainless steel sheet and strip in subject countries since the original investigations. The Commission also found that subject foreign producers would likely shift exports from third country markets to the United States, given the attractive prices prevailing in the U.S. market. Finally, the Commission found that subject foreign producers could increase their exports of stainless steel sheet and strip to the United States by shifting the production of out-of-scope cut-to-length stainless steel sheet and strip to subject merchandise, which was the more commercially advantageous form of stainless steel sheet and strip from the perspective of subject foreign producers.[172]

In the second reviews, the Commission determined that since the imposition of the orders, subject imports from Japan, Korea, and Taiwan had maintained a significant and continuous presence in the U.S. market. It found that subject producers in Japan, Korea, and Taiwan demonstrated a continued interest in serving the U.S. market and maintained ongoing relationships with U.S. customers. It also found that they possessed significant excess capacity with which they could significantly increase exports to the United States. According to the Commission, producers in Japan, Korea, and Taiwan had incentive to use their excess capacity to increase exports to the United States given their export orientation, the higher prices for stainless steel sheet and strip available in the U.S. market, and their established channels of distribution. The Commission observed that existing third country barriers were also likely to force them to shift exports to other markets, including the United States.[173]

2. The Current Reviews

Cumulated subject imports had a very limited presence in the U.S. market during the period of review, never exceeding *** short tons in any year or interim period and having a market penetration of *** percent or less.[174] Nevertheless, the record indicates that subject producers in Japan, Korea, and Taiwan have the ability and the incentive to increase shipments of subject merchandise to the U.S. market significantly within a reasonably foreseeable time if the antidumping and countervailing duty orders are revoked.

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[171] Original Determinations, USITC Pub. 3208 at 13-15.

[172] First Five-Year Reviews, USITC Pub. 3788 at 27-30. The Commission observed that imports of cut-to-length stainless steel sheet and strip from the subject countries increased by 80,000 short tons between 1998 and 2004, while subject imports declined by 150,000 short tons. *Id.*

[173] Second Five-Year Reviews, USITC Pub. 4244 at 42-44.

[174] CR/PR at Tables I-12, IV-1.

The cumulated subject industries in Japan, Korea, and Taiwan have substantial capacity. *** data indicate that in 2016 cold-rolled production capacity in Japan was *** short tons; cold-rolled production capacity attributable to subject producers in Korea was *** short tons; and cold-rolled production capacity in Taiwan was *** short tons.[175] [176]

The cumulated subject industries in Japan, Korea, and Taiwan also have substantial excess capacity.[177] *** data indicate that subject producers of cold-rolled products in Japan had a capacity utilization rate of *** percent in 2016.[178] Questionnaire data for Hitachi, the only Japanese producer to respond to the Commission's questionnaire, indicate that it had a capacity utilization rate of *** percent in 2016; its capacity utilization rate was lower in interim 2017, at *** percent, than in interim 2016, at *** percent.[179]

The information available similarly indicates that subject producers in Korea have available excess capacity. *** data indicate that cold-rolled stainless steel sheet and strip producers in Korea had a capacity utilization rate of *** percent in 2016.[180] Questionnaire data for Hyundai BNG, the only Korean producer to respond to the Commission's questionnaire, indicate that it had a capacity utilization rate of *** percent in 2016; its capacity utilization rate was higher in interim 2017, at *** percent, than in interim 2016, at *** percent.[181]

The information available also indicates that subject producers in Taiwan have excess capacity. *** data indicate that cold-rolled stainless steel sheet and strip producers in Taiwan had a capacity utilization rate of *** percent in 2016.[182]

The industries in Japan, Korea, and Taiwan are all export oriented. Official statistics indicate that stainless steel sheet and strip producers in each country exported substantial

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[175] As discussed earlier, the Commission's foreign producer questionnaire responses were limited, as only two subject producers responded to the Commission's questionnaire, one from Japan and one from Korea. *See* CR at IV-14-15, 21-22, 29-30, PR at IV-11-12, 15-16, 20-21. We have consequently used *** data as the facts available on the basis that they provide the most comprehensive information in the record concerning the subject industries, although we acknowledge that they are overstated because they include certain out-of-scope products and data from nonsubject producers in Korea and Taiwan. CR/PR at Tables IV-9 nn.1-2, 13 nn.1-2, and 16 nn.1-2.

[176] CR/PR at Tables IV-9, 13, 16. As observed above, we find *** data to be reliable. Information provided by Hyundai BNG from KOSA also indicate that subject producers in Korea had substantial cold-rolled production capacity at *** short tons. *See* Hyundai BNG Posthearing Br. at 4. Hyundai BNG reported that ***. CR at II-6, PR at II-3.

[177] As per our earlier analysis, we use shipments as a proxy for production with respect to the *** data.

[178] *See* CR/PR at Table IV-9.

[179] CR/PR at Table IV-10. As noted earlier, Hitachi is a low-volume producer of specialty products.

[180] CR/PR at Table IV-13. Nevertheless, the KOSA data also indicate that subject producers in Korea have excess cold-rolled production capacity.

[181] CR/PR at Table IV-14.

[182] CR/PR at Table IV-16. The Commission received no questionnaire responses from subject producers in Taiwan.

volumes of stainless steel sheet and strip over the period of review.[183] In 2016, the industry in Japan exported 670,229 short tons of stainless steel sheet and strip, producers in Korea exported 1.3 million short tons of stainless steel sheet and strip, and producers in Taiwan exported 904,508 short tons of stainless steel sheet and strip.[184] These export volumes were sizeable relative to the total cold-rolled shipments from each country.[185]

We find that subject producers in Japan, Korea, and Taiwan would likely direct significant volumes of stainless steel sheet and strip to the U.S. market should the orders be revoked. Even under the discipline of the orders, cumulated subject imports continued to be present in the U.S. market throughout the period of review, albeit at very low volumes, indicating the continued interest of subject producers in the U.S. market.[186] Prices for stainless steel sheet and strip in the U.S. are competitive with or higher than average world prices.[187] Rising total and excess capacity in Asian markets provides an additional incentive for subject producers to direct additional exports to the U.S. market upon revocation. *** data indicate that Asia accounted for *** percent of global cold-rolled stainless steel sheet and strip capacity in 2016 and that China alone accounted for *** percent of this capacity.[188] The data also indicate that capacity in Asia is increasing faster than Asian consumption; capacity increased by *** percent from 2014 to 2016, while consumption increased by *** percent over the same period.[189]

Trade barriers to imports of stainless steel sheet and strip in other markets provide a further incentive for subject producers to ship subject merchandise to the United States. There are trade remedy measures in effect against imports of certain stainless steel sheet and strip products from Japan in Thailand. There are trade remedy measures in effect against imports of certain stainless steel sheet products from Korea in Brazil, India, Taiwan, and Thailand. There are trade remedy measures in effect against imports of certain stainless steel sheet and strip products from Taiwan in Brazil, the European Union, India, Thailand, and Vietnam.[190]

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[183] *See* CR/PR at Tables IV-9, 13, 16.

[184] CR/PR at Tables IV-9, 13, 16.

[185] *See* CR/PR at Tables IV-9, 13, 16. While we acknowledge that there are differences in the product coverage between the *** data and official export statistics, and that both data series include data concerning nonsubject producers in Korea and Taiwan, they nevertheless reflect the facts available to the Commission regarding total shipments and exports. According to *** data and official export statistics for 2016, exports of stainless steel sheet and strip from Japan were *** percent of total shipments; exports of stainless steel sheet and strip from Korea were ***; and exports of stainless steel sheet and strip from Taiwan were *** percent of total shipments. *See id.* Each responding subject producer indicated exporting an appreciable (if substantially lower) proportion of its total shipments. *See* CR/PR at Tables IV-8, IV-12.

[186] CR/PR at Table I-12.

[187] CR/PR at Tables IV-22-23.

[188] CR/PR at Table IV-19.

[189] CR at IV-34-35, PR at IV-25; CR/PR at Tables IV-19-20.

[190] CR/PR at Table IV-18.

Given the cumulated subject industries' large capacity, unused capacity, and overall export orientation; the relative attractiveness of the U.S. market; rising total and excess capacity to produce stainless steel sheet and strip in Asia; and third-country trade barriers on imports of stainless steel sheet and strip from the subject countries, we conclude that cumulated subject import volumes would likely be significant, both in absolute terms and relative to U.S. consumption, upon revocation of the orders.[191]

D. Likely Price Effects

1. The Original Investigations and Prior Five-Year Reviews

In the original investigations, the Commission found that subject imports undersold the domestic like product in 196 of 321 possible quarterly price comparisons between 1996 and 1998. Prices for both the domestic like product and subject imports declined significantly over the period of investigation during a period of record high demand. Although raw material costs also fell during the period of investigation, the Commission found that the overall decline in price for each of the six pricing products outpaced the decline in raw material costs. Based on the substitutability of the subject imports and the domestic like product, price competition, the parallel declines in domestic and subject import prices during a period of record demand, the increasing subject import volumes, and the evidence of general underselling, the Commission concluded that the subject imports had significantly depressed domestic prices for stainless steel sheet and strip.[192]

In the first reviews, cumulated subject imports undersold the domestic like product in 78 of 192 quarterly comparisons during the period of review, despite the orders. According to the Commission, prices for the domestic like product declined during 2000 and 2001, when demand was weak; increased in 2003, although not enough to cover increased production

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[191] We have also examined inventories in our analysis of the likely volume of subject imports. Inventories of cumulated subject imports in the United States declined from *** short tons in 2014 to *** short tons in 2015, increased to *** short tons in 2016, and were *** short tons in both interim 2016 and interim 2017. CR/PR at Table IV-4. Data concerning inventories in the subject countries are limited to those provided in the questionnaire responses of Hitachi and Hyundai BNG. Reported end-of-period inventories of subject merchandise in Japan were *** throughout the period of review. CR/PR at Table IV-8. Reported end-of-period inventories of subject merchandise in Korea were *** short tons in 2014, *** short tons in 2015, and *** short tons in 2016; they were lower in in interim 2017, at *** short tons, than interim 2016, at *** short tons. CR/PR at Table IV-12. No data regarding end-of-period inventories were available regarding Taiwan.

With respect to the potential for product shifting, Japanese producer Hitachi reported that ***. CR at II-5, PR at II-4. It also reported that it largely produces products other than stainless steel sheet and strip on the same equipment and that these other products account for *** percent of total production. CR at IV-18, PR at IV-12; CR/PR at IV-10. Korean producer Hyundai BNG reported that it ***. CR at II-6, PR at II-4; CR at IV-26, PR at IV-13; CR/PR IV-14. There is no information available regarding the potential for product shifting in Taiwan.

[192] Original Determinations, USITC Pub. 3208 at 16-17.

costs; and then increased in 2004 in excess of increased production costs. Nevertheless, the Commission found that prices for the domestic like product were unlikely to remain strong if the orders were to be revoked, given the price sensitivity of the market for stainless steel sheet and strip, low projected U.S. demand growth, increased subject import volume during the period of review, and continued subject import underselling even with the orders in place. The Commission concluded that revocation of the orders would likely result in significant subject import underselling as well as significant price depression and suppression.[193]

In the second reviews, the Commission found that cumulated subject imports from Japan, Korea, and Taiwan generally undersold the domestic like product.[194] The Commission found that the moderate-to-high degree of substitutability, the importance of price in purchasing decisions, significant underselling despite the discipline of the orders, and the likelihood that the volume of cumulated subject imports from Japan, Korea, and Taiwan would increase after revocation indicated that subject import underselling was likely to intensify if the orders were revoked. It also found that significant underselling by subject imports from Japan, Korea, and Taiwan would likely result in the depression or suppression of the base prices for the domestic like product, as domestic producers would likely have to reduce their base prices to retain market share and maintain an acceptable rate of capacity utilization in the face of significantly increased quantities of low-priced subject imports from Japan, Korea, and Taiwan.[195]

2. The Current Reviews

As previously stated, we find that price is an important factor in purchasing decisions for stainless steel sheet and strip, and that there is a moderate-to-high degree of substitutability between the domestic like product and cumulated subject imports.

The Commission requested pricing data for six pricing products in these reviews.[196] The record contains limited pricing comparisons.[197] Price comparisons were available for only two

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[193] First Five-Year Reviews, USITC Pub. 3788 at 31-32.

[194] Second Five-Year Reviews at 44-45. According to the Commission, although the quantity of subject imports in those transactions was generally low, the prevalence of underselling by cumulated subject imports during that period of review, under the discipline of the orders, was consistent with the prevalence of underselling by subject imports from Japan, Korea, and Taiwan during the periods examined in the original investigations and the first five-year reviews. *Id.*

[195] Second Five-Year Reviews, USITC Pub. 4244 at 44-45.

[196] The Commission requested pricing data on the following products:

> **Product 1.**--AISI Grade 304, 0.075 inch nominal thickness (0.068-0.082 inch actual), width 48-60 inches, in coils, 2B finish.
>
> **Product 2.**--AISI Grade 304, 0.029 inch nominal thickness (0.0260-0.032 inch actual), width 48-60 inches, in coils, 2B finish.

(Continued…)

quarters, and only for pricing product 6 from Taiwan. Subject imports from Taiwan undersold the domestic like product in one of the two possible quarterly comparisons.[198]

As observed earlier, if the orders were revoked, cumulated subject producers would likely export significant volumes of cumulated subject imports to the United States. Given the importance of price in purchasing decisions and the substitutability of the products, suppliers of subject merchandise would likely again seek to increase their sales in the U.S. market by underselling the domestic like product, as they did in the original investigations. Consequently, there would likely be significant underselling by cumulated subject imports. The presence of significant quantities of subject imports that would likely undersell the domestic like product would force the domestic industry either to lower prices or cede market share. In light of these considerations, we conclude that cumulated subject imports would likely have significant depressing or suppressing effects on prices for the domestic like product.

E. Likely Impact

1. The Original Investigations and Prior Five-Year Reviews

In the original investigations, the Commission found that apparent U.S. consumption of stainless steel sheet and strip increased, growing by 11.7 percent. It observed that domestic producers increased their capacity by 9.3 percent in order to improve productivity and meet increasing demand. However, the industry's capacity utilization rate declined from 73.0 percent in 1996 to 69.6 percent in 1998. The Commission attributed the decline to increased subject import volumes and found that the domestic industry lowered its prices in order to preserve its market share. According to the Commission, despite growth in apparent consumption and a decline in the domestic industry's COGS, its operating income and ratio of

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Product 3.--AISI Grade 304, 0.036 inch nominal thickness (0.032-0.040 inch actual), width 48-60 inches, in coils, 2B finish.

Product 4.--AISI Grade 316L, 0.060 inch nominal thickness (0.054-0.066 inch actual), width 48-60 inches, 2B finish.

Product 5.--AISI Grade 409, 0.048 inch nominal thickness (0.0450-0.0510 inch actual), width 48-60 inches, in coils, 2B finish.

Product 6.--AISI Grade 430, 0.036 inch nominal thickness (0.032-0.040 inch actual), width 36-48 inches, in coils, polished.

CR at V-13-14, PR at V-9.

[197] Four U.S. producers and one importer provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters. Pricing data reported by these firms accounted for approximately 3.4 percent of U.S producers' shipments of stainless steel sheet and strip and 15.7 percent of U.S. shipments of subject imports from Taiwan in 2016, ***. No pricing data were reported for subject imports from Japan or Korea. CR at V-14, PR at V-9.

[198] CR at V-21, PR at V-12.

operating income to net sales both declined over the period of investigation. The Commission determined that the decline in operating income resulted from the domestic industry's decision to reduce prices in order to maintain market share.[199]

In the first reviews, the Commission found that the domestic industry's operating and financial performance improved in 1999 after imposition of the orders, declined in 2001 due to a recession, and then recovered through 2004, although to a level below that in 1999. Based on the domestic industry's generally positive performance in 2004, the Commission did not find the domestic industry to be vulnerable. Nevertheless, the Commission found that the domestic industry would require stainless steel sheet and strip prices that were considerably higher than historical averages to maintain profitability in the face of high raw material costs. Citing the modest demand growth projected for apparent U.S. consumption, the Commission found that the U.S. market would not be able to absorb the significant likely increase in subject imports, which would likely undersell the domestic like product and suppress or depress U.S. prices. It therefore concluded that subject imports would likely have a significant impact on the domestic industry after revocation of the orders.[200]

In the second reviews, while the Commission did not find that the domestic industry was vulnerable to continuation or recurrence of material injury, it found that cumulated subject imports from Japan, Korea, and Taiwan would likely have a significant impact on the domestic industry after revocation. According to the Commission, the likely increased volume of subject imports was likely to undersell the domestic like product, thereby depressing or suppressing prices for the domestic like product to a significant degree. It found that the likely volume and price effects would likely have a significant adverse effect on the production, shipments, sales, market share, and revenues of the domestic industry, which would in turn have a direct adverse impact on the industry's profitability and employment as well as its ability to raise capital and make necessary capital investments. The Commission found that nonsubject imports' share of apparent U.S. consumption fluctuated within a narrow band during the period of review and that there was no evidence that nonsubject foreign producers had the incentive to significantly increase their penetration of the U.S. market in the reasonably foreseeable future.[201]

2. The Current Reviews

The domestic industry's capacity increased slightly from 2014 to 2016; it was higher in interim 2017 than in interim 2016.[202] Production decreased from 2014 to 2015, and then

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[199] Original Determinations, USITC Pub. 3208 at 19-20.

[200] First Five-Year Reviews, USITC Pub. 3788 at 27-28.

[201] Second Five-Year Reviews, USITC Pub. 4244 at 45-46.

[202] CR/PR at Table III-2. Capacity increased from 2.5 million short tons in 2014 to 2.6 million short tons in 2015 and 2016; it was higher in interim 2017, at 690,849 short tons, than in interim 2016, at 679,740 short tons. *Id.*

increased in 2016 to below 2014 levels; it was higher in interim 2017 than in interim 2016.[203] Capacity utilization decreased overall, declining from 2014 to 2015, and then increasing in 2016 to below 2014 levels; it was higher in interim 2017 than in interim 2016.[204] U.S. shipments fluctuated from 2014 to 2016, but ended at roughly the same level in 2016 as in 2014; they were higher in interim 2017 than in interim 2016.[205] The domestic industry's share of apparent U.S. consumption fluctuated but increased overall from 2014 to 2016, decreasing from 82.0 percent in 2014 to 80.7 percent in 2015, and then increasing to 82.5 percent in 2016; its share of apparent U.S. consumption was lower in interim 2017, at 82.3 percent, than in interim 2016, at 84.1 percent.[206]

Employment indicators were mixed over the period of review. The number of production and related workers, hours worked, and wages paid all declined from 2014 to 2016, but were higher in interim 2017 than in interim 2016.[207] Productivity fluctuated but increased from 2014 to 2016, it was higher in interim 2017 than in interim 2016.[208]

The domestic industry's total net sales and total COGS both declined from 2014 to 2016, but were higher in interim 2017 than in interim 2016.[209] The industry had operating and net income losses from 2014 to 2016; both figures worsened from 2014 to 2015 and then improved in 2016 to a level better than that in 2014 (albeit still negative).[210] The industry had positive

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[203] CR/PR at Table III-2. Production decreased from 2.0 million short tons in 2014 to 1.7 million short tons in 2015, and increased to 1.9 million short tons in 2016; production was higher in interim 2017, at 504,784 short tons, than in interim 2016, at 449,407 short tons. *Id.*

[204] CR/PR at Table III-2. Capacity utilization was 78.3 percent in 2014, 65.2 percent in 2015, and 71.6 percent in 2016; it was 66.1 percent in interim 2016 and 73.1 percent in interim 2017. *Id.*

[205] CR/PR at Table III-5. Total U.S. shipments were 1,939,953 short tons in 2014, 1,764,169 short tons in 2015, and 1,916,985 short tons in 2016; they were 467,143 short tons in interim 2016 and 501,199 short tons in interim 2017. *Id.* Inventories declined from 221,816 short tons in 2014 to 193,043 short tons in 2015 and 178,274 short tons in 2016; they were higher in in interim 2017, at 181,859 short tons, than in interim 2016, at 175,307 short tons. CR/PR at Table III-6.

[206] CR/PR at Table I-12.

[207] CR/PR at Table III-7. The average number of production and related workers ("PRWs") was 2,968 in 2014, 2,718 in 2015, and 2,660 in 2016; it was 2,202 in interim 2016 and 2,520 in interim 2017. The number of hours worked was 6,355 hours in 2014, 5,909 hours in 2015, and 5,869 hours in 2016; it was 1,360 hours in interim 2016 and 1,477 hours in interim 2017. Wages paid were $225.7 million in 2014, $221.1 million in 2015, and $215.7 million in 2016; they were $52.8 million in interim 2016 and $53.2 million in interim 2017. *Id.*

[208] CR/PR at Table III-7. Productivity was 309.2 short tons per 1,000 hours in 2014, 293.7 short tons per 1,000 hours in 2015, and 324.1 short tons per 1,000 hours in 2016; it was 330.4 short tons per 1,000 hours in interim 2016 and 341.8 short tons per 1,000 hours in interim 2017. *Id.*

[209] CR/PR at Table III-8. Total net sales were $4.6 billion in 2014, $3.5 billion in 2015, and $3.4 billion in 2016; they were $765.2 million in interim 2016 and $1.1 billion in interim 2017. *Id*. Total COGS was $4.5 billion in 2014, $3.6 billion in 2015, and $3.3 billion in 2016; it was $808.3 million in interim 2016 and $933.9 million in interim 2017. *Id.*

[210] CR/PR at Table III-8. Operating loss was $139.5 million in 2014, $171.4 million in 2015, and $52.2 million in 2016. Total net sales were $4.6 billion in 2014, $3.5 billion in 2015, and $3.4 billion in (Continued…)

operating and net income levels only in interim 2017.[211] Capital expenditures fluctuated but increased overall over the period of review, while research and development expenses also increased.[212]

Consequently, the domestic industry was not profitable during most of the period of review. The available data indicate that the domestic industry's performance improved after the issuance of provisional duties on stainless steel sheet and strip from China in July and September 2016.[213] However, because the improvements are reflected most notably in the interim 2017 data, which cover only one quarter, we cannot discern a sufficient basis to project the extent to which the orders on stainless steel strip from China are likely to continue to reduce the domestic industry's vulnerability.

We have also considered the role of nonsubject imports in the U.S. market. The volume of nonsubject imports fluctuated but decreased from 2014 to 2016; they were higher in interim 2017 than in interim 2016.[214] The market share of nonsubject imports increased from *** percent in 2014 to *** percent in 2015, but then decreased to *** percent in 2016; it was *** percent in interim 2016 and *** percent in interim 2017.[215] Given that domestic production accounts for the clear majority of apparent U.S. consumption, the likely increase in volume of subject imports upon revocation will likely come substantially at the expense of the domestic industry. Consequently, we find that subject imports would likely have adverse effects distinct from those of nonsubject imports in the event of revocation.

Accordingly, we find that revocation of the countervailing duty order on stainless steel sheet and strip from Korea and antidumping duty orders on stainless steel sheet and strip from Japan, Korea, and Taiwan, would likely have a significant impact on the domestic industry.

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2016. The domestic industry's operating income/loss to net sales ratio was negative 3.1 percent in 2014, negative 4.9 percent in 2015, and negative 1.5 percent in 2016. *Id.*

[211] CR/PR at Table III-8. Operating income was $88.2 million in interim 2017, compared to a loss of $78.4 million in interim 2016; total net sales were $1.1 billion in interim 2017, compared to $765.1 million in interim 2016; the ratio of operating income to net sales was 8.3 percent in interim 2017, compared to negative 10.2 percent in interim 2016. *Id.*

[212] CR/PR at Table III-12. Total capital expenditures were *** in 2014, *** in 2015, and *** in 2015; they were *** in interim 2016 and *** in interim 2017. Research and development expenses were *** in 2014, *** in 2015, and *** in 2016; they were *** in interim 2016 and interim 2017. *Id.*

[213] *Countervailing Duty Investigation of Stainless Steel Sheet and Strip from the People's Republic of China: Preliminary Affirmative Determination and Alignment of Final Determination With Final Antidumping Duty Determination*, 81 Fed. Reg. 46643 (July 18, 2016); *Stainless Steel Sheet and Strip From the People's Republic of China: Preliminary Affirmative Determination of Sales at Less Than Fair Value and Preliminary Affirmative Determination of Critical Circumstances*, 81 Fed. Reg. 64135 (Sept. 19, 2016).

[214] CR/PR at Table I-11. The volume of nonsubject imports was *** short tons in 2014, *** short tons in 2015, and *** short tons in 2016; it was *** short tons in interim 2016 and *** short tons in interim 2017. *Id.*

[215] CR/PR at Table I-11.

V. Conclusion

For the above-stated reasons, we determine that revocation of the countervailing duty order on stainless steel sheet and strip from Korea and the antidumping duty orders on stainless steel sheet and strip from Japan, Korea, and Taiwan, would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

PART I: INTRODUCTION

BACKGROUND

On July 1, 2016, the U.S. International Trade Commission ("Commission") gave notice, pursuant to section 751(c) of the Tariff Act of 1930, as amended ("the Act"),[1] that it had instituted reviews to determine whether revocation of the countervailing duty order on imports of stainless steel sheet and strip from Korea and the antidumping duty orders on imports of stainless steel sheet and strip from Japan, Korea, and Taiwan would be likely to lead to continuation or recurrence of material injury.[2] [3] On October 4, 2016, the Commission determined that it would conduct full reviews 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]

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

[2] *Stainless Steel Sheet and Strip From Japan, Korea, and Taiwan; Institution of Five-Year Reviews*, 81 FR 43238, July 1, 2016.

[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 orders concurrently with the Commission's notice of institution. *Initiation of Five-Year ("Sunset") Review*, 81 FR 43185, July 1, 2016.

[4] *Stainless Steel Sheet and Strip from Japan, Korea, and Taiwan; Notice of Commission Determination to Conduct Full Five-Year Reviews*, 81 FR 71533, October 17, 2016. The Commission found the domestic interested party group response and the respondent interested party group response with respect to Korea were adequate. The Commission found that the respondent interested party group responses with respect to Japan and Taiwan were inadequate. However, the Commission determined to conduct full reviews concerning the orders on stainless steel sheet and strip from Japan and Taiwan to promote administrative efficiency in light of its decision to conduct full reviews with respect to the orders concerning stainless steel sheet and strip from Korea.

[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 a list of witnesses that appeared at the Commission's hearing.

Effective date	Action
July 27, 1999	Commerce's antidumping duty orders for France (64 FR 40562), Germany (64 FR 40557), Italy (64 FR 40567), Japan (64 FR 40565), Korea (64 FR 40555), Mexico (64 FR 40560), Taiwan (64 FR 40555), and the United Kingdom (64 FR 40555)
August 6, 1999	Commerce's countervailing duty orders for France, Italy, and Korea (64 FR 42923)
July 27, 2004	Commerce's revocation of antidumping duty orders for France and the United Kingdom (70 FR 44894)
September 1, 2004	Commerce's revocation of countervailing duty order for France (69 FR 53415)
October 8, 2004	Commerce's final results of expedited five-year review of the antidumping duty order for France (69 FR 60357).
October 25, 2004	Commerce's final results of expedited five-year review of the antidumping duty order for Japan (69 FR 62250)
November 22, 2004	Commerce's final results of expedited five-year reviews of the antidumping duty orders for Germany (69 FR 67896), Italy (69 FR 67894), Korea (69 FR 67892), Taiwan (69 FR 67892), and the United Kingdom (69 FR 67892)
December 17, 2004	Commerce's final results of the expedited five-year review of the countervailing duty order for Korea (69 FR 75513)
May 4, 2005	Commerce's final results of full five-year review of the countervailing duty order for Italy (70 FR 23094)
July 18, 2005	Commission's affirmative determinations with regard to Germany, Italy, Japan, Korea, Mexico, and Taiwan and negative determinations with regard to France and the United Kingdom (70 FR 41236)
August 4, 2005	Commerce's continuation of antidumping duty orders for Germany, Italy, Japan, Korea, Mexico, and Taiwan and countervailing duty orders for Italy and Korea (70 FR 44886)
March 28, 2006	Commerce's final results of countervailing duty changed circumstances review from Italy and revocation of countervailing duty order (71 FR 15382)
October 7, 2010	Commerce's final results of expedited five-year review of the countervailing duty order on stainless steel sheet and strip from Korea (75 FR 62101)
October 7, 2010	Commerce's final results of expedited five-year reviews of the antidumping duty orders on stainless steel sheet and strip from Germany, Japan, Korea, and Taiwan (75 FR 62104)
May 5, 2011	Commerce's final results of full five-year reviews of the antidumping duty orders on stainless steel sheet and strip from Italy (76 FR 25670) and Mexico (76 FR 25668)
July 25, 2010	Commerce's revocation of antidumping duty orders on Germany, Italy, and Mexico (76 FR 49450, August 10, 2011)
July 27, 2011	Commission' affirmative determinations with regard to Japan, Korea, and Taiwan and negative determinations with regards to Germany, Italy and Mexico (76 FR 46323)
August 11, 2011	Commerce's continuation of antidumping duty orders for Japan, Korea, and Taiwan and countervailing duty order for Korea (76 FR 49726)

Tabulation continued on next page.

Effective date	Action
July 1, 2016	Commission's institution of five-year reviews (81 FR 43238)
July 1, 2016	Commerce's initiation of five-year reviews (81 FR 43185)
October 4, 2016	Commission's determinations to conduct full five-year reviews (81 FR 71533, October 17, 2016)
November 7, 2016	Commerce's final results of expedited five-year review of the countervailing duty order on stainless steel sheet and strip from Korea (81 FR 78111)
	Commerce's final results of expedited five-year reviews of the antidumping duty orders on stainless steel sheet and strip from Japan, Korea, and Taiwan (81 FR 781147)
March 1, 2017	Commission's scheduling of full five-year reviews (82 FR 12843, March 7, 2017)
July 25, 2017	Commission's hearing
August 30, 2017	Commission's vote
September 20, 2017	Commission's determinations and views

The original investigations

The original investigations resulted from petitions filed on June 10, 1998 with Commerce and the Commission[6] [7]alleging that an industry in the United States was materially injured and threatened with material injury by reason of dumped imports of certain stainless steel sheet and strip from France, Germany, Italy, Japan, Korea, Mexico, Taiwan, and the United Kingdom and by reason of subsidized imports of such merchandise from France, Italy, and

[6] The petitions were filed by Allegheny Ludlum Corp., Pittsburgh, Pennsylvania; Armco, Inc., Pittsburgh, Pennsylvania; J&L Specialty Steel, Inc. ("J&L"), Pittsburgh, Pennsylvania; Washington Steel Division of Bethlehem Steel Corp., Washington, Pennsylvania; the United Steel Workers of America, AFL-CIO/CLC; Butler Armco Independent Union; and Zanesville Armco Independent Organization, Inc. J&L was not, however, a petitioner in either of the investigations involving France; Armco, Butler Armco Independent Union, and Zanesville Armco Independent Organization were not petitioners in the antidumping investigation involving Mexico.

[7] The petitions were filed soon after the sequence of events known as the "Asian financial crisis." The initial crisis spread from Thailand in mid-1997 through Asia. According to Commerce, reduced Asian steel demand, declining Asian currency values, and increased U.S. steel demand contributed to an increase in U.S. steel imports. See *Global Steel Trade: Structural Problems and Future Solutions*, International Trade Administration, U.S. Department of Commerce, July 2000, pp. 17-29. Indeed, according to ***, the United States accounted for *** percent of global consumption of cold-rolled stainless steel in 1998, with all of Asia accounting for *** percent. In 2016, according to the same source, the United States accounted for *** percent of global apparent consumption while Asia accounted for *** percent. ***.

Korea. Following notification of a final determination by Commerce that imports of stainless steel sheet and strip from France, Italy, and Korea were being subsidized and imports of stainless steel sheet and strip from France, Germany, Italy, Japan, Korea, Mexico, Taiwan, and the United Kingdom were being sold at less than fair value ("LTFV"), the Commission determined on July 19, 1999, that a domestic industry was materially injured by reason of the subject imports from the eight countries.[8] Commerce issued the antidumping orders on July 27, 1999,[9] and the countervailing duty orders on August 6, 1999.[10] Commerce subsequently revoked the countervailing duty order on stainless steel sheet and strip from France in September 2004.[11]

The first five-year reviews

In July 2005, the Commission completed full five-year reviews of the subject orders and determined that revocation of the subject orders on stainless steel sheet and strip from Germany, Italy, Japan, Korea, Mexico, and Taiwan would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[12] Following affirmative determinations in the first five-year reviews by

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[8] *Certain Stainless Steel Sheet and Strip from France, Germany, Italy, Japan, The Republic of Korea, Mexico, Taiwan and The United Kingdom*, 64 FR 40896, July 28, 1999. See also *Certain Stainless Steel Sheet and Strip from France, Germany, Italy, Japan, The Republic of Korea, Mexico, Taiwan, and The United Kingdom, Inv. Nos. 701-TA-380-382 and 731-TA-797-804 (Final)*, USITC Publication 3208 (July 1999).

[9] *Notice of Amended Final Determination of Sales at Less Than Fair Value and Antidumping Duty Order; Stainless Steel Sheet and Strip in Coils From Germany*, 64 FR 40557, July 27, 1999. *Notice of Amended Final Determination of Sales at Less Than Fair Value and Antidumping Duty Order; Stainless Steel Sheet and Strip in Coils From Italy*, 64 FR 40567, July 27, 1999. *Notice of Amended Final Determination of Sales at Less Than Fair Value and Antidumping Duty Order; Stainless Steel Sheet and Strip in Coils From France*, 64 FR 40562, July 27, 1999. *Notice of Amended Final Determination of Sales at Less Than Fair Value and Antidumping Duty Order; Stainless Steel Sheet and Strip in Coils From Japan*, 64 FR 40565, July 27, 1999. *Notice of Amended Final Determination of Sales at Less Than Fair Value and Antidumping Duty Order; Stainless Steel Sheet and Strip in Coils From Mexico*, 64 FR 40560, July 27, 1999. *Notice of Antidumping Duty Order; Stainless Steel Sheet and Strip in Coils From United Kingdom, Taiwan and South Korea*, 64 FR 40555, July 27, 1999.

[10] *Amended Final Determination: Stainless Steel Sheet and Strip in Coils From the Republic of Korea; and Notice of Countervailing Duty Orders: Stainless Steel Sheet and Strip in Coils From France, Italy, and the Republic of Korea*, 64 FR 42923, August 6, 1999.

[11] *Stainless Steel Sheet and Strip in Coils From France: Notice of Amended Final Determination Pursuant to Final Court Decision and Revocation of Order*, 69 FR 53415, September 1, 2004.

[12] *Certain Stainless Steel Sheet and Strip from France, Germany, Italy, Japan, Korea, Mexico, Taiwan, and The United Kingdom, Inv. Nos. 701-TA-381-382 and 731-TA-797-804 (Review)*, USITC Publication 3788 (July 2005).

Commerce and the Commission,[13] Commerce issued a continuation of the countervailing duty order on imports of stainless steel sheet and strip from Korea and Italy and of the antidumping duty order on imports of stainless steel sheet and strip from Germany, Italy, Japan, Korea, Mexico, and Taiwan, effective August 4, 2005.[14] The Commission also determined that revocation of the antidumping duty orders on imports of stainless steel sheet and strip from France[15] and the United Kingdom would not be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[16] Accordingly, Commerce revoked the antidumping duty order on imports of stainless steel sheet and strip from France and the United Kingdom, effective August 4, 2005.[17] Following a changed circumstances review of the countervailing duty order on stainless steel sheet and strip imports from Italy, Commerce revoked the order on March 28, 2006.[18]

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[13] *Certain Stainless Steel Sheet and Strip From France, Germany, Italy, Japan, Korea, Mexico, Taiwan, and the United Kingdom*, 70 FR 41236, July 18, 2005; *Stainless Steel Sheet and Strip in Coils from France; Final Results of the Expedited Sunset Review of the Antidumping Duty Order*, 69 FR 60357, October 8, 2004. *Stainless Steel Sheet and Strip in Coils from Japan*, 69 FR 62250, October 25, 2004; *Final Results of the Expedited Sunset Review of the Antidumping Duty Order; Stainless Steel Sheet and Strip in Coils from The Republic of Korea, Taiwan and the United Kingdom; Final Results of the Expedited Five Year ("Sunset") Reviews of Antidumping Duty Orders*, 69 FR 67892, November 22, 2004; *Stainless Steel Sheet and Strip from Mexico: Final Results of the Full Sunset Review of Antidumping Duty Order*, 70 FR 6620, February 8, 2005.

[14] *Continuation of Antidumping Duty Orders on Stainless Steel Sheet and Strip in Coils from Germany, Italy, Japan, the Republic of Korea, Mexico, and Taiwan, and Countervailing Duty Orders on Stainless Steel Sheet and Strip in Coils from Italy and the Republic of Korea*, 70 FR 44886, August 4, 2005.

[15] Both antidumping and countervailing duty orders were issued with respect to U.S. imports of subject merchandise from France. However, subsequent to the issuance of the institution notices for the first review, Commerce discovered that it had previously revoked the countervailing duty order for France on November 7, 2003, in its notice of implementation under Section 129 of the Uruguay Round Agreements Act. Consequently, Commerce (69 FR 35585, June 25, 2004) and the Commission (69 FR 35678, June 25, 2004) both rescinded the five-year review of the countervailing duty order on stainless steel sheet and strip from France.

[16] *Certain Stainless Steel Sheet and Strip from France, Germany, Italy, Japan, Korea, Mexico, Taiwan, and the United Kingdom, Inv. Nos. 701-TA-381-382 and 731-TA-797-804 (Review)*, USITC Publication 3788 (July 2005).

[17] *Certain Stainless Steel Sheet and Strip in Coils from France and the United Kingdom; Final Results of Sunset Reviews and Revocation of Antidumping Duty Order*, 70 FR 44894, August 4, 2005.

[18] *Stainless Steel Sheet and Strip in Coils from Italy: Final Results of Countervailing Duty Changed Circumstances Review and Revocation of Countervailing Duty Order, in Whole*, 71 FR 15382, March 28, 2006.

The second five-year reviews

In July 2011, the Commission completed its second full five-year review of the subject orders and determined that revocation of the subject orders on stainless steel sheet and strip from Japan, Korea, and Taiwan would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[19] Following affirmative determinations in the second five-year reviews by Commerce and the Commission, Commerce issued a continuation of the countervailing duty order on imports of stainless steel sheet and strip from Korea and the antidumping duty orders on imports of stainless steel sheet and strip from Japan, Korea, and Taiwan, effective August 11, 2011.[20] The Commission also determined that that revocation of the antidumping duty orders on stainless steel sheet and strip from Germany, Italy, and Mexico would not be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[21] Accordingly, Commerce revoked the antidumping duty orders on imports of stainless steel sheet and strip from Germany, Italy, and Mexico, effective July 25, 2010.[22]

Subsequent to the second five-year reviews, as a result of a Section 129 proceeding,[23] Korean producer Pohang Iron & Steel Co., Ltd. ("POSCO") received a revised dumping margin of zero. POSCO had already been excluded from the countervailing duty order on imports of stainless steel sheet and strip from Korea.[24] Accordingly, since the Section 129 proceeding, imports of stainless steel sheet and strip from POSCO have not been subject to either an antidumping or countervailing duty order.

RELATED INVESTIGATIONS

Table I-1 presents prior Commission investigations on stainless steel sheet and strip, along with investigations covered by and related to these reviews. Most recently, the Commission conducted investigations on LTFV and subsidized imports of stainless steel sheet and strip from China during 2016-17.[25]

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[19] *Stainless Steel Sheet and Strip from Germany, Italy, Japan, Korea, Mexico, and Taiwan, Inv. Nos. 701-TA-382 and 731-TA-798-803 (Second Review)*, USITC Publication 4244 (July 2011), p. 1.

[20] *Continuation of Antidumping and Countervailing Duty Orders: Stainless Steel Sheet and Strip in Coils From Japan, Korea, and Taiwan*, 76 FR 49726, August 11, 2011.

[21] *Stainless Steel Sheet and Strip From Germany, Italy, Japan, Korea, Mexico, and Taiwan*, 76 FR 46323, August 2, 2011.

[22] *Stainless Steel Sheet and Strip in Coils From Germany, Italy, and Mexico: Revocation of Antidumping Duty Orders*, 76 FR 49450, August 10, 2011.

[23] See *Section 129 proceedings* below for details.

[24] See *Company exclusions* below for details.

[25] *Stainless Steel Sheet and Strip From China, Investigation Nos. 701-TA-557 and 731-TA-1312 (Final),* USITC Publication 4676, March 2017.

Table I-1
Stainless steel sheet and strip: Previous Commission investigations

Item/sources	Inv. No.	Year	Report No.	Action/status
Stainless steel sheet and strip, cold-rolled, from France	AD-126	1973	TC 615	Negative
Stainless steel and alloy tool steel	TA-201-5	1976	USITC 756	3-year VRA (6/14/76-6/13/79)
Stainless steel and alloy tool steel	TA-203-3	1977	USITC 838	Probable economic effect if the relief provided by Presidential Proclamation 4445, as modified by Proclamation 4477, were to be reduced or revoked
Stainless steel and alloy tool steel	TA-201-48	1983	USITC 1377	4-year import relief (quotas and tariffs)
Stainless steel sheet and strip from Germany	731-TA-92	1983	USITC 1391	Affirmative Order date: 6/23/83 Revocation date: 8/11/86
Stainless steel sheet and strip from France	731-TA-95	1983	USITC 1391	Affirmative Order date: 6/22/83 Revocation date: 8/11/86
Stainless steel sheet and strip from the United Kingdom	701-TA-195	1983	USITC 1391	Negative
Stainless steel sheet and strip, cold-rolled, from Spain	731-TA-164	1984	USITC 1593	Negative
Stainless steel sheet and strip from France	701-TA-380	1998	USITC 3208	Affirmative Order date: 8/6/99 Revocation date: 9/1/04
Stainless steel sheet and strip from France	731-TA-797	1998	USITC 3208	Affirmative Order date: 7/27/99 Revocation date: 8/4/05
Stainless steel sheet and strip from Germany	731-TA-798	1998	USITC 3208	Affirmative Order date: 8/6/99 Revocation date: 7/25/11
Stainless steel sheet and strip from Italy	701-TA-381	1998	USITC 3208	Affirmative Order date: 7/27/99 Revocation date: 3/28/06
Stainless steel sheet and strip from Italy	731-TA-799	1998	USITC 3208	Affirmative Order date: 7/27/99 Revocation date: 7/25/11

Table continued on next page.

Table I-1--Continued

Stainless steel sheet and strip: Previous Commission investigations

Item/sources	Inv. No.	Year	Report No.	Action/status
Stainless steel sheet and strip from Japan	731-TA-800	1998	USITC 3208	Affirmative Order date: 7/27/99 Order in place; continued 8/11/11
Stainless steel sheet and strip from Korea	701-TA-382	1998	USITC 3208	Affirmative Order date: 8/6/99 Order in place; continued 8/11/11
Stainless steel sheet and strip from Korea	731-TA-801	1998	USITC 3208	Affirmative Order date: 7/27/99 Order in place; continued 8/11/11
Stainless steel sheet and strip from Mexico	731-TA-802	1998	USITC 3208	Affirmative Order date: 7/27/99 Revocation date: 7/25/11
Stainless steel sheet and strip from Taiwan	731-TA-803	1998	USITC 3208	Affirmative Order date: 7/27/99 Order in place; continued 8/11/11
Stainless steel sheet and strip from the United Kingdom	731-TA-804	1998	USITC 3208	Affirmative Order date: 7/27/99 Revocation date: 8/4/05
Stainless steel sheet and strip from China	701-TA-557	2016	USITC 4676	Order date: 4/3/17
Stainless steel sheet and strip from China	731-TA-1312	2016	USITC 4676	Order date: 4/3/17

Note.—Lightly shaded rows indicate antidumping or countervailing duty orders in place and subject to these reviews. Darkly shaded rows indicate antidumping or countervailing duty orders that were issued as a result of petitions filed with the orders subject to these reviews, but have since been revoked.

Source: U.S. International Trade Commission publications.

SUMMARY DATA

Table I-2 presents a summary of data from the original investigations and subsequent full five-year reviews. Data for the original investigations, two five-year reviews, and current reviews are believed to be generally comparable, although there have been some revisions to the scope since the original orders were issued.

Table I-2
Stainless steel sheet and strip: Comparative data from the original investigations and subsequent reviews, 1998, 2004, 2010, and 2016

Item	Original investigations	First reviews	Second reviews	Third reviews
	Calendar year			
	1998[1]	2004[1]	2010[2]	2016[3]
	Quantity (short tons)			
U.S. consumption quantity	1,747,442	1,895,410	1,508,745	1,978,372
	Share of quantity (percent)			
Share of U.S. consumption: U.S. producers' share	79.6	84.0	83.2	82.5
U.S. importers' share: Subject sources	***	***	***	***
Nonsubject sources	***	***	***	***
All import sources	20.4	16.0	16.8	17.5
	Value (1,000 dollars)			
U.S. consumption	2,883,292	4,197,633	4,111,376	3,617,546
	Share of value (percent)			
Share of U.S. consumption: U.S. producers' share	79.9	83.3	82.1	79.2
U.S. importers' share: Subject sources	***	***	***	***
Nonsubject sources	***	***	***	***
All import sources	20.1	16.7	17.9	20.8
	Quantity (short tons); value (1,000 dollars); and unit value (dollars per short ton)			
U.S. imports from Subject sources: Quantity	***	***	***	***
Value	***	***	***	***
Unit value	***	***	***	***
Nonsubject sources: Quantity	***	***	***	***
Value	***	***	***	***
Unit value	***	***	***	***
All import sources: Quantity	357,193	302,482	253,765	346,910
Value	579,615	701,057	734,438	750,800
Unit value	$1,623	$2,318	$2,894	$2,164

Table continued on next page.

Table I-2--Continued
Stainless steel sheet and strip: Comparative data from the original investigations and subsequent reviews, 1998, 2004, 2010, and 2016

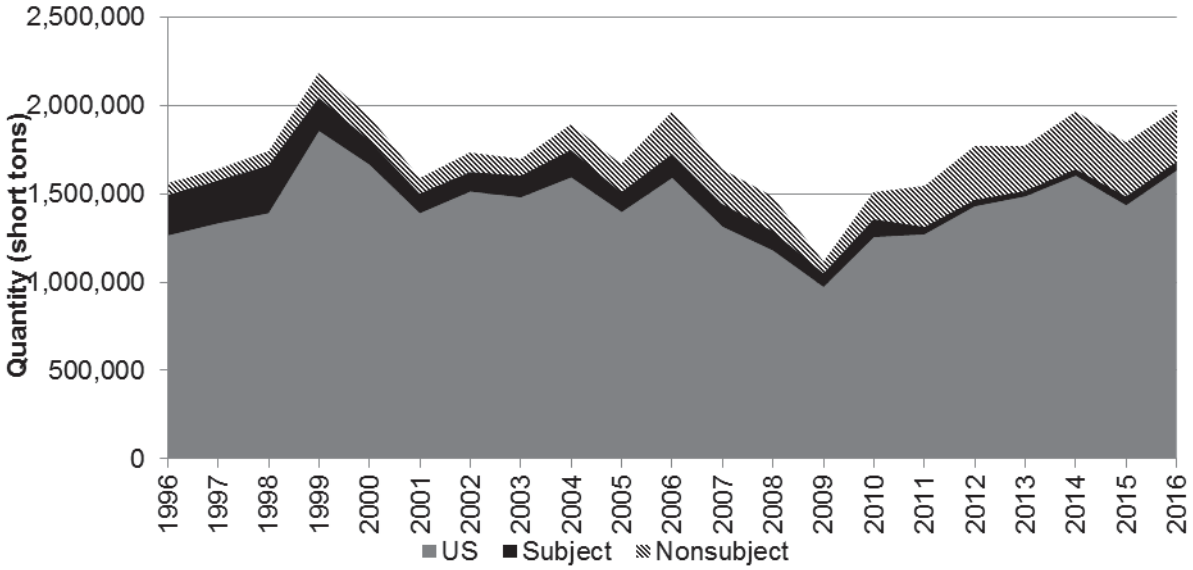
Item	Original investigations	First reviews	Second reviews	Third reviews
	Calendar year			
	1998[1]	2004[1]	2010[2]	2016[3]
U.S. industry:				
Capacity (quantity)	2,092,165	2,262,807	2,748,775	2,654,960
Production (quantity)	1,429,041	1,670,643	1,544,772	1,902,216
Capacity utilization (percent)	69.6	73.8	56.2	71.6
U.S. shipments:				
Quantity	1,390,249	1,592,928	1,254,980	1,631,462
Value	2,303,677	3,496,576	3,376,938	2,866,746
Unit value	$1,657	$2,195	$2,691	$1,757
Ending inventory	276,694	172,279	218,127	178,274
Inventories/total shipments	18.9	10.2	14.1	9.3
Production workers	8,154	4,407	2,989	2,660
Hours worked (1,000)	16,563	8,605	6,456	5,869
Wages paid (1,000 dollars)	353,294	233,925	236,989	215,724
Hourly wages	$21.33	$27.19	$36.71	$36.76
Productivity (short tons per hour)	86.8	196.7	239.3	324.1
Financial data:				
Net sales:				
Quantity	1,463,511	1,680,804	1,545,756	1,916,985
Value	2,433,455	3,692,443	4,211,902	3,366,746
Unit value	$1,663	$2,197	$2,725	$1,756
Cost of goods sold	2,254,260	3,332,922	4,021,106	3,279,618
Gross profit or (loss)	179,195	359,521	190,796	87,128
SG&A expense	134,431	127,398	119,653	139,309
Operating income or (loss)	44,764	232,123	71,143	(52,181)
Unit COGS	$1,540	$1,983	$2,601	$1,711
Unit operating income	$31	$138	$46	$(27)
COGS/ sales (percent)	92.6	90.3	95.5	97.4
Operating income or (loss)/ sales (percent)	1.8	6.3	1.7	(1.5)

[1] Subject sources include France, Germany Italy, Japan, Korea, Mexico, Taiwan, and the United Kingdom.
[2] Subject sources include Germany Italy, Japan, Korea, Mexico, and Taiwan.
[3] Subject sources include Japan, Korea, and Taiwan.

Source: Compiled from data submitted in response to Commission questionnaires, adjusted proprietary Customs data to account for all dutiable imports for subject countries, and official Commerce statistics.

Figure I-1 presents annual apparent U.S. consumption data for the period of 1996-2016. As shown below, imports subject to the original investigations entered the United States as apparent U.S. consumption was rising to a peak level (1999) which it has not achieved since.

Figure I-1
Stainless steel sheet and strip: Apparent U.S. consumption, 1996-2016



Note.--Subject sources include France, Germany Italy, Japan, Korea, Mexico, Taiwan, and The United Kingdom (1996-2004); Germany, Italy, Japan, Korea, Mexico, and Taiwan (2005-10); and Japan, Korea, and Taiwan (2011-16).

Source: Compiled from data submitted in response to Commission questionnaires, adjusted proprietary Customs data to account for all dutiable imports for subject countries, and official Commerce statistics.

As discussed above, the original orders for these reviews covered imports of stainless steel sheet and strip from eight countries. As a result of the Commission's determinations from the first five-year reviews, the antidumping duty orders on imports of stainless steel sheet and strip from France and the United Kingdom were revoked in August 2005. As a result of the Commission's second five-year review, the antidumping duty orders on imports of stainless steel sheet and strip from Germany, Italy, and Mexico were revoked on August 10, 2011 (effective July 25, 2010).

Commerce has issued a series of revocations to the antidumping duty orders with respect to imports from Japan. These include (1) stainless steel welding electrode strips from Japan (April 2000), (2) certain stainless steel used for razor blades, medical surgical blades, and industrial blades from Japan (September 2000), (3) certain stainless steel lithographic sheet

from Japan (October 2000), and (4) certain nickel clad stainless steel sheet from Japan (December 2000).[26]

With regard to Korea, in the original investigations, subject merchandise producer POSCO was excluded from the countervailing duty order on imports of stainless steel sheet and strip from Korea because it received a *de minimis* net subsidy rate of 0.65 percent *ad valorem*.[27] Likewise, Korean producer Inchon Iron & Steel Co., Ltd. ("Inchon") was excluded from the antidumping duty order on stainless steel sheet and strip from Korea because it received a zero dumping margin. As detailed below, effective November 16, 2011, Commerce revoked the antidumping duty order on POSCO, as a result of a Section 129 proceeding. Accordingly, imports of stainless steel sheet and strip from POSCO are no longer subject to any U.S. trade remedy orders on stainless steel sheet and strip.

With regard to Taiwan, in the original investigations, Commerce excluded from the antidumping duty order producers Chang Mien and Tung Mung because they received a *de minimis* dumping margins of 0.98 and a zero percent, respectively.[28] Ta Chen, a Taiwan exporter still subject to the antidumping duty orders, ***.[29]

In 1998, the last full year for which data were collected during the original investigations, total U.S. imports from the eight subject countries accounted for *** percent of apparent U.S. consumption. At the time of the Commission's determinations from the original investigations, imports from the three countries subject to the current reviews combined accounted for approximately *** percent of apparent U.S. consumption (Japan accounted for *** percent, Korea *** percent, and Taiwan *** percent).[30] As noted above, POSCO was never subject to the countervailing duty order and the antidumping duty order on it was revoked. In 1998, POSCO accounted for *** percent of U.S. imports of stainless steel sheet and strip from Korea. Excluding POSCO, U.S. imports of stainless steel sheet and strip from Korea accounted

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[26] For complete details on the products revoked from the antidumping duty order on stainless steel sheet and strip from Japan, see *Stainless Steel Sheet and Strip from Germany, Italy, Japan, Korea, Mexico, and Taiwan, Inv. Nos. 701-TA-382 and 731-TA-798-803 (Second Review)*, USITC Publication 4244, July 2011, Appendix E.

[27] *Amended Final Determination: Stainless Steel Sheet and Strip in Coils From the Republic of Korea; and Notice of Countervailing Duty Orders: Stainless Steel Sheet and Strip in Coils From France, Italy, and the Republic of Korea*, 64 FR 42923, August 6, 1999. POSCO was also excluded from the antidumping duty order. See "Section 129 proceedings" section.

[28] *Notice of Antidumping Duty Order; Stainless Steel Sheet and Strip in Coils From United Kingdom, Taiwan and South Korea*, 64 FR 40555, July 27, 1999; *Notice of Amended Final Determination in Accordance With Court Decision of the Antidumping Duty Investigation of Stainless Steel Sheet and Strip in Coils From Taiwan*, 69 FR 67311, November 17, 2004; and *Notice of Correction to the Amended Final Determination in Accordance With Court Decision in the Antidumping Duty Investigation of Stainless Steel Sheet and Strip in Coils From Taiwan*, 70 FR 17658, April 7, 2005.

[29] Staff telephone interview with ***. ***. Staff telephone interview with ***, July 21, 2017.

[30] See Appendix C, Summary Data Compiled in Prior Proceedings, "Table C-1; Certain Stainless Steel Sheet and Strip: Summary data concerning the U.S. market, 1996-1998."

for *** percent of apparent U.S. consumption in 1998, and countries subject to the current five-year reviews combined (excluding POSCO) accounted for *** percent.

Since the completion of the last reviews, the U.S. industry has experienced several changes that affected their operations.[31] In 2012, ThyssenKrupp Stainless USA ("ThyssenKrupp") began operations at its melt shop in it Calvert, Alabama facility. Before the end of the year, Outokumpu Oyj acquired ThyssenKrupp's stainless steel operations at this facility. However, in 2014, the three cold-milling mills in Calvert were not in operation for several months. In the first quarter of 2015, ATI completed commissioning a new hot-rolling processing facility that was slated to replace legacy equipment. However, from the second half of 2016 through early 2017, ATI locked out employees due to an impasse in contract renegotiations.

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 . . ..*

[31] Details of these changes are discussed in Part III.

(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 reviews that relates to the statutory criteria is presented throughout this report. A summary of trade and financial data for stainless steel sheet and strip as collected in the reviews is presented in appendix C. U.S. industry data are based on the questionnaire responses of four U.S. producers of stainless steel sheet and strip that are believed to have accounted for virtually all domestic production of stainless steel sheet and strip in 2016. U.S. import data and related information are based on Commerce's official import statistics, proprietary Customs data, and the questionnaire responses of 19 U.S. importers of stainless steel sheet and strip that are believed to have accounted for *** percent of the limited quantity of U.S. imports of stainless steel sheet and strip from subject sources and 51.9 percent of nonsubject sources during 2016. Foreign industry data and related information are based on the questionnaire responses of one producer of stainless steel sheet and strip in Japan, one producer of stainless steel sheet and strip in Korea, and secondary source material for all three subject countries. Responses by U.S. producers, importers, purchasers, and foreign producers of stainless steel sheet and strip to a series of questions concerning the significance of the existing antidumping and countervailing duty orders and the likely effects of revocation of such orders are presented in appendix D.

COMMERCE'S REVIEWS

Administrative reviews

Since completion of the last five-year reviews, Commerce has not conducted an administrative review for the subject orders. The below tabulation presents Commerce's results of its last administrative reviews.

Country – type of order	Period of review	Producer or exporter	Margin (percent)
Japan – antidumping	07/01/2007-6/30/2008	Hitachi Cable Ltd.	0.00
		Nippon	0.54
Korea – antidumping	07/01/2004-6/30/2005	Boorim Corporation	58.79
		Dae Kyung Corporation	58.79
		DaiYanh Metal Co., Ltd.	3.77
		Dine Trading Co., Ltd.	58.79
		Doko Co., Ltd.	58.79
Korea – countervailing duty	CY 2005	Dai Yang Metal Co., Ltd.	0.03 *de minimis*
Taiwan - antidumping	07/01/2008-6/30/2009	Chia Far	0.0
		Chain Chon Industrial Co., Ltd.	4.30
		Chien Shing Stainless Co.	4.30
		China Steel Corporation	([1])
		Dah Shi Metal Industrial Co., Ltd.	4.30
		Goang Jau Shing Enterprise Co., Ltd.	4.30
		KNS Enterprise Co., Ltd.	4.30
		Lih Chan Steel Co., Ltd.	4.30
		Maytun International Corp.	4.30
		PFP Taiwan Co., Ltd.	4.30
		Shih Yuan Stainless Steel Enterprise Co., Ltd.	4.30
		Ta Chen Stainless Pipe Co., Ltd.	4.30
		Tang Eng Iron Works	4.30
		Tibest International Inc.	4.30
		Tung Mung Development Co., Ltd. (aka Chung Hung Steel Co., Ltd.)[2]	4.30
		Yieh Mau Corp.	4.30
		Yieh Trading Corp.	4.30
		Yieh United Steel Corp.	4.30

[1] No shipments of sales subject to this review.
[2] This rate applies to shipments of stainless steel sheet and strip produced by Tung Mung Development Co. Ltd. in Taiwan and exported from Taiwan to the United States by Ta Chen Stainless Pipe Co., Ltd.

Scope inquiry reviews

Commerce has completed two scope rulings with respect to stainless steel sheet and strip from Japan, Korea, and Taiwan since the issuance of the orders. On August 15, 2005, Commerce determined that suspension foil, other than that specifically described in the scope exclusion language, is subject to the antidumping duty order on stainless steel sheet and strip in coils from Japan, Korea, and Taiwan.[32]

On July 22, 2015, Commerce determined that American BOA, Inc.'s ("ABI") precision strip products are within the scope of the order because they possess all of the essential physical characteristics of subject stainless steel sheet and strip in coils.[33]

Section 129 proceedings

On November 4, 2011, Commerce issued a determination as requested by the U.S. Trade Representative under Section 129 of the Uruguay Round Agreements Act. In response to a challenge by the Government of Korea before the World Trade Organization, Commerce issued a determination regarding the offsetting of dumped comparisons with non-dumped comparisons of average-to-average export price and normal value. Based on a recalculated margin of zero, effective November 16, 2011, Commerce revoked the antidumping duty order with respect to POSCO.[34] Commerce also recalculated the "All others" margin to 19.60 percent.[35]

Company exclusions

Korean producer POSCO was excluded from the countervailing duty order on stainless steel sheet and strip from Korea because it received a *de minimis* net subsidy rate of 0.65

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[32] Issues and Decision Memorandum for the Final Results of Expedited Second Sunset Reviews of the Antidumping Duty Orders on Certain Stainless Steel Sheet and Strip in Coils from Germany, Japan, the Republic of Korea, and Taiwan, September 30, 2010.

[33] *Notice of Scope Rulings*, 81 FR 14421, March 17, 2016.

[34] POSCO was one of three mandatory respondents in Commerce's original antidumping duty investigation on imports of stainless steel sheet and strip from Korea. Commerce calculated an antidumping duty margin of 12.12 percent for POSCO, a *de minimis* margin for Inchon, 58.79 percent for Taihan, and 12.12 for all others. *Certain Stainless Steel Sheet and Strip From France, Germany, Italy, Japan, The Republic of Korea, Mexico, Taiwan, and The United Kingdom, Inv. Nos. 701-TA-380-382 and 731-TA-797-804 (Final)*, USITC Publication 3208, July 1999, table I-2.

[35] *Notice of Implementation of Determination Under Section 129 of the Uruguay Round Agreements Act and Revocation of the Antidumping Duty Order on Stainless Steel Plate in Coils From the Republic of Korea; and Partial Revocation of the Antidumping Duty Order on Stainless Steel Sheet and Strip in Coils From the Republic of Korea*, 76 FR 74771, December 1, 2011.

percent *ad valorem*.[36] Korean producer Inchon was excluded from the antidumping duty order on stainless steel sheet and strip from Korea because it received a zero dumping margin. Taiwan producers Chang Mien and Tung Mung are excluded from the antidumping duty order on stainless steel sheet and strip from Taiwan because they received a *de minimis* dumping margin of 0.98 percent and a zero dumping margin, respectively.[37]

Duty absorption findings

Commerce has made one duty absorption finding to date concerning stainless steel sheet and strip in coils from Taiwan. In the fourth administrative review, covering the period July 1, 2002 through June 30, 2003, Commerce determined that Chia Far had absorbed antidumping duties for all U.S. sales through its affiliated importer.[38]

Changed circumstances reviews

Since the second five-year reviews, Commerce has conducted one changed circumstances review with respect to the antidumping duty order on Japan. In February 2014, Commerce found that Hitachi Metals is the successor-in-interest to the merger of Hitachi Metals and Hitachi Cable Ltd. for purposes of determining antidumping duty cash deposits and liabilities.[39]

Anti-circumvention findings

Since the second five-year reviews, there have been no anti-circumvention findings.

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[36] *Amended Final Determination: Stainless Steel Sheet and Strip in Coils From the Republic of Korea; and Notice of Countervailing Duty Orders: Stainless Steel Sheet and Strip in Coils From France, Italy, and the Republic of Korea*, 64 FR 42923, August 6, 1999. POSCO was also excluded from the antidumping duty order. See "Section 129 proceedings" section.

[37] *Notice of Antidumping Duty Order; Stainless Steel Sheet and Strip in Coils From United Kingdom, Taiwan and South Korea*, 64 FR 40555, July 27, 1999; *Notice of Amended Final Determination in Accordance With Court Decision of the Antidumping Duty Investigation of Stainless Steel Sheet and Strip in Coils From Taiwan*, 69 FR 67311, November 17, 2004; and *Notice of Correction to the Amended Final Determination in Accordance With Court Decision in the Antidumping Duty Investigation of Stainless Steel Sheet and Strip in Coils From Taiwan*, 70 FR 17658; April 7, 2005.

[38] *Stainless Steel Sheet and Strip in Coils From Taiwan; Final Results and Partial Rescission of Antidumping Administrative Duty Review,* 70 FR 7715, February 15, 2005.

[39] *Stainless Steel Sheet and Strip in Coils From Japan: Final Results of Antidumping Duty Changed Circumstances Review*, 79 FR 10096, February 24, 2014.

Five-year reviews

Commerce has issued the final results of its expedited reviews with respect to Japan, Korea, and Taiwan.[40] Table I-3 presents the countervailable subsidy margins for producers/exporters of stainless steel sheet and strip in Korea for the original investigations, first reviews, second reviews, and third reviews. Table I-4 presents the antidumping duty margins calculated by Commerce in its original investigations, first reviews, second reviews, and third reviews.

Commerce's notices of results of its countervailing and antidumping duty five-year reviews are presented in tables I-3 and I-4, respectively. In its separate proceedings administering the antidumping and countervailing duty orders on Korea, Commerce has made separate determinations concerning whether INI and Sammi -- predecessor firms to Hyundai Steel -- were separate legal entities. Table I-3, shows that Korean producer Hyundai Steel was formerly known as INI/BNG, which was formerly Inchon Iron & Steel Co., Ltd. During the administrative review of the countervailing duty order covering the year 2001, Commerce found that cross-ownership existed between INI and Sammi Steel Co. and assigned a single rate (0.54 percent) for both companies.[41] Table I-4, which summarizes the results for the antidumping five-year reviews, references Inchon Iron & Steel Co., Ltd. In 2002, Commerce addressed whether cross-ownership existed between INI (the successor-in-interest to Inchon and the predecessor to Hyundai Steel) and Sammi Steel Co. (the predecessor to BNG), finding that INI and Sammi remained separate legal entities.[42] Commerce has not subsequently addressed this issue in the context of the antidumping duty order on subject imports from Korea.

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[40] *Stainless Steel Sheet and Strip in Coils From the Republic of Korea: Final Results of Expedited Sunset Review of the Countervailing Duty Order*, 81 FR 78111, November 7, 2016 and *Stainless Steel Sheet and Strip in Coils From Japan, the Republic of Korea, and Taiwan: Final Results of the Expedited Sunset Reviews of the Antidumping Duty Orders*, 81 FR 78114, November 7, 2016.

[41] 69 FR 2113, January 14, 2004 as amended by 69 FR 7419, February 17, 2004.

[42] *Stainless Steel Sheet and Strip in Coils from the Republic of Korea: Notice of Final Results of Changed Circumstances Antidumping Duty Administrative Review,* 67 FR 43583, June 28, 2002.

Table I-3

Stainless steel sheet and strip: Commerce's original, first, second, and third five-year review countervailable subsidy margins for producers/exporters, Korea

Producer/exporter	Original margin (percent)	First five-year review margin (percent)	Second five-year review margin (percent)	Third five-year review margin (*percent*)
			Korea[1]	
Inchon	2.64	--	--	--
INI/BNG[2]	--	0.54	--	--
Hyundai Steel Company (formerly known as INI/BNG and as Inchon)[3]	--	--	0.54	--
INI/BNG (formerly Inchon and now known as Hyundai)[3]	--	--	--	0.54
DaiYang	1.58	--	--	--
Dai Yang Metal Company	--	0.67	0.67	--
DMC	--	--	--	0.67
Taihan	7.00	4.64	4.64	4.64
Sammi	59.30	--	--	--
All others	1.68	0.63	0.63	0.63

Note 1.—"- -" indicates that the specific firm name did not appear in the referenced Commerce *Federal Register* notice.

Note 2.–The Korean producer POSCO was excluded from the countervailing duty order because it received a *de minimis* net subsidy rate of 0.65 percent ad valorem.

[1] Countervailing duty order, 64 FR 42923, August 6, 1999; final results of Commerce's first review, 69 FR 75513, December 17, 2004; final results of Commerce's second review, 75 FR 62101, August 7, 2010; final results of Commerce's third review, 81 FR 78111, November 7, 2016.

[2] During the administrative review covering calendar year 2001, Commerce determined that Inchon had changed its name to INI and that Sammi had changed its name to BNG. It also determined that cross-ownership existed between INI and Sammi during the period of review and assigned a single rate to INI/BNG. 69 FR 2113, January 14, 2004.

[3] Hyundai Steel Company - In a changed circumstances review completed in 2007, Commerce determined that Hyundai Steel Company was the successor-in-interest to INI. 72 FR 12767, March 19, 2007.

Source: Cited Federal Register notices.

Table I-4
Stainless steel sheet and strip: Commerce's original, first, second, and third five-year review antidumping duty margins for producers/exporters, by subject country

Producer/exporter	Original margin (percent)	First five-year review margin (percent)	Second five-year review margin (percent)	Third five-year review margin (*percent*)
Japan[1]				
Kawasaki Steel Corporation	40.18	40.18	--	[2]
Kawasaki Steel Corporation/JFE Steel Corporation	--	--	40.18	[2]
Nippon Steel Corporation	57.87	57.87	57.87	[2]
Nisshin Steel Co., Ltd.	57.87	57.87	57.87	[2]
Nippon Yakin Kogyo	57.87	57.87	57.87	[2]
Nippon Metal Industries	57.87	57.87	57.87	[2]
All others	40.18	40.18	40.18	57.89
Korea[3]				
Pohang Iron & Steel Co., Ltd.	12.12	--	--	[2]
POSCO	--	2.49	2.49[4]	Excluded
Taihan Electric Wire Co., Ltd.	58.79	58.79	--	[2]
Taihan	--	--	58.79	[2]
Inchon Iron & Steel Co., Ltd.[5]	0.00	Excluded	Excluded	Excluded
Daiyang (DMC)	--	5.44	5.44	[2]
All others	12.12	2.49	2.49	58.79
Taiwan[6]				
Tung Mung/Ta Chen	15.40	15.40	15.40	[2]
Tung Mung[7]	14.95	Excluded	Excluded	Excluded
Chang Mien	0.00	Excluded	Excluded	Excluded
YUSCO/Ta Chen	34.95	36.44	36.44	[2]
YUSCO	34.95	21.00	21.10	[2]
All others	12.61	12.61	12.61	21.10

Note.—"- -" indicates that the specific firm name did not appear in the referenced Commerce *Federal Register* notice.

[1] Antidumping duty order, 64 FR 40565, July 27, 1999; final results of Commerce's first review, 69 FR 62250, October 25, 2004; final results of Commerce's second review, 75 FR 62104, October 7, 2010; final results of Commerce's third review, 81 FR 78114, November 7, 2016.
[2] Commerce reported the final results of its sunset reviews as follows: "Pursuant to sections 751(c)(1) and 752(c)(1) and (3) of the Act, the Department determines that revocation of the AD Orders on stainless steel sheet and strip in coils from Japan, Korea, and Taiwan would be likely to lead to continuation or recurrence of dumping up to" the figures presented above for each country.
[3] Antidumping duty order, 64 FR 40555, July 27, 1999; final results of Commerce's first review, 69 FR 67892, November 22, 2004; final results of Commerce's second review, 75 FR 62104, October 7, 2010; final results of Commerce's third review, 81 FR 78114, November 7, 2016.

Notes continued on next page.

[4] Pursuant to a section 129 proceeding, POSCO was excluded from the antidumping duty order based on a recalculated margin of zero. In addition, Commerce recalculated the "All others" margin to 19.60 percent, effective November 16, 2011.
[5] In a changed circumstances review completed in 2002, Commerce determined that INI was the successor-in-interest to Inchon and that INI and Sammi remained separate legal entities. 67 FR 43583, June 28, 2002. In a changed circumstances review completed in 2006, Commerce determined that Hyundai Steel Company was the successor-in-interest to INI. 71 FR 37906, March 10, 2006.
[6] Antidumping duty order, 64 FR 40555, July 27, 1999; final results of Commerce's first review, 69 FR 67892, November 22, 2004; final results of Commerce's second review, 75 FR 62104, October 7, 2010; final results of Commerce's third review, 81 FR 78114, November 7, 2016.
[7] Tung Mung was excluded from the antidumping duty order as a result of an amended final determination, effective June 8, 1999. *Notice of Amended Final Determination in Accordance With Court Decision of the Antidumping Duty Investigation of Stainless Steel Sheet and Strip in Coils From Taiwan*, 69 FR 67311, November 17, 2004; and Notice of Correction to the Amended Final Determination in Accordance With Court Decision in the Antidumping Duty Investigation of Stainless Steel Sheet and Strip in Coils From Taiwan, 70 FR 17658, April 7, 2005

Source: Cited *Federal Register* notices.

THE SUBJECT MERCHANDISE

Commerce's scope

Commerce has defined the scope of the orders as follows:

> *The products covered by these reviews are stainless steel sheet and strip in coils. Stainless steel is an alloy steel containing, by weight, 1.2 percent or less of carbon and 10.5 percent or more of chromium, with or without other elements. The subject sheet and strip is a flat-rolled product in coils that is greater than 9.5 mm in width and less than 4.75 mm in thickness, and that is annealed or otherwise heat treated and pickled or otherwise descaled. The subject sheet and strip may also be further processed (i.e., cold-rolled, polished, aluminized, coated, etc.), provided that it maintains the specific dimensions of sheet and strip following such processing.*
>
> *Excluded from the scope of these Orders are the following: (1) sheet and strip that is not annealed or otherwise heat treated and pickled or otherwise descaled, (2) sheet and strip that is cut to length, (3) plate (i.e., flat-rolled stainless steel products of a thickness of 4.75 mm or more), (4) flat wire (i.e., cold-rolled sections, with a prepared edge, rectangular in shape, of a width of not more than 9.5 mm), and (5) razor blade steel, (6) flapper valve steel, (7) suspension foil, (8) certain stainless steel foil for automotive catalytic converters, (9) permanent magnet iron-chromium-cobalt alloy stainless strip, (10) certain electrical resistance ally steel, (11) certain martensitic precipitation-hardenable stainless steel, and (12) three specialty stainless steels typically used in certain industrial blades and surgical and medication instruments.*[43]

[43] *Memorandum from Christian Marsh to Paul Piquado: Issues and Decision Memorandum for the Final Results of Expedited Third Sunset Reviews of the Antidumping Duty Orders on Certain Stainless Steel Sheet and Strip in Coils from Japan, the Republic of Korea, and Taiwan*, October 31, 2016.

Tariff treatment

Stainless steel sheet and strip is classifiable in the Harmonized Tariff Schedule of the United States ("HTS") and reported for statistical purposes under the following statistical reporting numbers:

7219.13.00.31; 7219.13.00.51, 7219.13.00.71, 7219.13.00.81, 7219.14.00.30, 7219.14.00.65, 7219.14.00.90, 7219.32.00.05, 7219.32.00.20, 7219.32.00.25, 7219.32.00.35, 7219.32.00.36, 7219.32.00.38, 7219.32.00.42, 7219.32.00.44, 7219.33.00.05, 7219.33.00.20, 7219.33.00.25, 7219.33.00.35, 7219.33.00.36, 7219.33.00.38, 7219.33.00.42, 7219.33.00.44, 7219.34.00.05, 7219.34.00.20, 7219.34.00.25, 7219.34.00.30, 7219.34.00.35, 7219.35.00.05, 7219.35.00.15, 7219.35.00.30, 7219.35.00.35, 7219.90.00.10, 7219.90.00.20, 7219.90.00.25, 7219.90.00.60, 7219.90.00.80, 7220.12.10.00, 7220.12.50.00, 7220.20.10.10, 7220.20.10.15, 7220.20.10.60, 7220.20.10.80, 7220.20.60.05, 7220.20.60.10, 7220.20.60.15, 7220.20.60.60, 7220.20.60.80, 7220.20.70.05, 7220.20.70.10, 7220.20.70.15, 7220.20.70.60, 7220.20.70.80, 7220.20.80.00, 7220.20.90.30, 7220.20.90.60, 7220.90.00.10, 7220.90.00.15, 7220.90.00.60, and 7220.90.00.80.

Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection. The general rate of duty is "free."

THE PRODUCT

Description and applications[44]

The stainless steel sheet and strip subject to these reviews are flat-rolled stainless steel products in coils, less than 4.75 mm in thickness, at least 9.5 mm in width, that are annealed (heat-treated) and pickled (subjected to an acid rinse to remove surface scale).[45]

Sheet and strip are distinguished from one another by width. Sheet is 24 inches or greater in width; strip is less than 24 inches in width (table I-5). Stainless steel is a low carbon steel which contains 10.5 percent or more chromium by weight. The addition of chromium gives the steel its corrosion resisting properties. Other alloying elements can be added to impart various characteristics, but all stainless steels contain chromium at a minimum.

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[44] Unless otherwise noted, information in this section was obtained from *Stainless Steel Sheet and Strip from China, Inv. Nos. 701-TA-7 and 731-TA-1312 (Final)*, USITC Publication 4676, March 2017, pp. I-10 - I-18.

[45] Hot-rolled black band ("HRB"), the intermediate stainless flat-rolled product produced after stainless steel slab is rolled but before the rolled material is annealed and pickled, is not within the product scope.

Table I-5

Stainless steel flat products: Various forms and their definitions

Item	Definition	Relation to product scope
Sheet	Under 3/16 inches (4.75 mm) in thickness and 24 inches (610 mm) and over in width.	Sheet in coils is within the product scope.
Strip	Under 3/16 inches (4.75 mm) in thickness and is under 24 inches (610 mm) in width.	Strip in coils is within the product scope if it is at least 9.5 mm (0.374 inches) in width.
Foil	Maximum thickness of .005 inches.	Foil in coils, except for specific exclusions in the scope definition, is within the product scope.
Plate	More than ten inches (254 mm) wide with a thickness ranging from 3/16 of an inch (4.75 mm) and over.	Plate is outside of the product scope.

Source: Specialty Steel Industry of North America, "Stainless Steel Overview: Definition of Terms," http://www.ssina.com/overview/glossary.html, retrieved June 14, 2017.

There are many different stainless steel alloys, each with its own characteristics. The broad metallurgical groupings are austenitic, ferritic, martensitic, precipitation-hardening, and duplex (table I-6). The precipitation-hardening and duplex types are less widely used than the others. Each alloying element imparts certain characteristics to the steel (table I-7). The most commonly used stainless steels are grades 304 and 316.[46]

[46] Specialty Steel Industry of North America, "Stainless Steel Overview: Alloy Classifications," http://www.ssina.com/overview/alloy-families.html, retrieved June 14, 2017.

Table I-6

Stainless steel: Stainless steel classes and their most important grades

Class	Composition	Characteristics	Common applications
Austenitic	Iron-Chromium-Manganese-small amounts of nickel Series 200 grades – these grades have higher levels of manganese and much lower levels of nickel than the series 300 grades. These grades substitute manganese for some of the nickel compared to series 300 stainless steels. Iron-Chromium-Nickel (series 300 grades) Molybdenum is added to some grades for additional resistance to chlorides. In some alloys, nitrogen may be added to improve strength and corrosion resistance **Commonly used grades:** 300-series grades; 301, 304, and 316. Grades 304 and 316 are the most widely-used stainless steel grades.	Excellent corrosion resistance Non-magnetic Good high and low temperature mechanical properties Excellent formability and weldability All common finishes can be applied	Cookware, Flatware, Automotive wiper arms, Hardware, hinges, Entry Doors, Chemical processing equipment, Storage tanks, Chemical transportation tanks, Food processing equipment, Oil refining equipment
Ferritic	Iron-Chromium **Commonly used grades:** 409 and 430	Good corrosion resistance Magnetic Limited temperature use Can be polished	Automotive exhaust systems, Fins for heater tubes, Smoke control ductwork, Transformer and capacitor cases, Architectural applications (interior), Automotive trim, Cooking utensils, Food processing equipment
Martensitic	Iron-Chromium-Carbon **Commonly used grades:** 410, 420 and 440	Adequate corrosion resistance Magnetic Somewhat limited temperature use Limited weldability	Fasteners, pump shafts, turbine blades, surgical instruments, cutlery
Precipitation Hardening Steels	Iron-Chromium-Nickel Some grades may contain other elements such as molybdenum, aluminum, copper, rare earth elements and nitrogen.	Good corrosion resistance Characterized by ease of fabrication	Valves, gears, and petrochemical equipment
Duplex	Iron-Chromium-Nickel-Nitrogen Combine both the austenitic and ferritic metallurgical structures Some grades also contain molybdenum	Magnetic Offer increased tensile and yield strength over the other categories More resistant to stress corrosion cracking than austenitic, yet tougher than ferritic alloys.	Pipelines, pressure shafting, structural components, and industrial tanks

Source: Special Steel Industry of North America, "Stainless Steel Overview: Alloy Classifications," http://www.ssina.com/overview/alloy-families.html, "Stainless Steel Overview: Applications," http://www.ssina.com/overview/sheetstrip.html, retrieved June 14, 2017.

Table I-7
Stainless steel sheet and strip: Properties imparted by common alloying elements

Alloying element	Properties imparted
Chromium	-Resists rust
Nickel	-Increases ductility -Increases toughness -Increases corrosion resistance to acids -Creates non-magnetic structure
Molybdenum	-Increases pitting and crevice corrosion resistance -Increases resistance to chlorides
Manganese	-Substitutes for nickel is some grades
Nitrogen	-Increases strength and corrosion resistance in austenitic and duplex steels
Carbon	-Usually kept low. Used in martensitic grades to increase strength and hardness.

Source: Special Steel Industry of North America, "Stainless Steel Overview: Alloying Elements Summary," http://www.ssina.com/overview/alloyelements_summary.html, retrieved June 14, 2017.

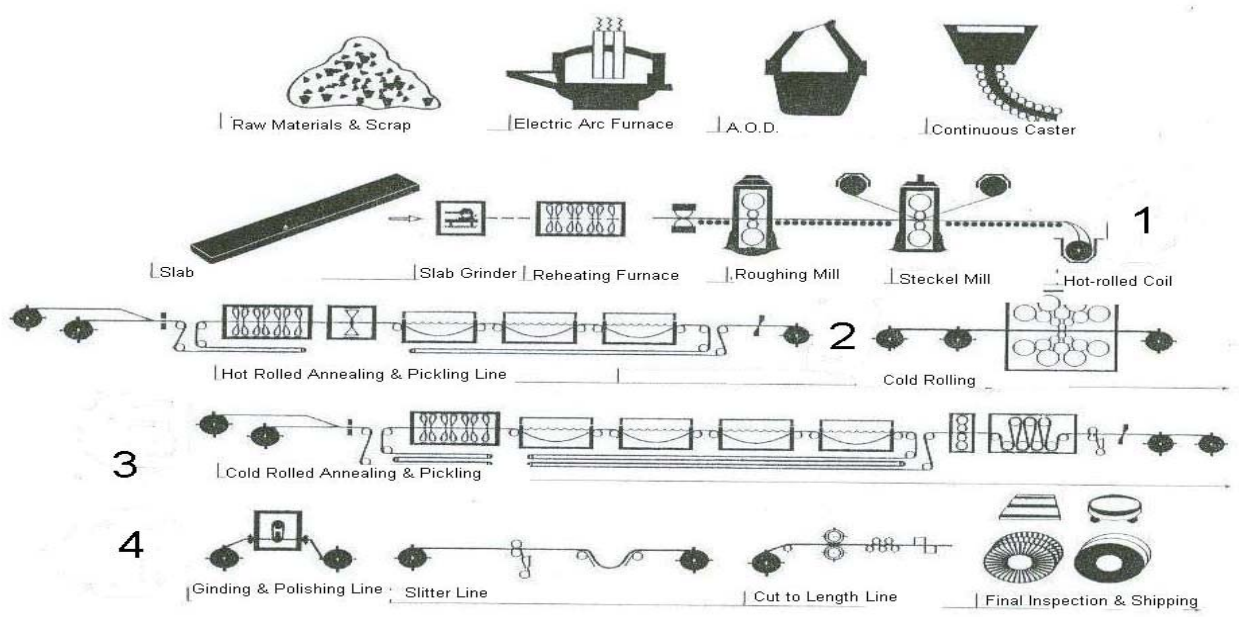
Many consumer and industrial applications utilize stainless steel sheet and strip products, especially where corrosion resistance, heat resistance, or stainless steel's aesthetic characteristics are desired. For example, the automotive industry uses sheet and strip to manufacture trim, exhaust- and emission-control systems, and wheel covers. The pipe and tube industry uses slit coil as its raw material and produces pipes and tubes by welding the lengthwise edges together. Sheet and strip are also used by the chemical and construction industries, as well as by appliance and industrial equipment manufacturers, among many other applications.

Manufacturing processes[47]

The basic steps in stainless steel sheet and strip production regardless of grade or final width and thickness are: (1) stainless steel production; (2) the casting of slabs, a semifinished flat-rolled product; (3) hot-rolling the slabs; and, if specified, (4) cold-rolling the hot-rolled products; and, if specified (5) finishing (figure 1-1). U.S. producers perform all of these steps.

[47] Unless otherwise noted, information in this section was obtained from *Stainless Steel Sheet and Strip from China, Inv. Nos. 701-TA-7 and 731-TA-1312 (Final)*, USITC Publication 4676, March 2017, pp. I-10 - I-18.

Figure I-1
Stainless steel sheet and strip: Production process



1 Stainless steel coil at this point is not yet annealed and pickled. The coil at this point is hot-rolled black band and is not within the product scope.
2 After the stainless steel is hot-rolled annealed and pickled it is within the product scope. The product at this stage is also known as white band. Stainless steel coil can be sold at this point, be moved to finishing operations such as slitting, cut to length, or continue in the process to cold rolling. The majority of stainless steel sheet and strip continues processing through the cold-rolled stage.
3 If bright annealing is required, it takes place at this stage instead of the usual pickling and annealing. With bright annealing the pickling step is eliminated.
4 If desired, the coil can undergo finishing operations. Although a cut-to-length line is shown in the illustration, cut-to-length stainless steel sheet and strip is outside the product scope of these reviews.

Source: North American Stainless, *Flat Products Brochure*, p. 14, modified by Commission staff, http://www.northamericanstainless.com/wp-content/themes/northamericanstainless/pdf/NAS_Flat_Products_Brochure.pdf , retrieved June 14, 2017.

Stainless steel production

Mills produce stainless steel by melting stainless or other steel scrap and alloying elements such as chromium, nickel, and molybdenum (depending on the stainless steel grade) in an electric arc furnace. The resultant liquid steel is tapped into a furnace ladle and transferred to an argon-oxygen decarburization ("AOD") vessel for further refinement (also known as secondary steelmaking) in which oxygen, gradually replaced by argon, is blown

through the molten steel, to eliminate impurities.[48] Secondary steelmaking requires frequent testing to determine the precise amount of ferroalloys to be added in order to produce steel with specific properties according to end-use applications. The quantity and composition of inputs is particularly important in the production of stainless steel as raw materials such as scrap and the alloying elements nickel, molybdenum, and chromium account for the majority of the total cost. After achieving the desired chemical composition, the molten stainless steel is transferred in a preheated transfer ladle to the continuous slab caster for solidification into slabs, the wide semifinished products from which flat-rolled products are rolled.

Slab casting

The molten stainless steel is poured into a tundish (reservoir dam) which controls the flow into the top of the mold of the continuous casting machine. Solid surfaces form as the molten stainless steel passes through and out the open bottom of the mold, and the slab solidifies as it slowly descends through the caster. The resulting slabs are generally 5 to 8 inches thick and up to 100 inches wide, depending on mill capability and the flat-rolled product that will be produced from the slab. The continuous slab is cut into lengths of up to about 35 feet for further processing. The length is limited by the mill's reheating and/or rolling capability. The slab is then inspected and conditioned by grinding the surface to remove scale and defects, in preparation for rolling in coil form on the hot-strip mill. Before it enters the rolling mill, the slab is charged in a gas-fired reheating furnace to a rolling temperature of 2,250-2,300 degrees Fahrenheit. After reaching the appropriate temperature, the slab exits the furnace and enters the hot-strip mill.

Hot rolling the slabs

For a mill designed primarily to produce stainless steel, the roughing mill is generally a reversing mill in which the slabs are rolled to a thickness of about 1 inch in a succession of rolling passes. The finishing mill is either a reversing mill of the Steckel type, which is equipped to coil the bands after each pass in order to conserve space and temperature, or a continuous mill made up of a series of individual roll stands that may be hundreds of yards long and with the bands passing continuously through the stands in one direction only.[49] The bands continue on to a coiler, where they are wrapped into coils. The coils (whether destined to become sheet or strip) are called hot-rolled black (HRB) bands, due to the surface layer of dark-colored oxide formed as a result of exposure to oxygen at high temperatures.

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[48] An alternate method of removing impurities from molten stainless steel is to use vacuum oxygen decarburization ("VOD"), in which the molten metal is placed in a vacuum while oxygen is bubbled through it.

[49] Because the slabs are fed into the mill at an elevated temperature, the mill is known as a "hot-strip mill."

Annealing

The rolling process creates internal stresses and hardens the steel. Annealing, a form of heat treatment, relieves the stresses and softens the steel. Therefore, after cooling, the hot-rolled black band passes through a continuous furnace in which it is heated to annealing temperatures, about 2,000 degrees Fahrenheit depending on the stainless steel grade, and then quickly cooled. The heat treatment creates a dark colored oxide scale on the surface of the steel. The band next passes through a grit-blasting machine in which the scale from the hot mill and the annealing furnace is broken up by using small particles of steel grit thrown at high speed by centrifugal wheels.

Pickling

After annealing and grit blasting, the band undergoes pickling, to remove the dark oxide scale and surface defects, and to impart corrosion resistance. The band passes through pickling tanks which usually contain mixtures of nitric and hydrofluoric acids to descale the steel,[50] followed by a water rinse. Annealing and pickling are usually performed on a continuous process line, although they can be performed in separate units. The product at this point is considered white coil or white band, or hot-rolled annealed and pickled ("HRAP") coil or HRAP band, and can be shipped in this condition.

Cold rolling

Cold-rolled stainless sheet and strip is manufactured by transferring HRAP coil to a cold-rolling mill to reduce the product's thickness by 10 to 95 percent. Depending on the desired thickness of the end product, multiple passes through the cold-rolling mill may be required to achieve the necessary reduction. As in hot-rolling, the material hardens after a certain amount of cold-rolling. Further cold-rolling becomes difficult at this point so annealing (to soften the material) and pickling, several times may be necessary to achieve the desired final thickness. The final product is considered cold-rolled, annealed, and pickled coil. The large majority of stainless steel sheet and strip is sold as cold-rolled product.[51] If specified, after cold rolling the coil can be bright annealed. In bright annealing, the coil is placed in a special furnace that heats the coil in an oxygen-free reducing atmosphere. Bright annealing does not create the dark oxide

[50] The European Stainless Steel Development Association, *Pickling and Passivating Stainless Steel,* second edition 2007, p. 3, http://www.worldstainless.org/process_and_production/surface_treatment, retrieved June 14, 2017.

[51] More than 85 percent of HRAP is subsequently cold rolled according to U.S. producer questionnaire responses (see Part III discussion under *U.S. Production, capacity, and capacity utilization*).

scale on the coil and so the pickling step is unnecessary. This type of annealing produces a mirror-like appearance and is often used when a highly reflective surface is desired.[52]

Finishing

Stainless steel sheet and strip may undergo additional finishing operations. For example, once the final anneal/pickle/cold-roll sequence is complete, the steel may undergo a temper roll (skin pass) to improve surface condition. However, this step does not involve any further thickness reduction in the material. A finish may also be applied to the product. As shown in table I-8, stainless steel sheet and strip are available in a number of finishes, including "rolled-on" embossing, etching, special surface mechanical treatment to provide, for example, perforations, electromechanical coloring and plating.[53]

Table I-8
Stainless steel sheet and strip: Standard finishes

Finish designator	Description
No. 1	Rough, dull finish that results from hot rolling
No. 2B	Bright finish with some reflectivity. It is a general purpose finish used as is, or it is used as a basis for subsequent polished finishes.
No. 2D	Dull finish generally used where the surface appearance is of little concern.
Bright Annealed (BA or 2BA)	Mirror like appearance but may have some cloudiness and other imperfections. A finish that is designated "BA" has only been bright annealed. A finish that is designated "2BA" has been bright annealed and then passed between highly polished rolls. A minimal amount of roll pressure (skin pass) is applied. The process improves flatness and finish uniformity but does not significantly decrease thickness. Bright annealed stainless is sometimes buffed to attain a more mirror-like finish.
No. 4	Polished bright surface with reasonable reflectivity, although it contains visible "grit lines" which prevent mirror reflection.
No. 6	Dull satin finish with less reflectivity than a No. 4.
No. 7	Highly reflective surface finish but still maintains some light "grit" lines.
No. 8	Reflective standard finish with a mirror-like reflectivity

Source: Specialty Steel Industry of North America*, Designer Handbook: Stainless Steel Primer*, p. 2, http://www.ssina.com/publications/primer.html, retrieved June 14, 2017.

[52] NAS began running a new 20-roll cold mill and bright annealing line in January 2017 and began test rolling its first stainless coils on the new equipment. Kusic, Sam*, Iron and Steel Technology* "Developments in the North American Iron and Steel Industry — 2016," April 2017, Association of Iron and Steel Technology.

[53] Specialty Steel Industry of North America, *Designer Handbook: Special Finishes for Stainless Steel*, http://www.ssina.com/publications/spe_fin.html, retrieved June 14, 2017.

Sheet and strip may also be edge-trimmed, slit, or cut-to-length. Edge condition is often more important for strip than for sheet. Strip is produced with various edge specifications: (1) mill edge (as produced, condition unspecified); (2) No. 1 edge (edge-rolled, rounded, or square); (3) No. 3 edge (as-slit); or (4) No. 5 edge (square edge produced by rolling or filing after slitting). Mill edge is the least expensive edge condition and is adequate for many purposes. No. 1 edge provides improved width tolerance over mill edge plus a cold-rolled edge condition; rounded edges are preferred for applications requiring the lowest degree of stress concentration at corners. No. 3 and No. 5 edges give progressively better width tolerance and squareness over No. 1 edge.[54]

DOMESTIC LIKE PRODUCT ISSUES

In its original determinations and its full first and second five-year review determinations, the Commission defined the domestic like product as certain stainless steel sheet and strip in coils, coextensive with Commerce's scope.[55] In its notice of institution for these reviews, the Commission solicited comments from interested parties regarding the appropriate domestic like product. According to their response to the notice of institution, the domestic producers agreed with the Commission's definition.[56] Japanese respondent interested parties tentatively agreed with the definition of the domestic like product, but reserved the right to comment further.[57] The Korean respondent interested party did not contest the definition of the domestic like product.[58] The domestic producers were the only party that provided comments on the Commission's draft questionnaires, which did not include any

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[54] ASM International*, ASM Specialty Handbook: Stainless Steels*, p. 39, 1994.

[55] *Certain Stainless Steel Sheet and Strip From France, Germany, Italy, Japan, The Republic of Korea, Mexico, Taiwan, and The United Kingdom, Inv. Nos. 701-TA-380-382 and 731-TA-797-804 (Final)*, USITC Publication 3208, July 1999, p. 8; *Stainless Steel Sheet and Strip From France, Germany, Italy, Japan, Korea, Mexico, Taiwan, and The United Kingdom, Inv. Nos. 701-TA-381-382 and 731-TA-797-804 (Review)*, USITC Publication 3788, July 2005, p. 6; and *Stainless Steel Sheet and Strip from Germany, Italy, Japan, Korea, Mexico, and Taiwan, Inv. Nos. 701-TA-382 and 731-TA-798-803 (Second Review)*, USITC Publication 4244, July 2011, p. 8. In the original investigations, the Commission rejected arguments that it should expand the domestic like product definition beyond the scope of the subject merchandise to include stainless steel plate. It also determined that one particular grade of stainless steel sheet and strip, Grade 409, was not a separate like product. *Certain Stainless Steel Sheet and Strip From France, Germany, Italy, Japan, The Republic of Korea, Mexico, Taiwan, and The United Kingdom, Inv. Nos. 701-TA-380-382 and 731-TA-797-804 (Final)*, USITC Publication 3208, July 1999, pp. 6-7.

[56] *Domestic Interested Parties' Response to the Notice of Institution,* August 1, 2016, p. 23.

[57] *Japanese Respondent Interested Parties' Response to the Notice of Institution*, August 1, 2016, p. 13.

[58] *Korean Respondent Interested Party's Response to the Notice of Institution*, August 1, 2016, p. 8.

comments on the domestic like product.[59] Furthermore, no party contested the definition of the domestic like product in their briefs during this proceeding.[60]

U.S. MARKET PARTICIPANTS

U.S. producers

During the original investigations, six integrated steel mills and seven re-rollers of stainless steel sheet and strip supplied the Commission with questionnaire responses and accounted for virtually 100 percent of U.S. production of stainless steel sheet and strip in 1998. Of the six integrated steel producers that participated in the original investigations, three still currently produce stainless steel sheet and strip, while the other three no longer exist as independent producers.[61] Current U.S. producer ATI purchased Washington Steel's production assets in 1999 and J&L Specialty Steel's stainless steel assets in 2004. Nucor Steel, which accounted for *** percent of U.S. production in 1998, ceased producing stainless steel in 2007. In the original investigations, *** had operating losses in 1998.[62]

In the Commission's first five-year reviews, five mills and two re-rollers supplied the Commission with data on their U.S. operations with respect to stainless steel sheet and strip. These firms accounted for 100 percent of U.S. production of stainless steel sheet and strip in 2004. In the second five-year reviews, the Commission issued producers' questionnaires to 11 firms, seven of which provided the Commission with information on their stainless steel sheet and strip operations. These firms were believed to account for all U.S. production of stainless steel sheet and strip in 2010.

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[59] *Domestic producers' comments on draft questionnaires*, March 17, 2017.

[60] See U.S. producers' prehearing brief, p. 3 and, generally, Hyundai BNG's prehearing brief.

[61] *Stainless Steel Sheet and Strip from France, Germany, Italy, Japan, Korea, Mexico, Taiwan, and the United Kingdom – Staff Report*, INV-W-131, June 18, 1999, table III-1, *Certain Stainless Steel Sheet and Strip from France, Germany, Italy, Japan, Korea, Mexico, Taiwan, and The United Kingdom, Inv. Nos. 701-TA-381-382 and 731-TA-797-804 (Review)*, USITC Publication 3788 (July 2005), table I-9, and *Stainless Steel Sheet and Strip from Germany, Italy, Japan, Korea, Mexico, and Taiwan, Inv. Nos. 701-TA-382 and 731-TA-798-803 (Second Review)*, USITC Publication 4244, July 2011, table III-1.

The three producers from the original investigations that still currently produce stainless steel sheet and strip are Armco (predecessor to AK Steel), ATI, and NAS. NAS, however, at the time of the original investigations, had just commenced operating as an integrated steel mill after it completed in late 1998 installation of its hot-rolling mill. Before that time, NAS's manufacturing operations consisted of processing and finishing (i.e., annealing and pickling, and cold-rolling) semi-finished hot bands. *Certain Stainless Steel Sheet and Strip from France, Germany, Italy, Japan, The Republic of Korea, Mexico, Taiwan, and The United Kingdom, Inv. Nos. 701- TA-380-382 and 731-TA-797-804 (Final)*, USITC Publication 3208, July 1999, p. III-3.

[62] ***. *Stainless Steel Sheet and Strip from France, Germany, Italy, Japan, Korea, Mexico, Taiwan, and the United Kingdom – Staff Report*, INV-W-131, June 18, 1999, table VI-2.

In these current proceedings, the Commission issued U.S. producers' questionnaires to four firms, all of which provided the Commission with information on their product operations. These firms are believed to account for all U.S. production of stainless steel sheet and strip in 2016. Presented in table I-9 is a list of current domestic producers of stainless steel sheet and strip and each company's position on continuation of the orders, production locations(s), related and/or affiliated firms, and share of reported production of stainless steel sheet and strip in 2016.

Table I-9
Stainless steel sheet and strip: U.S. producers, positions on orders, U.S. production locations, related and/or affiliated firms, and shares of 2016 reported U.S. production

Firm	Position on continuation of the order	Production location(s)	Share of production (percent)
AK Steel[1]	Supports all	Butler, PA Coshocton, OH Mansfield, OH Middletown, OH Rockport, IN Zanesville, OH	***
ATI[2]	Supports all	Brackenridge, PA Vandergrift, PA Louisville, OH New Bedford, MA Waterbury, CT	***
NAS[3]	Supports all	Ghent, KY Minooka, IL Pendergrass, GA Wrightsville, PA	***
Outokumpu[4]	Supports all	Calvert, AL	***
Total			***

[1] AK Steel is wholly owned by AK Steel Holding (U.S.A.).
[2] ATI is wholly owned by Allegheny Technologies, Inc. (U.S.A.). ATI is partnered with Chinese stainless steel sheet and strip producer Baosteel in Shanghai STAL Precision Stainless Co., Ltd., a Chinese producer of stainless steel sheet and strip.
[3] NAS is wholly owned by Acerinox SA (Spain), which has subsidiary firms producing stainless steel sheet and strip in Spain, South Africa, and Malaysia.
[4] Outokumpu is wholly owned by Outokumpu Americas, Inc. (U.S.A.) and its ultimate parent company is Outokumpu Oyj (Finland), which has stainless steel sheet and strip operations in Finland, Germany, Sweden, Mexico, and the United Kingdom.

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

Although each of the four U.S. producers is related to foreign producers of stainless steel sheet and strip, none of the related firms produce stainless steel sheet and strip in Japan, Korea, or Taiwn. ATI, Outokumpu, and NAS each import stainless steel sheet and strip, but only from nonsubject sources. No U.S. producer purchased subject stainless steel sheet and strip.

U.S. importers

The Commission received usable data from 46 U.S. importing firms during the original investigations and from 26 firms during the first reviews. During the second reviews, usable questionnaire responses were received from 27 companies, which accounted for approximately three-quarters of U.S. imports during 2005-10 that were subject to those reviews.

In the current proceedings, the Commission issued U.S. importers' questionnaires to 24 firms believed to be importers of stainless steel sheet and strip, as well as to all U.S. producers of stainless steel sheet and strip. Usable questionnaire responses were received from 18 firms. For 2016, importers' responses accounted for approximately *** percent of the *** short tons of subject imports from Japan in 2016, *** percent of the *** short tons of subject imports from Korea, and were *** the *** short tons of subject imports from Taiwan. Importers' questionnaire responses accounted for approximately 52 percent of U.S. imports of stainless steel sheet and strip from nonsubject sources. Table I-10 lists all responding U.S. importers of stainless steel sheet and strip from Japan, Korea, and Taiwan and other sources, their locations, and their shares of U.S. imports in 2016.

U.S. purchasers

The Commission received 23 usable questionnaire responses from firms that have purchased stainless steel sheet and strip since January 2011.[63] Ten responding purchasers are distributors, seven are processors/service centers, four are automotive assemblers/suppliers, one is a tubular products producer, one is a manufacturer of *** and one is a manufacturer of ***.[64] The largest responding purchasers, based on volume of 2016 purchases, were ***.

[63] Of the 23 responding purchasers, 21 purchased the domestic product, 4 purchased imports from Japan, 8 purchased imports from Korea, 6 purchased imports from Taiwan and 14 purchased imports from other sources.

[64] One purchaser indicated that it was both a distributor and a processor/service center.

Table I-10
Stainless steel sheet and strip: U.S. importers, location of their headquarters, and share of total imports by source, 2016

Firm	Headquarters	Share of imports by source (percent)					
		Japan	Korea	Taiwan	Subject sources	Non-subject sources	All import sources
ATI	Pittsburgh, PA	***	***	***	***	***	***
Atlas	Twinsburg, OH	***	***	***	***	***	***
Baosteel America	Montvale, NJ	***	***	***	***	***	***
Empire	Fort Lee, NJ	***	***	***	***	***	***
Felchar	Binghamton, NY	***	***	***	***	***	***
Hanwa	Schaumburg, IL	***	***	***	***	***	***
HANWHA	Teaneck, NJ	***	***	***	***	***	***
Hitachi	Purchase, NY	***	***	***	***	***	***
HSSC	Cerritos, CA	***	***	***	***	***	***
Marubeni-Itochu	New York, NY	***	***	***	***	***	***
Marubeni-itochu Steel Canada	Burnaby, BC	***	***	***	***	***	***
NAS	Ghent, KY	***	***	***	***	***	***
Olbert Metal	Mississauga, ON	***	***	***	***	***	***
Outokumpu	Mobile, AL	***	***	***	***	***	***
Posco	Teaneck, NJ	***	***	***	***	***	***
Ta Chen	Long Beach, CA	***	***	***	***	***	***
thyssenkrupp	Southfield, MI	***	***	***	***	***	***
Tisco	Canonsburg, PA	***	***	***	***	***	***
Total		***	***	***	***	***	***

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

APPARENT U.S. CONSUMPTION

Data concerning apparent U.S. consumption of stainless steel sheet and are shown in table I-11. Apparent U.S. consumption was modestly higher in 2016 than in 2014, after recovering from a downturn in 2015. Apparent U.S. consumption also was higher in January-March 2017 than in January-March 2016.

Table I-11
Stainless steel sheet and strip: U.S. shipments of domestic product, U.S. imports, and apparent U.S. consumption, 2014-16, January-March 2016, and January-March 2017

Item	Calendar year			January-March	
	2014	2015	2016	2016	2017
	Quantity (short tons)				
U.S. producers' U.S. shipments	1,602,576	1,435,209	1,631,462	393,475	395,343
U.S. imports from.--					
Japan	***	***	***	***	***
Korea	***	***	***	***	***
Taiwan	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	352,079	344,293	340,910	74,500	85,030
Apparent U.S. consumption	1,954,572	1,779,458	1,978,372	467,975	480,373
	Value (1,000 dollars)				
U.S. producers' U.S. shipments	3,749,999	2,867,080	2,866,746	641,960	850,822
U.S. imports from.--					
Japan	***	***	***	***	***
Korea	***	***	***	***	***
Taiwan	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	939,502	848,111	750,800	164,826	188,071
Apparent U.S. consumption	4,689,501	3,715,191	3,617,546	806,786	1,038,893

Source: Compiled from data submitted in response to Commission questionnaires and proprietary Customs records.

U.S. MARKET SHARES

U.S. market share data are presented in table I-12. U.S. producers have maintained a market share, by quantity, in excess of 80 percent since 2014. The import market share peaked in 2015 with higher levels of imports from China.

Table I-12
Stainless steel sheet and strip: U.S. consumption and market shares, 2014-16, January-March 2016, and January-March 2017

Item	Calendar year			January-March	
	2014	2015	2016	2016	2017
	Quantity (short tons)				
Apparent U.S. consumption	1,954,572	1,779,458	1,978,372	467,975	480,373
	Share of quantity (percent)				
U.S. producers' U.S. shipments	82.0	80.7	82.5	84.1	82.3
U.S. imports from.--					
Japan	***	***	***	***	***
Korea	***	***	***	***	***
Taiwan	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	18.0	19.3	17.5	15.9	17.7
	Value (1,000 dollars)				
Apparent U.S. consumption	4,689,501	3,715,191	3,617,546	806,786	1,038,893
	Share of value (percent)				
U.S. producers' U.S. shipments	80.0	77.2	79.2	79.6	81.9
U.S. imports from.--					
Japan	***	***	***	***	***
Korea	***	***	***	***	***
Taiwan	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	20.0	22.8	20.8	20.4	18.1

Source: Compiled from data submitted in response to Commission questionnaires and proprietary Customs records.

PART II: CONDITIONS OF COMPETITION IN THE U.S. MARKET[1]

U.S. MARKET CHARACTERISTICS

Stainless steel sheet and strip is an input used in a variety of consumer and industrial applications, including automotive parts, pipe and tube, food service equipment, kitchen equipment and appliances, and tanks and pressure vessels. Demand for stainless steel sheet and strip is driven largely by demand in these industries, as well as overall economic conditions. The most commonly used stainless steels are grades 304 and 316.[2]

Since the original investigations and subsequent reviews, there have been a number of changes in the U.S. industry. In addition, there have been changes in the countries and individual producers subject to the orders including the revocation of the orders on France, Germany, Italy, Mexico, and the United Kingdom. Additional producers in subject countries are excluded from the orders, including the largest producer in Korea, POSCO, and two producers in Taiwan, Chang Mien and Tung Mung. Changes to the U.S. industry and the countries/firms subject to the orders since the original investigations are detailed in Part I.

Overall, apparent U.S. consumption of stainless steel sheet and strip, by quantity, was 1.2 percent higher in 2016 than in 2014; apparent U.S. consumption during January-March 2017 was 2.6 percent higher than in January-March 2016.

CHANNELS OF DISTRIBUTION

The majority of stainless steel sheet and strip shipments are to distributors (table II-1). All four U.S. producers sold to both distributors and end users, with a slight majority to distributors. Shipments of subject imports from Korea went *** to end users in 2014 and 2015, *** to distributors in 2016, and *** to distributors in 2017. *** shipments of subject imports from Japan were to end users. *** shipments of imports subject imports from Taiwan were to distributors. Most shipments of imports from all other sources were to distributors.

[1] U.S. producers' responses to questions in the importer questionnaire which duplicate their answers in the producer questionnaire have not been included in this part of the report.

[2] Stainless steel is a series of different alloy compositions designed to provide specific properties and designed for different applications. There are over 150 different stainless steel grades, but about 15 are the most commonly used. Specialty Steel Industry of North America, "Stainless Steel Overview: Alloy Classifications," http://www.ssina.com/overview/alloy-families.html, retrieved June 26, 2017.

Table II-1
Stainless steel sheet and strip: U.S. producers' and importers' share of reported U.S. commercial shipments, by sources and channels of distribution, 2014-16, January-March 2016, and January-March 2017

Item	Calendar year			January-March	
	2014	2015	2016	2016	2017
	Share of reported shipments (*percent*)				
U.S. producers:					
Distributors	55.5	52.3	56.4	54.9	53.9
End users	44.5	47.7	43.6	45.1	46.1
U.S. importers: Japan					
Distributors	***	***	***	***	***
End users	***	***	***	***	***
U.S. importers: Korea (subject)					
Distributors	***	***	***	***	***
End users	***	***	***	***	***
U.S. importers: Taiwan (subject)					
Distributors	***	***	***	***	***
End users	***	***	***	***	***
U.S. importers: All other sources					
Distributors	82.2	84.0	82.1	79.1	79.9
End users	17.8	16.0	17.9	20.9	20.1

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

GEOGRAPHIC DISTRIBUTION

U.S. producers reported selling stainless steel sheet and strip to all regions in the contiguous United States (table II-2). Importers from subject countries reported selling in selected regions: *** for Japan; primarily Pacific Coast, as well as Central Southwest, Northeast, Midwest, and Southeast for Korea, and the Pacific Coast for Taiwan. For U.S. producers, 9 percent of sales were within 100 miles of their production facility, 80 percent were between 101 and 1,000 miles, and 11 percent were over 1,000 miles. Importers sold 90 percent within 100 miles of their U.S. point of shipment and 10 percent between 101 and 1,000 miles.

Table II-2
Stainless steel sheet and strip: Geographic market areas in the United States served by U.S. producers and importers

Region	U.S. producers	U.S. importers		
		Japan	Korea	Taiwan
Northeast	4	***	1	0
Midwest	4	***	1	0
Southeast	4	***	1	0
Central Southwest	4	***	1	0
Mountain	4	***	0	0
Pacific Coast	4	***	3	3
Other[1]	0	***	0	0
All regions (except Other)	4	***	0	0
Reporting firms	4	***	3	3

[1] All other U.S. markets, including AK, HI, PR, and VI.

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

SUPPLY AND DEMAND CONSIDERATIONS

U.S. supply

Table II-3 summarizes supply factors regarding capacity utilization, inventories, and shipments in 2016 reported by firms producing stainless steel sheet and strip in the United States and in subject countries. Limited data regarding the industries in subject countries are available from foreign producer questionnaires since only two foreign producers provided questionnaire responses. More detail regarding the foreign industries is discussed in Part IV.

Table II-3
Stainless steel sheet and strip: Industry factors that affect ability to increase shipments to the U.S. market, 2016

* * * * * * *

Domestic production

Based on available information, U.S. producers of stainless steel sheet and strip have the ability to respond to changes in demand with moderate-to-large changes in the quantity of shipments of U.S.-produced stainless steel sheet and strip to the U.S. market. The main contributing factor to this moderate-to-high degree of responsiveness of supply is the availability of some unused capacity, along with some ability to shift shipments from alternate markets, some inventories, and some ability to produce alternate products.

U.S. producers also produce other products on the same equipment used to produce stainless steel sheet and strip, although these products account for a relatively small share of total production using the equipment. In 2016, out-of-scope products accounted for about 10 percent of total U.S. production using HRAP (hot-rolled annealed and pickled) equipment and less than 5 percent of total U.S. production using cold-rolling equipment.

All four U.S. producers export stainless steel sheet and strip. *** stated that it would not be difficult to shift sales to alternate markets if market conditions supported such sales, while *** stated that it is difficult to sell outside of the NAFTA region.[3]

Subject imports from Japan, Korea, and Taiwan[4]

Based on available information, producers of stainless steel sheet and strip from Japan, Korea, and Taiwan have the ability to respond to changes in demand with large changes in the

[3] ATI reported that its exports decreased by *** from 2014-16 as a result of the closure of its Midland, Pennsylvania plant. ***. Hearing transcript, p. 53 (Hartford). Domestic interested parties' posthearing brief, exh. 1, pp. 6-7.

[4] One foreign producer in Japan, Hitachi, and one foreign producer in Korea, Hyundai BNG, provided questionnaire responses. POSCO, the largest producer in Korea, is excluded from the orders. No producers in Taiwan responded to the foreign producer questionnaire.

quantity of shipments of stainless steel sheet and strip to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the relatively large capacity in subject countries, ability to shift shipments from alternate markets, and some ability to produce alternate products.

Responding Japanese producer Hitachi stated that ***. Responding Korean producer Hyundai BNG ***. ***.[5] ***.

Nonsubject imports

Nonsubject imports accounted for *** percent of total U.S. imports in 2016. The largest sources of nonsubject imports during 2014-16 were Mexico, France, China, and Vietnam. Combined, these countries accounted for *** percent of imports in 2016. Imports from excluded producers in Taiwan and Korea accounted for smaller shares of imports.

Supply constraints

Three of the four U.S. producers reported supply constraints since January 1, 2011. *** reported a surge in demand for *** in the second quarter of 2014. *** reported a temporary supply disruption in late 2014 ***. *** reported implementing a controlled order entry system during January-February 2015 following extended lead times in 2014, and that a similar situation occurred during some of 2016. *** did not report a supply constraint.[6] The domestic producers reported that they have had no supply constraints in 2017.[7]

Four of 13 importers reported supply constraints since January 1, 2011. Importer *** noted import restrictions making it difficult to find product and in turn making it difficult to make timely shipment commitments. Importer *** reported that in 2014, it had to turn down potential orders because its local office could not meet increased demand that occurred because of domestic supply shortages. Two importers (***) noted constraints resulting from the import injury investigations on Chinese product.

Fourteen of 23 purchasers reported that a domestic or import supplier had refused, denied, or been unable to supply stainless steel sheet and strip since January 1, 2011 (table II-4). Nearly half of the 23 responding purchasers reported allocated or controlled entry and nearly half reported non-timely or extended delivery times by U.S. producers. Nine purchasers reported non-timely or extended delivery times for imports.

Purchasers reported that allocated or controlled entry for domestic product took place at various times during 2014-16. Specifically, six purchasers reported being placed on allocation by one or more domestic producers in 2016, primarily in the second and third quarters, and a smaller number of purchasers reported allocations during 2014 and early 2015. Among the

[5] ***.

[6] ***.

[7] Hearing transcript, pp. 60-62 (Pfeiffer, Hartford, Lyons, and Letnich).

largest responding purchasers, *** stated that NAS limited volume to *** and that ATI limited volume to ***.

Table II-4
Stainless steel sheet and strip: Supplier constraints reported by purchasers

Item	Domestic supplier	Import supplier
Placed purchaser on allocation or controlled order entry	11	0
Declined order(s)	5	2
Accepted order but delivered less than promised and/or contracted	3	3
Unable to deliver product by the date of delivery identified at the time of order	11	9
Unable or unwilling to provide specific types of stainless steel sheet and strip	5	3
Total responding purchasers	23	22

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

*** also stated that U.S. mills are unwilling to supply *** because the volumes purchased are too low. *** noted allocations by NAS during the second and third quarters of 2016. Purchasers *** indicated no allocations, although *** stated that extended delivery times were issues with both domestic and foreign mills.

Among other purchasers, *** stated that ATI exited the ferritic market in 2016. *** stated that all domestic mills have had some allocations during 2011-16, typically lasting 6-12 months. In addition, *** reported being placed on allocation for bright-annealed stainless steel sheet and strip during the second half of 2014.

Most responding purchasers (13 of 22) reported that the availability of domestic stainless steel sheet and strip has changed since January 1, 2011, with many citing the startup of operation of Outokumpu's mill in Calvert, Alabama. Some purchasers also cited the closure of some ATI facilities while others noted increased capacity at ATI and NAS. Most purchasers reported that the availability of stainless steel sheet and strip from subject countries had not changed, although two firms noted increased imports from Korea. *** stated that imports increased sharply in 2014 following increases in domestic pricing and lead times; it stated that increased imports from Japan, Korea, and Taiwan were not as much as those from China. *** stated that since the original investigations in 1999, distributors have imported stainless steel from Taiwan in sheet form rather than in coil form. A few firms reported changes in the availability of nonsubject imports, including increased imports from China prior to the issuance of antidumping and countervailing duties, and one firm stated that imports from India have significantly increased.

Most purchasers did not anticipate changes in availability. Two purchasers noted that NAS has added capacity for bright annealed material and one purchaser anticipates that ATI will re-engage the ferritic markets. *** stated that it is concerned about proposals for new rolling mills in Houston and that more domestic capacity is not needed.[8]

[8] It referred to possible U.S. investments in stainless steel production by Yieh Group, Tsingshan, and Hongwang.

New suppliers

Nine of 23 purchasers indicated that new suppliers entered the U.S. market since January 1, 2011, and five expect additional entrants. Purchasers indicating new suppliers since 2011 identified domestic mills, POSCO, Aperam, Chinese trading companies following the EU dumping case on China, and imports from Turkey, Korea, and Vietnam. Purchasers citing additional entrants identified a planned Chinese joint venture in Texas, a YUSCO Taiwan investment in a carbon and stainless melt shop in Texas,[9] and Samsung-Otelinox.

U.S. demand

Based on available information, the overall demand for stainless steel sheet and strip is likely to experience small-to-moderate changes in response to changes in price. The main contributing factors are moderate cost shares for stainless steel sheet and strip among end-use products and the lack of substitute products.

End uses and cost share

U.S. demand for stainless steel sheet and strip depends on the demand for U.S.-produced downstream products. Reported end uses include automotive parts, pipe and tube, restaurant and food service equipment, appliances, and venting products. All responding U.S. producers and importers, and all but one responding purchaser reported no changes in end uses since 2011 and no firms anticipated any changes in end uses.

Since stainless steel sheet and strip is used in a number of applications and industries, cost shares can vary considerably depending on the end use. Stainless steel sheet and strip accounts for a moderate-to-large share of the cost of the products in which it is used. Reported cost shares for some end uses were as follows:

- Automotive exhaust and other components (30-90 percent)
- Pipe and tube (70-85 percent)
- Sinks (85 percent)
- Food and restaurant equipment (70 percent)
- Appliances (20 percent)
- Venting products (20-30 percent)

Business cycles

Most responding firms (all 4 U.S. producers, 10 of 13 importers, and 15 of 23 purchasers) indicated that the market for stainless steel sheet and strip is not subject to business cycles. Some firms (three importers and eight purchasers) indicated that the market

[9] ***.

was subject to business cycles. Specifically, importers and purchasers reported that demand for stainless steel sheet and strip typically declines during the fourth quarter, with one importer noting that purchasers begin destocking during this period. ATI stated that distributors will often drive their inventory down at the end of the year and then restock during the beginning of the following year.[10] Purchasers also reported that there is seasonal demand in the appliance and automotive markets, with some cyclical demand for stainless steel as new car models are introduced as well as cycles following the general economy.

A few firms (one U.S. producer and three purchasers) indicated that the stainless steel sheet and strip market was subject to other distinct conditions of competition. U.S. producer *** stated that import penetration was a distinct condition, and purchasers cited nickel price fluctuations, monthly changes in stainless steel sheet and strip pricing, and order lead times.

A few firms (one U.S. producer and four purchasers) reported changes in business cycles or conditions of competition since 2011. U.S. producer *** reported increased imports sold at low prices and with extended credit terms. Four purchasers noted changes including inconsistent and low GDP growth; increased automotive demand as a result of increased automotive production as well as more stainless steel being used in car parts because of lower stainless steel prices; and declines in demand from the oil and gas sector. One purchaser noted an increase in imports in 2014, particularly from China, when domestic mills had increased pricing and had longer lead times.

Demand trends

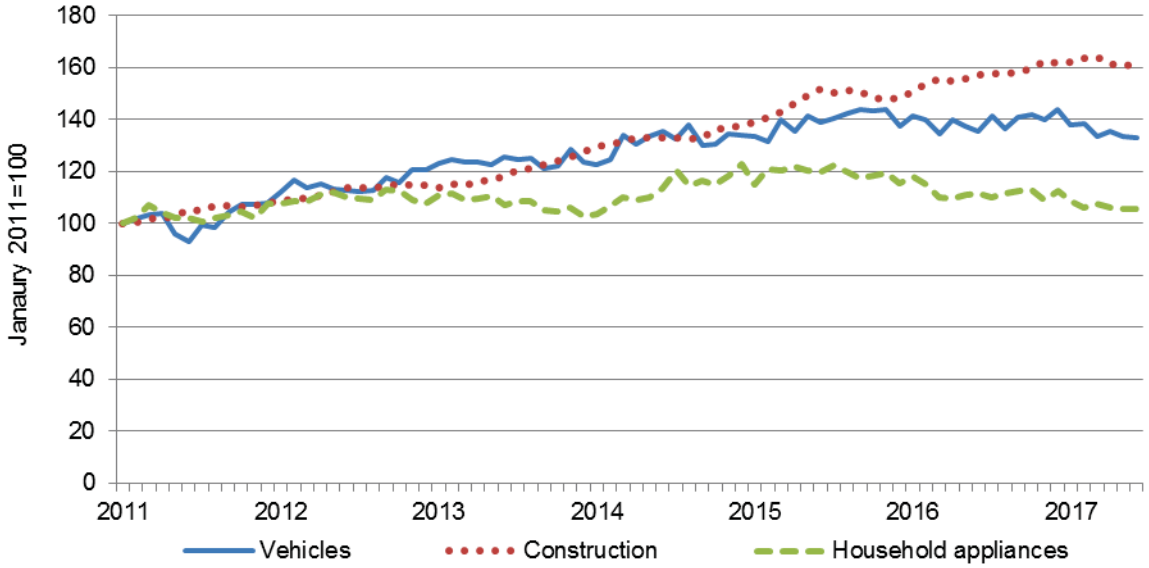
U.S. demand for stainless steel sheet and strip is driven largely by changes in overall economic activity, as well as demand in the most common end-use markets, such as automobiles, construction, and home appliances. Overall, these downstream industries have experienced steady growth since 2011, with the strongest growth in construction, followed by vehicle production and sales, and then household appliances. Between January 2011 and March 2017, total vehicle sales, total construction spending, and household appliance shipments increased, by 34 percent, 64 percent, and 8 percent respectively (figure II-1). Between January 2014 and March 2017, total vehicle sales increased by 8 percent, total construction spending increased by 27 percent, and total household appliance spending increased by 4 percent.

Between 2011 and 2016, U.S. passenger car production increased by 32 percent and U.S. truck production increased by 45 percent, and overall U.S. vehicle production increased by 41 percent (figure II-2). The construction sector experienced steady growth, with privately owned housing starts increasing by 89 percent between January 2011 and March 2017, and by 32 percent between January 2014 and March 2017 (figure II-3).

[10] *Stainless Steel Sheet and Strip from China*, *Inv. Nos. 701-TA-557 and 731-TA-1312 (Final)*, USITC Publication 4676, March 2017, p. II-10.

Figure II-1

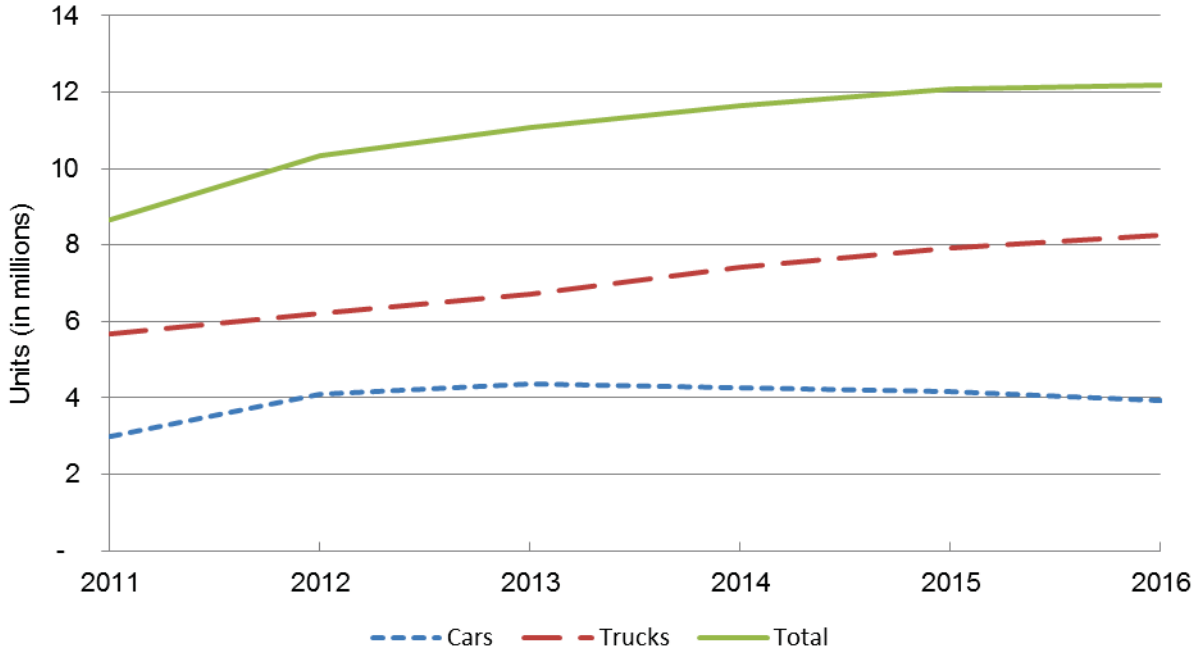
Indices of manufacturing spending: Total vehicles, total construction, and total household appliances, seasonally adjusted, monthly, January 2011-June 2017



Source: Bureau of Economic Analysis and U.S. Census Bureau, retrieved August 8, 2017.

Figure II-2

Annual U.S. passenger car and truck production, 2011-16



Note.—Data are not available for 2017.

Source: International Organization of Motor Vehicle Manufacturers, retrieved June 14, 2017.

Figure II-3
Total new privately owned housing units started, seasonally adjusted, monthly, January 2011-June 2017

Source: U.S. Census Bureau, retrieved August 1, 2017.

All responding U.S. producers and foreign producers and a plurality of purchasers reported an increase in U.S. demand for stainless steel sheet and strip since January 1, 2011, and a plurality of importers reported no change in demand (table II-5). Most firms expect demand to increase or not change over the next two years.

Firms reporting increased demand attributed it to increased automotive demand, general economic growth, and more applications for stainless steel. Firms anticipating future increases cited automotive demand and economic growth as well as growth in defense spending. *** reported increased demand in the U.S. market during 2011-16 which it attributes to a strong U.S. economic recovery, and it expects demand to increase in the future with growth in GDP, vehicle sales, and construction spending.

At the hearing, domestic producers attributed a decline in apparent U.S. consumption from 2014 to 2015 to tepid overall economic growth, a decline in demand from the oil and gas sector, and a destocking of import inventories in 2015.[11] These firms expect modest growth in U.S. demand over the next few quarters in line with overall GDP growth, and in particular in the construction and automotive markets.[12]

[11] Hearing transcript, pp. 48-50 (Harford, Kim, Pfeiffer).
[12] Hearing transcript, pp. 51-52 (Harford, Pfeiffer).

Table II-5
Stainless steel sheet and strip: Firms' responses regarding U.S. demand

Item	Increase	No change	Decrease	Fluctuate
Demand in the United States:				
U.S. producers	4	0	0	0
Importers	3	4	1	3
Purchasers	10	3	2	6
Foreign producers	2	0	0	0
Anticipated future demand in the United States:				
U.S. producers	3	0	0	1
Importers	3	4	0	4
Purchasers	7	8	1	3
Foreign producers	2	0	0	0
Demand for purchasers' final products:				
Purchasers	4	1	0	3

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

Substitute products

Substitutes for stainless steel sheet and strip are limited. All four U.S. producers, all 16 responding importers, and the vast majority of purchasers (18 of 22) reported that there were no substitutes for stainless steel sheet and strip.[13] The potential for substitution is often limited by the end use. Substitute products identified by purchasers include carbon steel in appliances; plastic in automotive parts and trim; galvanized steel in heat exchangers and building construction; aluminum in building exteriors and ceilings, and automotive trim; and copper in water conveyer systems.

SUBSTITUTABILITY ISSUES

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

Lead times

Stainless steel sheet and strip is primarily produced-to-order. U.S. producers reported that 93 percent of their commercial shipments were produced-to-order, with reported lead

[13] All responding U.S. producers and importers, and nearly all responding purchasers also reported no changes in substitutes since 2011, and none anticipated changes in substitutes. Purchaser *** stated that 3-D printing which uses powder metals could be used to replace current stainless steel parts.

times ranging by firms: 30-35 days (***), 45 days (***) and 70 days (***).[14] The remaining 7 percent came from inventories, with reported lead times of 2 to 7 days. Importers reported that *** percent of their commercial shipments of subject imported stainless steel sheet and strip was produced-to-order, with reported lead times averaging 80 days. Foreign producers Hitachi and Hyundai BNG reported that *** of their sales were produced-to-order and that lead times averaged ***.

Knowledge of country sources

All 22 responding purchasers indicated they had marketing/pricing knowledge of domestic product, 5 of Japanese product, 7 of Korean product, 2 of Taiwan product, and 11 of product from nonsubject countries.[15]

As shown in table II-6, 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 make decisions based on the manufacturer, *** stated that it wants to know the name of the producing mill before purchasing and *** stated that it has specific quality and pricing requirements. Firms that reported that they usually base purchases on producer or country of origin indicated that the following factors were important: supply chain, continuity of supply, lead times, quality, capability to manufacture, ability to best meet the specification, long standing relationships, and a preference for domestic product.

Table II-6
Stainless steel sheet and strip: Purchasing decisions based on producer and country of origin

Purchaser/customer decision	Always	Usually	Sometimes	Never
Purchaser makes decision based on producer	2	6	5	9
Purchaser's customers make decision based on producer	0	1	11	8
Purchaser makes decision based on country	1	5	7	10
Purchaser's customers make decision based on country	0	2	13	6

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 stainless steel sheet and strip were quality (22 firms), price (18 firms), and delivery/lead times (14 firms) as shown in table II-7. Price was the most frequently cited first-most important factor (cited by 12 firms), followed by quality (6 firms); quality was the most frequently reported

[14] U.S. producers experienced extended lead times during 2014. *Stainless Steel Sheet and Strip from China*, *Inv. Nos. 701-TA-557 and 731-TA-1312 (Final)*, USITC Publication 4676, March 2017, p. II-14.

Purchaser *** stated that domestic producers had 12-14 week lead times in 2014, compared to typical domestic lead times of 5-6 weeks.

[15] Belgium, Brazil, China, India, Italy, and Mexico were listed by at least two purchasers each. In addition, one firm each listed Finland, France, South Africa, Thailand, and Turkey.

second-most important factor (10 firms); and delivery/lead time was the most frequently cited third-most important factor (10 firms).

Table II-7
Stainless steel sheet and strip: Ranking of factors used in purchasing decisions as reported by U.S. purchasers, by factor

Factor	First	Second	Third	Total
Quality	6	10	6	22
Price	12	3	3	18
Delivery/lead time	0	4	10	14
Availability	1	4	2	7
Range	1	1	1	3
Other[1]	3	1	3	7

[1] Other factors include capability to produce to purchaser's specifications, relationship with supplier, terms, capacity to meet production requirements, and location.

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

The majority of purchasers (13 of 23) reported that they always or usually purchase the lowest-priced product, nine reported sometimes, and one reported never. When asked if they purchased stainless steel sheet and strip from one source although a comparable product was available at a lower price from another source, 15 purchasers reported reasons including quality, shorter lead times, minimum quantity requirements, only buy from approved suppliers, delivery, customer requirements, and availability. Many of these purchasers stated that they are willing to pay higher prices for domestic product for those reasons.

Six purchasers reported that certain types of product were only available from a single source. Most of these purchasers cited types of stainless steel sheet and strip used by the automotive industry, and stated that these specific products were available only from suppliers in Asia, Europe, or Japan.[16]

Importance of specified purchase factors

Purchasers were asked to rate the importance of 15 factors in their purchasing decisions (table II-8). The factors rated as very important by more than half of responding purchasers were delivery time (22), availability (21), quality meets industry standards (21), product consistency (21), reliability of supply (20), price (19), delivery terms (13), and U.S. transportation costs (12).

[16] Four purchasers cited products produced in Japan or Asia, in general. ***.
Two purchasers stated that certain products were only produced in Europe. ***.

Table II-8
Stainless steel sheet and strip: Importance of purchase factors, as reported by U.S. purchasers, by factor

Factor	Very important	Somewhat important	Not important
Availability	21	2	0
Delivery terms	13	9	1
Delivery time	22	1	0
Discounts offered	9	10	3
Extension of credit	11	8	4
Minimum quantity requirements	7	13	3
Packaging	8	11	4
Price	19	4	0
Product consistency	21	2	0
Product range	9	13	1
Quality exceeds industry standards	13	7	3
Quality meets industry standards	21	1	---
Reliability of supply	20	2	0
Technical support/service	9	14	0
U.S. transportation costs	12	8	3

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

Supplier certification

Most purchasers (17 of 23) require their suppliers to become certified or qualified to sell stainless steel sheet and strip to their firm. Six purchasers reported that it took 14 days or less to qualify a new supplier, five purchasers reported 60 to 90 days, four reported 120 to 300, and one purchaser reported 720 days. Purchasers described their process to certify new suppliers based on ISO certification, trial order, customer feedback, site visit, and compliant with conflict mineral regulation. Twenty-two of 23 purchasers reported that no domestic or foreign supplier had failed in its attempt to qualify product, or had lost its approved status since 2011.

Changes in purchasing patterns

Purchasers were asked about changes in their purchasing patterns from different sources since January 1, 2011 (table II-9); reasons reported for changes in sourcing included customer requirements, pricing, lead times, market conditions, mill availability, and items not available domestically. Two purchasers reported increased purchases from Korea following the imposition of antidumping and countervailing duties on stainless steel sheet and strip from China.

Eight of 23 responding purchasers reported that they had changed suppliers since January 1, 2011. Two purchasers dropped Chinese suppliers because of the antidumping and countervailing investigations. Two purchasers stated that their suppliers change based on quality, availability, price, and delivery performance. In addition, ***.

Table II-9
Stainless steel sheet and strip: Changes in purchase patterns from U.S., subject, and nonsubject countries

Source of purchases	Did not purchase	Decreased	Increased	Constant	Fluctuated
United States	0	3	7	4	8
Japan	11	0	0	3	4
Korea	9	1	3	3	3
Taiwan	11	1	0	5	3
All other countries	1	0	2	2	11
Sources unknown	5	1	1	0	6

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

Importance of purchasing domestic product

Nine of 19 responding purchasers reported that all or nearly all (95 to 100 percent) of their stainless steel sheet and strip purchases in 2016 had no domestic requirements, and ten purchasers reported that a portion of their purchases (ranging from 20 to 89 percent) had no domestic requirements. Ten purchasers reported that domestic product was required by law (for 1 to 20 percent of their purchases), 13 purchasers reported it was required by their customers for some portion of purchases (ten reported 25 percent or less, and one purchaser each reported 50, 75, and 100 percent respectively), and four purchasers reported that some or all of their 2016 purchases required domestic product for other reasons (total landed cost and lead time).

Comparisons of domestic products, subject imports, and nonsubject imports

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

Most purchasers rated the U.S. product and that from subject countries as comparable on most factors. Exceptions include delivery time and U.S. transportation costs, for which most firms reported that the U.S. product was superior. Firms reported mixed responses regarding availability, delivery terms, minimum quantity requirements, and technical support, rating the domestic product as comparable or superior to the imported product depending on the subject country.

Most purchasers reported that U.S. and nonsubject product were comparable on all factors except delivery time and technical support, for which firms rated the U.S. product as superior, and U.S. transportation, for which firms' responses were mixed. In comparisons among subject countries for the 15 factors, all six purchasers that compared product from Korea to that from Taiwan reported that the products were comparable. The majority of the 5 purchasers that compared product from Japan with that from Korea indicated that the products were comparable on 14 of the 15 factors, except for product range for which the responses were mixed. Of the three purchasers that compared product from Japan to that from Taiwan,

the majority of firms indicated that the products were comparable on 13 of the 15 factors, except for product range and reliability of supply for which the responses were mixed.

Table II-10
Stainless steel sheet and strip: Purchasers' comparisons between U.S.-produced and imported product

Factor	U.S. vs. Japan			U.S. vs. Korea			U.S. vs. Taiwan			U.S. vs. other		
	S	C	I	S	C	I	S	C	I	S	C	I
Availability	6	5	0	5	7	0	5	5	0	7	9	0
Delivery terms	5	5	0	7	5	0	5	5	0	7	9	0
Delivery time	6	3	1	9	1	2	8	1	1	12	2	2
Discounts offered	1	8	0	0	8	3	0	8	1	2	12	2
Extension of credit	3	4	2	4	6	2	4	6	0	5	9	2
Minimum quantity requirements	4	3	2	5	5	2	4	5	1	5	10	1
Packaging	2	6	1	1	10	1	2	7	1	3	12	0
Price[1]	2	6	1	0	9	3	0	6	3	0	12	4
Product consistency	1	9	0	2	10	0	3	7	0	6	9	1
Product range	3	7	0	4	7	1	4	5	1	4	11	1
Quality exceeds industry standards	2	7	1	1	10	1	3	7	0	5	10	1
Quality meets industry standards	2	8	0	2	10	0	2	8	0	3	13	0
Reliability of supply	4	6	0	5	7	0	5	5	0	5	11	0
Technical support/service	4	5	1	8	3	1	7	3	0	8	6	1
U.S. transportation costs[1]	6	3	1	8	2	1	6	3	1	7	7	2

Factor	Japan vs. Korea			Japan vs. Taiwan			Korea vs. Taiwan		
	S	C	I	S	C	I	S	C	I
Availability	0	3	2	0	2	1	0	6	0
Delivery terms	0	4	1	0	3	0	0	6	0
Delivery time	0	4	1	0	3	0	0	6	0
Discounts offered	0	5	0	0	3	0	0	6	0
Extension of credit	0	5	0	0	3	0	0	6	0
Minimum quantity requirements	0	5	0	0	3	0	0	6	0
Packaging	1	4	0	0	3	0	0	6	0
Price[1]	0	3	2	0	2	1	0	6	0
Product consistency	1	4	0	1	2	0	0	6	0
Product range	1	2	2	1	1	1	0	6	0
Quality exceeds industry standards	1	4	0	1	2	0	0	6	0
Quality meets industry standards	1	4	0	1	2	0	0	6	0
Reliability of supply	1	3	1	1	1	1	0	6	0
Technical support/service	1	4	0	1	2	0	0	6	0
U.S. transportation costs[1]	0	5	0	0	3	0	0	6	0

[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 stainless steel sheet and strip

In order to determine whether U.S.-produced stainless steel sheet and strip can generally be used in the same applications as imports from Japan, Korea and Taiwan, 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-11, all four U.S. producers reported that stainless steel sheet and strip from all specified sources can always be used interchangeably. Importers provided mixed responses. Importer *** indicated that U.S. and Korean product were sometimes interchangeable depending on product quality and range, and reputation of the manufacturer. Importer *** indicated that quality, alloy production, and finish limited interchangeability between sources. Importer *** stated that differences in surface quality and availability of thinner gauges limited interchangeability between domestic product and that from Taiwan and nonsubject countries.

A majority or plurality of purchasers reported that the domestic product and imports from Japan, Korea, and Taiwan are frequently interchangeable. Purchasers more frequently reported that other imports are less often interchangeable for domestic product than are subject imports. Among the purchasers that explained reasons for reduced interchangeability, two purchasers stated that specific Japanese OEM requirements limited interchangeability for certain grades of Japanese stainless steel sheet and strip.[17] A few purchasers indicated that there were quality issues with some Chinese and Mexican product, and one purchaser stated that product from Korea, Taiwan, China, and India is not approved for U.S. Department of Defense acquisitions.

As can be seen from table II-12, all responding purchasers reported that domestically produced product and imported product from subject and nonsubject sources always or usually meets minimum quality specifications.

In addition, producers, importers, and purchasers were asked to assess how often differences other than price were significant in sales of stainless steel sheet and strip from the United States, subject, or nonsubject countries. As seen in table II-13, all U.S. producers reported that such differences were never significant in their sales. Most importers and purchasers reported that differences other than price were sometimes significant in comparing stainless steel sheet and strip among sources.

[17] *** reported that U.S. product and Japanese product are sometimes interchangeable because of *** specific grade requirements. *** indicated that domestic and Japanese products were frequently interchangeable rather than always interchangeable because of certain specific steel types that have been developed for Japanese OEMs.

Table II-11
Stainless steel sheet and strip: Interchangeability between stainless steel sheet and strip produced in the United States and in other countries, by country pairs

Country pair	Number of U.S. producers reporting				Number of U.S. importers reporting				Number of purchasers reporting			
	A	F	S	N	A	F	S	N	A	F	S	N
United States vs. Japan	4	---	---	---	---	3	2	---	2	6	3	---
United States vs. Korea	4	---	---	---	3	2	3	---	3	7	3	---
United States vs. Taiwan	4	---	---	---	2	3	3	---	2	5	3	---
Japan vs. Korea	4	---	---	---	---	3	1	---	2	5	3	---
Japan vs. Taiwan	4	---	---	---	---	2	3	---	3	1	2	---
Korea vs. Taiwan	4	---	---	---	1	2	4	---	3	1	1	---
United States vs. Other	4	---	---	---	2	4	3	---	4	6	7	---
Japan vs. Other	4	---	---	---	---	2	2	1	2	2	4	---
Korea vs. Other	4	---	---	---	1	2	3	1	3	1	3	---
Taiwan vs. Other	4	---	---	---	1	2	3	---	3	1	2	---

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

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

Table II-12
Stainless steel sheet and strip: Ability to meet minimum quality specifications, by source[1]

Source	Always	Usually	Sometimes	Rarely or never	Don't know
United States	14	8	0	0	0
Japan	6	3	0	0	13
Korea	5	6	0	0	11
Taiwan	2	6	0	0	14
Other	5	8	0	0	5

[1] Purchasers were asked how often domestically produced or imported stainless steel sheet and strip meets minimum quality specifications for their own or their customers' uses.

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

Three importers noted non-price differences between sources including product quality, finish, product range, manufacturer's reputation, customer service, availability, and timely delivery. Two purchasers (***) noted non-price differences, citing longer lead times from Japan, Korea, and Taiwan. In addition, *** stated that transportation costs and product range were less often issues when buying from domestic producers than when purchasing product imported from subject countries.

Table II-13
Stainless steel sheet and strip: Significance of differences other than price between stainless steel sheet and strip produced in the United States and in other countries, by country pairs

Country pair	Number of U.S. producers reporting				Number of U.S. importers reporting				Number of purchasers reporting			
	A	F	S	N	A	F	S	N	A	F	S	N
United States vs. Japan	---	---	---	4	---	---	4	---	---	1	5	4
United States vs. Korea	---	---	---	4	---	1	4	1	---	1	8	4
United States vs. Taiwan	---	---	---	4	---	---	6	---	---	1	6	3
Japan vs. Korea	---	---	---	4	---	1	2	---	---	1	4	3
Japan vs. Taiwan	---	---	---	4	---	---	4	---	---	1	2	2
Korea vs. Taiwan	---	---	---	4	---	1	5	---	---	---	3	2
United States vs. Other	---	---	---	4	---	---	8	1	---	2	10	3
Japan vs. Other	---	---	---	4	---	---	3	1	---	1	4	1
Korea vs. Other	---	---	---	4	---	1	4	2	---	---	2	2
Taiwan vs. Other	---	---	---	4	---	---	5	---	---	---	2	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. No parties commented on the estimates.

U.S. supply elasticity

The domestic supply elasticity[18] for stainless steel sheet and strip measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price of stainless steel sheet and strip. 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 stainless steel sheet and strip. Analysis of these factors above indicates that the U.S. industry has the ability to increase or decrease shipments to the U.S. market; an estimate in the range of 4 to 6 is suggested.

U.S. demand elasticity

The U.S. demand elasticity for stainless steel sheet and strip measures the sensitivity of the overall quantity demanded to a change in the U.S. market price of stainless steel sheet and strip. 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 stainless steel sheet and strip in the production of any downstream products. Based on the available

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

information, the aggregate demand for stainless steel sheet and strip is likely to be inelastic; a range of -0.5 to -1.0 is suggested.

Substitution elasticity

The elasticity of substitution depends upon the extent of stainless steel sheet and strip differentiation between the domestic and imported products.[19] 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 stainless steel sheet and strip and imported stainless steel sheet and strip is likely to be in the range of 3 to 5.

[19] 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 accounted for virtually all[1] U.S. production of stainless steel sheet and strip during 2016, supplied information on their operations in these reviews and other proceedings on stainless steel sheet and strip.

Table III-1 lists industry events reported in the trade press and public filings made by U.S. producers.

Table III-1
Stainless steel sheet and strip: Important industry events since 2011

Year	Month	Company	Event
2011	April	AK Steel	Ratifies a new labor agreement with the International Association of Machinists and Aerospace Workers at the Middletown, Ohio Works. The agreement is scheduled to expire September 15, 2014.
2012	March		Ratifies a new labor agreement with the United Auto Workers covering employees at the Zanesville Ohio Works. For the period of May through May 20, 2015.
	July		Ratifies a new labor agreement with the United Auto Workers covering employees at the Butler Pennsylvania Works for the period of October 1, 2012 through October 1, 2016.

Table continued on next page.

[1] In addition to the four responding U.S. producers, *** identified two additional U.S. firms, ***, with cold-rolled stainless steel sheet and strip capacity. Combined, these firms accounted for *** percent of U.S. stainless steel cold-rolling capacity in 2014 and 2015. There was no capacity data reported for *** in 2016; *** accounted for *** percent of U.S. stainless steel cold-rolling capacity in 2016. ***.

Table III-1--Continued
Stainless steel sheet and strip: Important industry events since 2011

Year	Month	Company	Event
2012	December	ThyssenKrupp Stainless USA	A melt shop at the Calvert, Alabama plant begins operations enabling the company to make stainless steel at this location. Before the commissioning of the melt shop, the plant did not make its own steel but re-rolled semifinished stainless steel acquired from outside this location.
		Outokumpu	Outokumpu acquires the stainless steel operations of ThyssenKrupp AG including operations in Calvert, Alabama.
2013	March	AK Steel	Ratifies a new labor agreement with the United Auto Workers for the period of March 31, 2013 through March 31, 2016 for employees at the Coshocton, Ohio Works.
	August	AK Steel	Ratifies a new labor agreement with the United Auto Workers, for the period of September 30, 2013 through September 30, 2017 for employees at the Rockport, Indiana Works.
2014	January	ATI	Announces closure of its previously idled New Castle, Indiana operation in 2013 and its plan to close its Wallingford, Connecticut operations by mid-2014.
	February	AK Steel	Ratifies a new labor agreement with the United Steelworkers covering workers at the Mansfield, Ohio Works for the period of March 31, 2014 through March 31, 2017.
	June		Ratifies a new labor agreement with the International Association of Machinists and Aerospace Workers for the period of September 15, 2014 through March 15, 2018 for employees at the Middletown, Ohio Works.
	Third quarter	ATI	ATI's Wallingford, Connecticut operations are closed.
	December	ATI	Commissions Hot-Rolling and Processing Facility designed to "significantly expand our product offering capabilities, shorten manufacturing cycle times, reduce inventory requirements, and improve the cost structure of our flat rolled products business." Legacy equipment is planned to be idled by the end of the first quarter of 2015.

Table continued on next page.

Table III-1--Continued
Stainless steel sheet and strip: Important industry events since 2011

Year	Month	Company	Event
2015	May	AK Steel	Ratifies a new labor agreement with the United Auto Workers for employees at the Zanesville, Ohio Works, and runs through May 31, 2019.
	August	ATI	Issues a lockout notice involving more than 2,000 workers at various facilities. The lockout takes effect August 15, 2015. ATI announces it will continue to operate the affected facilities with salaried non-union employees and temporary professional staffing until a new contract can be finalized with the United Steel Workers.
	December	ATI	Announces intent to idle the standard stainless melt shop and sheet finishing operations at the Midland, Pennsylvania facility by January 2016.
2016	February	ATI	Issues statement that the company will challenge the complaint issued by the Pittsburgh regional office of the National Labor Relations Board (NLRB) concerning the lockout involving approximately 2,200 USW-represented employees.
	March	AK Steel	Ratifies a new labor agreement with the United Auto Workers for employees at the Coshocton, Ohio Works, and runs through September 30, 2019.
		ATI	Union-represented employees of its flat-rolled products business and other locations are scheduled to return to work beginning the week of March 13, 2016. This follows ratification of the new four-year agreement with the United Steelworkers. All charges and the complaint pending with NLRB have been withdrawn.
	August	AK Steel	Ratifies a new labor agreement with the United Auto Workers for employees at the Butler, Pennsylvania Works, and runs through April 1, 2019.
	February	AK Steel, ATI, NAS, Outokumpu	Fil petitions with Commerce and the Commission alleging that an industry in the United States is materially injured and threatened with material injury by reason of subsidized and less-than-fair-value imports of stainless steel sheet and strip from China.
2017	January	NAS	Starts up its new cold mill and bright annealing line and begins “test rolling” coils through the new equipment.
	March	AK Steel	Ratifies a new labor agreement with the United Steel Workers (USW) covering about 300 workers at the Mansfield Ohio Works. The agreement will be in effect until March 31, 2021.

Source: Public sources such as news articles, press releases, etc.

Changes experienced by the industry[2]

Acquisition

In December 2012, Outokumpu's parent company, Outokumpu Oyj acquired the stainless steel operations of ThyssenKrupp AG ("TK") including operations in Calvert, Alabama. The stainless portion of TK's investments was more than $1.5 billion. Cold-rolling operations started in 2010 and the melt shop began operating in 2012. At the time of the original investment by TK, and when Outokumpu's parent company acquired the facility, the U.S. market was characterized by Outokumpu as being strong and stable. In spite of this characterization, ATI commented that with a new facility coming online in the United States it would be facing a new competitor with new equipment, which is typically disruptive. The USW echoed this sentiment, questioning the wisdom of the investment, but like ATI, saw the new facility as a substitute supplier of product Outokumpu was importing into the United States at that time.

Prolonged shutdowns or curtailments

The Calvert facility began the process of starting up production in December 2012, with 2013 seen as the "ramp-up" year, and the expectation that in 2014 it would be in a break-even state while it was gaining orders. However, in June 2014, one of its three cold-rolling mills experienced a motor outage, removing it from operation for six months. Calvert's two other cold-rolling mills were subsequently taken out of service for preventative maintenance during the month of September. All three mills were operational again by the end of 2014.[3]

In June 2014, a blast furnace was idled at AK Steel's Middleton, Ohio facility. Although AK Steel performs hot rolling, cold rolling, and finishing for its stainless steel sheet and strip at this facility, it stated that the idled furnace did not affect its stainless steel sheet and strip operations.

AK Steel reported that *** periodically experienced prolonged shutdowns.[4] There were no other shutdowns reported by any other producers, although *** reported experiencing production curtailments due to reduced orders.[5]

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[2] Unless otherwise noted, information in this section was obtained from *Stainless Steel Sheet and Strip from China, Inv. Nos. 701-TA-7 and 731-TA-1312 (Final)*, USITC Publication 4676, March 2017, pp. III-4—III-6.

[3] Outokumpu provided details of when its cold-rolling mills were offline. Due to a motor failure, cold-rolling mill ("CRM") *** Outokumpu's U.S. producers' questionnaire response, section II-2.

[4] AK reported that its *** AK Steel's Zanesville facility performs finishing operations for products other than stainless steel sheet and strip, namely for electrical and other stainless steel products. http://www.aksteel.com/production_facilities/zanesville.aspx, retrieved on June 28, 2017.

[5] ***. NAS's U.S. producers' questionnaire response, section II-6a.

Plant opening

In 2008, ATI announced that it planned to invest $1.2 billion to build a new state of the art hot-rolling and processing facility ("HRPF") at its Brackenridge, Pennsylvania site. ATI completed commissioning this facility in the first quarter of 2015. ATI stated that the new HRPF would replace legacy equipment which would be idled.

Plant closings

In December 2015, ATI announced it was idling the stainless melt shop and sheet finishing operations of its Midland operations (formerly a J&L Specialty Steel facility). In October 2016, ATI announced the permanent closure of its Midland, Pennsylvania melt shop and stainless steel finishing facility, due, in part, to "the expectation of continued significant excess global capacity for commodity stainless steel sheet." This facility was characterized as having "legacy capacity", which was idled in mid-2015 "due to market conditions" and was not restarted after a labor lockout (discussed below) was resolved. Any restart of the facility would depend on future business conditions and its ability to earn an acceptable return.[6]

ATI also closed two other facilities, neither of which it claims it could restart. In December 2013, ATI's New Castle, Indiana plant permanently closed. The facility performed hot-roll annealing, cold-rolling, final annealing, slitting, and polishing for stainless steel sheet and strip. In September 2014, ATI's Wallingford, Connecticut plant closed.[7]

Revised labor agreements

All six of AK Steel's facilities that produce stainless steel sheet and strip have been subject to revised labor agreements since 2012.

ATI reached new labor agreements at several of its facilities. However, in August 2015, due to a lack of progress in contract negotiations with the United Steel Workers Union ("USW") over health care benefits, ATI locked out approximately 2,000 USW-represented employees from all its production facilities. On February 11, 2016, the National Labor Relations Board ("NLRB") served a complaint on ATI that alleged violations of the National Labor Relations Act including an unlawful lockout of its union employees. On March 4, 2016, ATI announced that an agreement with the union had been reached, a new contract ratified, and the complaint with the NLRB withdrawn.

ATI claimed that its seven month lockout of its union employees did not materially affect its production or shipment capabilities. ATI stated that it planned far in advance for the eventuality of the effects of a labor dispute, starting thirteen months prior to the expiration of the labor contracts. This included building inventory both of intermediate goods that could be

[6] Allegheny Technologies, Inc., SEC Form 10-K, 2015, p. 7.

[7] Public statements by ATI do not indicate the extent to which the Wallingford facility was a key facility for producing stainless steel sheet and strip.

subsequently processed during the lockout, and of finished goods. Its sales portfolio was changed to focus on U.S. customers and to decrease exports. The facilities were also operated by company employees and professional temporary employees during the lockout. According to ATI's annual report, "after an initial drop in asset utilization during the work stoppage, production rates improved and resumed operations, meeting and in some cases exceeding output and quality expectations."[8] ATI also reported that its flat rolled products segment's operating results in the first quarter of 2016 included $21 million of costs for the new four-year labor agreement.[9]

Anticipated changes in operations

No U.S. producer reported that it anticipated changes in the character of its operations relating to the production of stainless steel sheet and strip.

U.S. PRODUCTION, CAPACITY, AND CAPACITY UTILIZATION

Table III-2 presents U.S. producers' production, capacity,[10] and capacity utilization. U.S. producers' capacity to produce stainless steel sheet and strip increased by 5.9 percent from 2014 to 2016 primarily because of Outokumpu's cold-rolling operations coming back online after being shut down for a portion of 2014. Production and capacity utilization decreased unevenly from 2014 to 2016. Capacity utilization rates varied across firms. *** reported consistently operating with a capacity utilization rate above *** percent and ***. ***. Indeed, ***'s capacity utilization approached *** percent during ***. ******.

[8] Allegheny Technologies, Inc., SEC Form 10-K, 2015, p. 29.
[9] Allegheny Technologies, Inc., SEC Form 10-Q, March 31, 2016, p. 27.
[10] U.S. producers' reported constraints on capacity include: ***.

Table III-2
Stainless steel sheet and strip: U.S. producers' production, capacity, and capacity utilization, 2014-16, January-March 2016, and January-March 2017

Item	Calendar year			January-March	
	2014	2015	2016	2016	2017
	Capacity (short tons)				
AK Steel	***	***	***	***	***
ATI	***	***	***	***	***
NAS	***	***	***	***	***
Outokumpu	***	***	***	***	***
Total capacity	2,507,812	2,659,635	2,654,960	679,740	690,849
	Production (short tons)				
AK Steel	***	***	***	***	***
ATI	***	***	***	***	***
NAS	***	***	***	***	***
Outokumpu	***	***	***	***	***
Total production	1,964,833	1,735,351	1,902,216	449,407	504,784
	Capacity utilization ratio (percent)				
AK Steel	***	***	***	***	***
ATI	***	***	***	***	***
NAS	***	***	***	***	***
Outokumpu	***	***	***	***	***
Average capacity utilization	78.3	65.2	71.6	66.1	73.1

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

The Commission sought additional information about U.S. producers' stainless steel sheet and strip capacity as it relates to the firms' hot-rolling annealing and pickling ("HRAP") and cold-rolling operations. As discussed in the manufacturing process section in Part I, slabs are hot rolled, then undergo annealing and pickling. It is after these processes are completed that the product becomes merchandise covered by the scope of these orders. Table III-3 presents data on U.S. producers overall HRAP capacity, production details, and capacity utilization rates. Total in-scope stainless steel sheet and strip accounted for the vast majority of total production of products made on HRAP equipment. As shown in the below data, the volume of stainless steel sheet and strip in this form are relatively small compared to the amount that is subsequently further processed, to include cold-rolling.

Table III-3
Stainless steel sheet and strip: U.S. producers' HRAP production, capacity, and capacity utilization, 2014-16, January-March 2016, and January-March 2017

Item	Calendar year			January-March	
	2014	2015	2016	2016	2017
	Quantity (short tons)				
Overall HRAP capacity	3,275,287	3,275,287	3,280,287	827,571	827,571
HRAP capacity allocated to SSSS	2,740,761	2,742,584	2,737,909	700,477	701,586
Production:					
Further processed SSSS HRAP	***	***	***	***	***
To be sold as SSSS HRAP	***	***	***	***	***
In-scope SSSS HRAP	2,093,105	1,845,295	2,018,162	486,049	538,428
Other products	331,102	237,213	226,651	51,979	61,211
Total production	2,424,207	2,082,508	2,244,813	538,028	599,639
	Ratios and shares (percent)				
Capacity utilization	74.0	63.6	68.4	65.0	72.5
In-scope SSSS HRAP capacity utilization	76.4	67.3	73.7	69.4	76.7
	Ratios and shares (percent)				
Share of production:					
Further processed SSSS HRAP	***	***	***	***	***
To be sold as SSSS HRAP	***	***	***	***	***
In-scope SSSS HRAP	86.3	88.6	89.9	90.3	89.8
Other products	13.7	11.4	10.1	9.7	10.2
Total production	100.0	100.0	100.0	100.0	100.0

Note.—"SSSS" is stainless steel sheet and strip; "HRAP" is hot-rolled, annealed, and pickled.

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

Table III-4 presents data on U.S. producers' overall cold-rolling operations. A comparison of table III-3 to III-4 shows that in each period, more than 85 percent of HRAP stainless steel sheet and strip is further processed as cold-rolled stainless steel sheet and strip. Cold-rolled stainless steel sheet and strip accounted for no less than 90.9 percent of total production of all products made on cold-rolling equipment. U.S. producers' cold-rolling capacity for stainless steel sheet and strip increased by 6.8 percent from 2014 to 2015, as Outokumpu's Calvert facility came back online.

Table III-4
Stainless steel sheet and strip: U.S. producers' cold-rolling production, capacity, and capacity utilization, 2014-16, January-March 2016, and January-March 2017

Item	Calendar year			January-March	
	2014	2015	2016	2016	2017
	Quantity (short tons)				
Overall CR capacity	2,618,222	2,692,128	2,697,128	675,532	675,532
Allocated CR capacity	2,267,636	2,422,624	2,427,624	608,159	614,409
Production:					
In-scope SSSS CR	1,796,458	1,617,930	1,772,842	419,019	469,465
Other products	180,063	95,796	88,004	15,485	22,949
Total production	1,976,521	1,713,726	1,860,846	434,504	492,414
	Ratios and shares (percent)				
Capacity utilization	75.5	63.7	69.0	64.3	72.9
In-scope SSSS CR capacity utilization	79.2	66.8	73.0	68.9	76.4
Share of production:					
In-scope SSSS CR	90.9	94.4	95.3	96.4	95.3
Other products	9.1	5.6	4.7	3.6	4.7
Total production	100.0	100.0	100.0	100.0	100.0

Note.—"SSSS" is stainless steel sheet and strip; "CR" is cold-rolled.

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. U.S. producers' commercial U.S. shipments accounted for no less than *** percent of total shipments for any period examined and total U.S. shipments accounted for no less than 78.9 percent. U.S. producers' exports decreased from 2014 to 2016 in both absolute volume and relative volume, though they still accounted for at least 14.9 percent of total shipments.[11] Export shipments contributed substantially to the higher level of total shipments in interim 2017 compared to interim 2016.

The quantity of U.S. producers' U.S. shipments increased from 2014 to 2016; higher commercial U.S. shipments more than offset decreases in internal consumption and transfers to related firms during this period. The value of U.S. shipments, however, was lower in 2016 compared to 2014. Both total U.S. shipments and export shipments were greater during January-March 2017 compared to January-March 2016.

All average unit values decreased steadily from 2014 to 2016. The lowest reported average unit values were in January-March 2016. In January-March 2017, average unit values for U.S. shipments and for export shipments were at their highest levels since 2014.

[11] *** U.S. producers reported exports of stainless steel sheet and strip and identified as their principal export markets the countries of Canada, Mexico, Italy, Germany, Spain, the Netherlands, and the areas of the European Union and South America.

Table III-5
Stainless steel sheet and strip: U.S. producers' U.S. shipments, exports shipments, and total shipments, 2014-16, January-March 2016, and January-March 2017

Item	Calendar year			January-March	
	2014	2015	2016	2016	2017
	Quantity (short tons)				
Commercial U.S. shipments	***	***	***	***	***
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
U.S. shipments	1,602,576	1,435,209	1,631,462	393,475	395,343
Export shipments	337,377	328,960	285,523	73,668	105,856
Total shipments	1,939,953	1,764,169	1,916,985	467,143	501,199
	Value (1,000 dollars)				
Commercial U.S. shipments	***	***	***	***	***
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
U.S. shipments	3,749,999	2,867,080	2,866,746	641,960	850,822
Export shipments	801,275	657,426	499,999	123,216	212,175
Total shipments	4,551,274	3,524,506	3,366,745	765,176	1,062,997

Table continued on next page.

Table III-5--Continued
Stainless steel sheet and strip: U.S. producers' U.S. shipments, exports shipments, and total shipments, 2014-16, January-March 2016, and January-March 2017

Item	Calendar year			January-March	
	2014	2015	2016	2016	2017
	Unit value (dollars per short ton)				
Commercial U.S. shipments	***	***	***	***	***
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
U.S. shipments	2,340	1,998	1,757	1,632	2,152
Export shipments	2,375	1,998	1,751	1,673	2,004
Total shipments	2,346	1,998	1,756	1,638	2,121
	Share of quantity (percent)				
Commercial U.S. shipments	***	***	***	***	***
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
U.S. shipments	82.6	81.4	85.1	84.2	78.9
Export shipments	17.4	18.6	14.9	15.8	21.1
Total shipments	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)				
Commercial U.S. shipments	***	***	***	***	***
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
U.S. shipments	82.4	81.3	85.1	83.9	80.0
Export shipments	17.6	18.7	14.9	16.1	20.0
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. End-of-period inventories decreased steadily during 2014-16 but were higher in absolute terms in January-March 2017 compared to January-March 2016. Relative to production and total shipments, end-of-period inventories were at their lowest level in January-March 2017 and at their highest level in 2014.

Table III-6
Stainless steel sheet and strip: U.S. producers' inventories, 2014-16, January-March 2016, and January-March 2017

Item	Calendar year			January-March	
	2014	2015	2016	2016	2017
	Quantity (short tons)				
U.S. producers' end-of-period inventories	221,861	193,043	178,274	175,307	181,859
	Ratio (percent)				
Ratio of inventories to.--					
U.S. production	11.3	11.1	9.4	9.8	9.0
U.S. shipments	13.8	13.5	10.9	11.1	11.5
Total shipments	11.4	10.9	9.3	9.4	9.1

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

U.S. PRODUCERS' IMPORTS AND PURCHASES

No U.S. producer reported direct imports of subject merchandise or purchases of subject merchandise.

U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

Table III-7 shows U.S. producers' employment-related data. Production and related workers ("PRWs") decreased steadily during 2014-16 but were higher in January-March 2017 compared to January-March 2016. Total hours worked and wages paid exhibited the same trend. *** accounted for all but *** of the decrease in PRWs from 2014 to 2016 and *** of the 318 increase in PRWs in interim 2017 compared to interim 2016. ***. *** reported *** more PRWs in 2016 compared to 2014, even though its production output was essentially the same. *** ***.

Table III-7
Stainless steel sheet and strip: Average number of production and related workers, hours worked, wages paid to such employees, hourly wages, productivity, and unit labor costs, 2014-16, January-March 2016, and January-March 2017

Item	Calendar year			January-March	
	2014	2015	2016	2016	2017
Production and related workers (PRWs) (number)	2,968	2,718	2,660	2,202	2,520
Total hours worked (1,000 hours)	6,355	5,909	5,869	1,360	1,477
Hours worked per PRW (hours)	2,141	2,174	2,206	618	586
Wages paid ($1,000)	225,674	221,148	215,724	52,790	53,210
Hourly wages (dollars per hour)	$35.51	$37.43	$36.76	$38.82	$36.03
Productivity (short tons per 1,000 hours)	309.2	293.7	324.1	330.4	341.8
Unit labor costs (dollars per short ton)	$115	$127	$113	$117	$105

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

FINANCIAL EXPERIENCE OF U.S. PRODUCERS

Background

Four integrated U.S. producers, AK Steel, ATI, NAS, and Outokumpu, reported their financial results on stainless steel sheet and strip.[12] No U.S. producer represented the majority of overall stainless steel sheet and strip revenue. *** accounted for *** percent of total sales revenue in 2016. They were followed by *** (*** percent) and *** *** percent).[13]

*** reported purchasing *** of inputs from related suppliers (*** percent of COGS, respectively). *** companies confirmed that these inputs were reported in a manner consistent with the firm's accounting books and records.[14]

OPERATIONS ON STAINLESS STEEL SHEET AND STRIP

Table III-8 presents aggregated data on U.S. producers' operations in relation to stainless steel sheet and strip. Table III-9 shows the changes in average unit values of select financial indicators. Table III-10 presents selected company-specific financial data.[15]

Table III-8
Stainless steel sheet and strip: Results of operations of U.S. producers, 2014-16, January-March 2016, and January-March 2017

Item	Calendar year			January-March	
	2014	2015	2016	2016	2017
	Quantity (short tons)				
Total net sales	1,939,953	1,764,169	1,916,985	467,143	501,199
	Value (1,000 dollars)				
Total net sales	4,551,274	3,524,506	3,366,746	765,176	1,062,997
Cost of goods sold.-- Raw materials	2,983,470	2,156,011	1,971,047	470,103	602,929

Continued on the next page.

[12] All four U.S. producers have fiscal years that end December 31, and have therefore reported their financial results on a calendar year basis. With the exception of Outokumpu, which reported on the basis of International Financial Reporting Standards (IFRS), U.S. producers reported their financial results on the basis of Generally Accepted Accounting Principles ("GAAP").

[13] As mentioned previously, Outokumpu's Calvert, Alabama facility, which became operational in 2010,was constructed by ThyssenKrupp. In 2012, Outokumpu Oyj (Outokumpu's parent company) purchased ThyssenKrupp's global stainless steel division, Inoxum, which included the stainless producing portion of the Calvert plant.

[14] U.S. producer questionnaires, responses to III-7 and III-8.

[15] Outokumpu has a toll agreement with AM/NS Calvert (the joint venture that owns the carbon steel portion of the Calvert facility) to hot roll slabs and ingots for Outokumpu. In 2016, *** percent of Outokumpu's hot rolling was toll-produced by AM/NS Calvert. Tolling fees accounted for approximately *** percent of Outokumpu's COGS in 2016 and were reported in ***. Email from ***, May 26, 2017. *** percent of their company-specific COGS in 2016. Emails from ***, May 25-26, 2017.

Table III-8--Continued
Stainless steel sheet and strip: Results of operations of U.S. producers, 2014-16, January-March 2016, and January-March 2017

Item	Calendar year			January-March	
	2014	2015	2016	2016	2017
Direct labor	313,499	273,034	273,430	113,391	121,032
Other factory costs	1,236,721	1,143,949	1,035,141	224,803	209,961
Total COGS	4,533,690	3,572,994	3,279,618	808,297	933,922
Gross profit	17,584	(48,488)	87,128	(43,121)	129,075
SG&A expense	157,081	122,908	139,309	35,296	40,852
Operating income or (loss)	(139,497)	(171,396)	(52,181)	(78,417)	88,223
Interest expense	***	***	***	***	***
All other expenses	***	***	***	***	***
All other income	***	***	***	***	***
Net income or (loss)	(220,839)	(343,402)	(167,622)	(108,601)	64,361
Depreciation/amortization	158,377	158,211	152,270	37,859	40,036
Cash flow	(62,462)	(185,191)	(15,352)	(70,742)	104,397
	Unit value (dollars per short ton)				
Total net sales	2,346	1,998	1,756	1,638	2,121
Cost of goods sold.-- Raw materials	1,538	1,222	1,028	1,006	1,203
Direct labor	162	155	143	243	241
Other factory costs	638	648	540	481	419
Average COGS	2,337	2,025	1,711	1,730	1,863
Gross profit	9	(27)	45	(92)	258
SG&A expense	81	70	73	76	82
Operating income or (loss)	(72)	(97)	(27)	(168)	176
Net income or (loss)	(114)	(195)	(87)	(232)	128
	Ratio to COGS (percent)				
Cost of goods sold.-- Raw materials	65.8	60.3	60.1	58.2	64.6
Direct labor	6.9	7.6	8.3	14.0	13.0
Other factory costs	27.3	32.0	31.6	27.8	22.5
Total COGS	100.0	100.0	100.0	100.0	100.0
	Ratio to net sales (percent)				
Cost of goods sold.-- Raw materials	65.6	61.2	58.5	61.4	56.7
Direct labor	6.9	7.7	8.1	14.8	11.4
Other factory costs	27.2	32.5	30.7	29.4	19.8
Total COGS	99.6	101.4	97.4	105.6	87.9
Gross profit	0.4	(1.4)	2.6	(5.6)	12.1
SG&A expense	3.5	3.5	4.1	4.6	3.8
Operating income or (loss)	(3.1)	(4.9)	(1.5)	(10.2)	8.3
Net income or (loss)	(4.9)	(9.7)	(5.0)	(14.2)	6.1

Continued on the next page.

Table III-8—Continued
Stainless steel sheet and strip: Results of operations of U.S. producers, 2014-16, January-March 2016, and January-March 2017

Item	Calendar year			January-March	
	2014	2015	2016	2016	2017
	Number of firms reporting				
Operating losses	2	2	2	3	2
Net losses	2	2	2	3	2
Data	4	4	4	4	4

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

Table III-9
Stainless steel sheet and strip: Changes in AUVs, between calendar years and partial year periods

Item	Between calendar years			January-March
	2014-16	2014-15	2015-16	2016-17
	Changes in unit values (dollars per short ton)			
Total net sales	(590)	(348)	(242)	483
Cost of goods sold.-- Raw materials	(510)	(316)	(194)	197
Direct labor	(19)	(7)	(12)	(1)
Other factory costs	(98)	11	(108)	(62)
Average COGS	(626)	(312)	(314)	133
Gross profit	36	(37)	73	350
SG&A expense	(8)	(11)	3	6
Operating income or (loss)	45	(25)	70	344
Net income or (loss)	26	(81)	107	361

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

Table III-10
Stainless steel sheet and strip: Results of operations of U.S. producers, by firm, January-March 2016, and January-March 2017

Item	Calendar year			January-March	
	2014	2015	2016	2016	2017
	Net sales quantity (short tons)				
ATI	***	***	***	***	***
AK Steel	***	***	***	***	***
Outokumpu	***	***	***	***	***
NAS	***	***	***	***	***
Total net sales quantity	1,939,953	1,764,169	1,916,985	467,143	501,199
	Net sales value (1,000 dollars)				
ATI	***	***	***	***	***
AK Steel	***	***	***	***	***
Outokumpu	***	***	***	***	***
NAS	***	***	***	***	***
Total net sales value	4,551,274	3,524,506	3,366,746	765,176	1,062,997
	COGS (1,000 dollars)				
ATI	***	***	***	***	***
AK Steel	***	***	***	***	***
Outokumpu	***	***	***	***	***
NAS	***	***	***	***	***
Total COGS	4,533,690	3,572,994	3,279,618	808,297	933,922
	Gross profit or (loss) (1,000 dollars)				
ATI	***	***	***	***	***
AK Steel	***	***	***	***	***
Outokumpu	***	***	***	***	***
NAS	***	***	***	***	***
Total gross profit or (loss)	17,584	(48,488)	87,128	(43,121)	129,075
	SG&A expenses (1,000 dollars)				
ATI	***	***	***	***	***
AK Steel	***	***	***	***	***
Outokumpu	***	***	***	***	***
NAS	***	***	***	***	***
Total SG&A expenses	157,081	122,908	139,309	35,296	40,852

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Table III-10—Continued
Stainless steel sheet and strip: Results of operations of U.S. producers, by firm, January-March 2016, and January-March 2017

Item	Calendar year			January-March	
	2014	2015	2016	2016	2017
	Operating income or (loss) (1,000 dollars)				
ATI	***	***	***	***	***
AK Steel	***	***	***	***	***
Outokumpu	***	***	***	***	***
NAS	***	***	***	***	***
Total operating income or (loss)	(139,497)	(171,396)	(52,181)	(78,417)	88,223
	Net income or (loss) (1,000 dollars)				
ATI	***	***	***	***	***
AK Steel	***	***	***	***	***
Outokumpu	***	***	***	***	***
NAS	***	***	***	***	***
Total net income or (loss)	(220,839)	(343,402)	(167,622)	(108,601)	64,361
	COGS to net sales value (percent)				
ATI	***	***	***	***	***
AK Steel	***	***	***	***	***
Outokumpu	***	***	***	***	***
NAS	***	***	***	***	***
Average COGS to sales	99.6	101.4	97.4	105.6	87.9
	Gross profit or (loss) to net sales value (percent)				
ATI	***	***	***	***	***
AK Steel	***	***	***	***	***
Outokumpu	***	***	***	***	***
NAS	***	***	***	***	***
Average gross profit or (loss) to sales	0.4	(1.4)	2.6	(5.6)	12.1
	SG&A expenses to net sales value (percent)				
ATI	***	***	***	***	***
AK Steel	***	***	***	***	***
Outokumpu	***	***	***	***	***
NAS	***	***	***	***	***
Average SG&A expenses to sales	3.5	3.5	4.1	4.6	3.8

Table continued on next page.

Table III-10—Continued
Stainless steel sheet and strip: Results of operations of U.S. producers, by firm, January-March 2016, and January-March 2017

Item	Calendar year			January-March	
	2014	2015	2016	2016	2017
	Operating profit or (loss) to net sales value (percent)				
ATI	***	***	***	***	***
AK Steel	***	***	***	***	***
Outokumpu	***	***	***	***	***
NAS	***	***	***	***	***
Average operating profit or (loss) to sales	(3.1)	(4.9)	(1.5)	(10.2)	8.3
	Net income or (loss) to net sales (percent)				
ATI	***	***	***	***	***
AK Steel	***	***	***	***	***
Outokumpu	***	***	***	***	***
NAS	***	***	***	***	***
Total net income or (loss) to net sales	(4.9)	(9.7)	(5.0)	(14.2)	6.1
	Unit net sales value (dollars per short ton)				
ATI	***	***	***	***	***
AK Steel	***	***	***	***	***
Outokumpu	***	***	***	***	***
NAS	***	***	***	***	***
Average unit net sales value	2,346	1,998	1,756	1,638	2,121
	Unit raw materials (dollars per short ton)				
ATI	***	***	***	***	***
AK Steel	***	***	***	***	***
Outokumpu	***	***	***	***	***
NAS	***	***	***	***	***
Average unit raw materials	1,538	1,222	1,028	1,006	1,203
	Unit direct labor (dollars per short ton)				
ATI	***	***	***	***	***
AK Steel	***	***	***	***	***
Outokumpu	***	***	***	***	***
NAS	***	***	***	***	***
Average unit direct labor	162	155	143	243	241

Table continued on next page.

Table III-10—Continued
Stainless steel sheet and strip: Results of operations of U.S. producers, by firm, January-March 2016, and January-March 2017

Item	Calendar year			January-March	
	2014	2015	2016	2016	2017
	Unit other factory costs (dollars per short ton)				
ATI	***	***	***	***	***
AK Steel	***	***	***	***	***
Outokumpu	***	***	***	***	***
NAS	***	***	***	***	***
Average unit other factory costs	638	648	540	481	419
	Unit COGS (dollars per short ton)				
ATI	***	***	***	***	***
AK Steel	***	***	***	***	***
Outokumpu	***	***	***	***	***
NAS	***	***	***	***	***
Average unit COGS	2,337	2,025	1,711	1,730	1,863
	Unit gross profit or (loss) (dollars per short ton)				
ATI	***	***	***	***	***
AK Steel	***	***	***	***	***
Outokumpu	***	***	***	***	***
NAS	***	***	***	***	***
Average unit gross profit or (loss)	9	(27)	45	(92)	258
	Unit SG&A expense (dollars per short ton)				
ATI	***	***	***	***	***
AK Steel	***	***	***	***	***
Outokumpu	***	***	***	***	***
NAS	***	***	***	***	***
Average unit SG&A expense	81	70	73	76	82
	Unit operating income or (loss) (dollars per short ton)				
ATI	***	***	***	***	***
AK Steel	***	***	***	***	***
Outokumpu	***	***	***	***	***
NAS	***	***	***	***	***
Average unit operating income or (loss)	(72)	(97)	(27)	(168)	176
	Unit net income or (loss)				
ATI	***	***	***	***	***
AK Steel	***	***	***	***	***
Outokumpu	***	***	***	***	***
NAS	***	***	***	***	***
Average unit net income or (loss)	(114)	(195)	(87)	(232)	128

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

Revenue

Net sales primarily reflect commercial sales (*** of total sales quantity during the period examined), followed by transfers to related firms (***).[16] Internal consumption, the smallest revenue category, accounted for *** percent of total sales volume throughout the period examined.

Net sales quantity decreased from 2014 to 2015, and increased from 2015 to 2016 to approach the level reported for 2014. Net sales revenue, however, decreased in both 2015 and 2016. In January-March 2017, net sales quantity and value were higher than in the same period in 2016. As shown in table III-10, the directional trends of company-specific sales quantity were largely uniform in the annual periods (***).[17] During the interim periods, ***. The directional trend of company-specific net sales values was also mostly uniform during the period examined with *** companies reporting decreasing sales revenue from 2014 to 2015, *** companies reporting decreasing sales from 2015 to 2016, and *** companies reporting higher net sales value in January-March 2017 than in the same period in 2016.

The directional trend of company-specific net sales average unit values ("AUVs") was uniform, with *** companies reporting decreasing net sales AUVs between 2014 and 2015, and to a lesser extent, 2016, and *** companies reporting *** higher net sales AUVs in January-March 2017 than in the same period in 2016. From 2014 to 2016, the overall net sales unit value decreased by 25.1 percent from $2,346 per short ton in 2014 to $1,756 per short ton in 2016, and was 29.5 percent higher in January-March 2017 ($2,121) than in January-March 2016 ($1,638). As shown in table III-10, *** consistently reported the *** sales AUVs. Outokumpu reported *** for net sales AUV from 2015 to 2016.[18]

Cost of goods sold and gross profit or (loss)

As shown in table III-8 raw material costs represented the largest component of COGS, accounting for between 58.2 percent (January-March 2016) and 65.8 percent (2014) of total

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[16] The transfers to related firms were sales of stainless steel sheet and strip by *** to ***. *** U.S. producer questionnaire, response to II-11.

[17] ***.

[18] Outokumpu's U.S. producer questionnaire at III-10. According to Outokumpu's annual report in 2016, "The 2016 stainless steel market was volatile in the US. The year started with low base prices and high imports from China. In February, Outokumpu joined other US stainless steel producers and filed antidumping and countervailing duty petitions against Chinese importers. In September, the US Commerce Department set preliminary antidumping duties against imports from China. These measures resulted in significantly reduced import volumes from China particularly during the second half of the year, which, together with healthy underlying stainless steel demand, resulted in increased base prices towards the end of the year. However, the CRU reported average market base price for the year was clearly lower on average at USD 1,286/tonne compared to USD 1,349/tonne in 2015." Outokumpu's 2016 Annual Report: Financial Statements, p. 3, http://www.outokumpu.com/SiteCollectionDocuments/Outokumpu_Annual_report_2016.pdf, retrieved August 10, 2017.

COGS. Raw materials, as a share of COGS, decreased from 2014 to 2016 and were at a period low in January-March 2016. Table III-10 shows that company-specific trends in per-short ton raw material costs were generally uniform, decreasing from 2014 to 2016, and higher in January-March 2017 than in the same period in 2016. Only *** ***[19]

Other factory costs were the second largest component of COGS, accounting for between 22.5 percent (January-March 2017) and 32.0 percent (2015), while direct labor accounted for between 6.9 percent (2014) and 14.0 percent (January-March 2016). ***.

The industry's gross profit declined from $17.6 million in 2014 to a gross loss of $48.5 million in 2015, before improving to $87.1 million in 2016. The industry reported a gross profit in January to March 2017 ($129.1 million) compared to a gross loss in the same period in 2016 (loss of $43.1 million). The decrease in gross profit from 2014 to 2015 reflects a decrease in the gross margin from $9 per short ton in 2014 to a negative $27 per short ton in 2015 (per-short ton net sales values decreased more than the decrease in per-short ton COGS), as well as a decrease in the volume of net sales. Conversely, the improvement in gross profit from 2015 to 2016 is because the gross margin improved to $45 per short ton (in this case, while per-short ton sales values were still decreasing, per-short ton COGS decreased to a greater extent), coupled with an increase in sales volume. On a company-specific basis, ***[20] whereas ***.

SG&A expenses and operating profit or (loss)

As shown in table III-8, the industry's SG&A expense ratio (i.e., total SG&A expenses divided by total revenue) ranged from 3.5 percent in 2014 and 2015 to 4.6 percent in January-March 2016.[21]

Operating income followed the same trend as gross profit, worsening from a loss of $139.5 million in 2014 to a loss of $171.4 million in 2015, before improving to a loss of $52.2 million in 2016. The industry reported operating income of $88.2 million in January-March 2017 compared to an operating loss of $78.4 million in January-March 2016.

All other expenses and net income or (loss)

Classified below the operating income level are interest expense, other expense, and other income, which are usually allocated to the product line from high levels in the corporation. Interest expense, the largest of these line items, decreased irregularly from 2014 to 2016, and was lower in January to March 2017 than in the same period in 2016. All other expenses were $*** in 2014, $*** in 2015, and $*** in 2016. *** accounted for the majority of the reported other expenses. ***.[22] All other income decreased from 2014 to 2016, and was lower in January-March 2017 compared to the same period in 2016. ***.[23] [24]

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[19] In response to questions by staff, ***. Email from ***, May 25, 2017.

[20] ***.

[21] ***.

[22] ***.

[23] ***.

Net income followed the same trend as gross profit and operating income, worsening from a loss of $220.8 million in 2014 to a loss of $343.4 million in 2015, before improving to a loss of $167.6 million in 2016. The industry reported a net loss of $108.6 million in January-March 2016 and a net income of $64.4 million in January-March 2017.

Variance analysis

A variance analysis for the operations of U.S. producers of stainless steel sheet and strip is presented in table IIII-11.[25] The information for this variance analysis is derived from table III-8. The analysis illustrates that from 2014 to 2016, the increase in operating income is primarily attributable to a higher favorable cost/expense variance despite an unfavorable price variance (i.e., costs and expenses decreased more than prices). The improvement in operating income in January-March 2017 compared to January-March 2016 is primarily attributable to a favorable price variance that more than offset an unfavorable net/cost expense variance (i.e., prices increased more than costs and expenses).

(…*continued*)

[24] ***. ***. In Outokumpu's 2014 Annual Report, it reported that it "suffered {a} contractor's fatal accident in Calvert, {Alabama} in June. In addition, serious machinery breakdown incidents took place…at {the} cold rolling mills in Calvert. These losses are expected to be covered partially by insurance." According to Outokumpu's 2016 Annual Report, "The loss settlement for the machinery breakdown, which took place in June 2014 in Calvert, {Alabama,} was settled with insurers in March at about USD 60 million less risk retention of about USD 13 million…In 2016, EUR 24 million adjustment was recognized relating to earlier insurance compensation in Calvert mill in the US due to machinery breakdown incident in 2014. In 2015 costs of EUR 17 million were recognized due to interruption and transfer of production to Group's other mills as well as repair and maintenance costs." Outokumpu's 2016 Annual Report, p. 111, http://www.outokumpu.com/SiteCollectionDocuments/Outokumpu_Annual_report_2014.pdf, retrieved August 10, 2017, and Outokumpu's 2016 Financial Statements, pp. 29 and 45.

[25] The Commission's variance analysis is calculated in three parts: Sales variance, cost of sales variance (COGS variance), and SG&A expense variance. Each part consists of a price variance (in the case of the sales variance) or a cost or expense variance (in the case of the COGS and SG&A expense variance), and a volume variance. The sales or cost/expense variance is calculated as the change in unit price or per-unit cost/expense times the new volume, while the volume variance is calculated as the change in volume times the old unit price or per-unit cost/expense. Summarized at the bottom of the table, the price variance is from sales; the cost/expense variance is the sum of those items from COGS and SG&A variances, respectively, and the volume variance is the sum of the volume components of the net sales, COGS, and SG&A expense variances. The overall volume component of the variance analysis is generally small.

Table III-11
Stainless steel sheet and strip: Variance analysis on the operations of U.S. producers, between calendar years and partial year periods

Item	Between calendar years			January-March
	2014-16	2014-15	2015-16	2016-17
Net sales:				
Price variance	(1,130,643)	(614,366)	(463,060)	242,038
Volume variance	(53,885)	(412,402)	305,300	55,783
Net sales variance	(1,184,528)	(1,026,768)	(157,760)	297,821
Cost of sales:				
Cost/expense variance	1,200,396	549,887	602,876	(66,698)
Volume variance	53,676	410,809	(309,500)	(58,927)
Total cost of sales variance	1,254,072	960,696	293,376	(125,625)
Gross profit variance	69,544	(66,072)	135,616	172,196
SG&A expenses:				
Cost/expense variance	15,912	19,939	(5,754)	(2,983)
Volume variance	1,860	14,234	(10,647)	(2,573)
Total SG&A expense variance	17,772	34,173	(16,401)	(5,556)
Operating income variance	87,316	(31,899)	119,215	166,640
Summarized as:				
Price variance	(1,130,643)	(614,366)	(463,060)	242,038
Net cost/expense variance	1,216,308	569,826	597,122	(69,681)
Net volume variance	1,652	12,640	(14,847)	(5,717)

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

Capital expenditures and research and development expenses

Table III-12 presents capital expenditures and research and development ("R&D") expenses by firm. Capital expenditures increased irregularly by *** percent from 2014 to 2016, and were *** percent higher in January-March 2017 when compared to the same period in 2016. As shown in table III-13

***.[26] *** accounted for the *** of R&D expenses reported.[27]

[26] ***. *** U.S. producer questionnaires at III-13 and email from ***, May 26, 2017.
[27] ***. *** U.S. producer questionnaire at III-13.

Table III-12
Stainless steel sheet and strip: Capital expenditures and research and development expenses of U.S. producers, by firm, 2014-16, January-March 2016, and January-March 2017

* * * * * * *

ASSETS AND RETURN ON ASSETS

Table III-13 presents data on the U.S. producers' total assets and their operating return on assets.[28] Total assets decreased from $5.0 billion in 2014 to $4.5 billion in 2015 and increased to $4.6 billion in 2016.

Table III-13
Stainless steel sheet and strip: U.S. producers' total assets and return on assets, 2014-16

Firm	Calendar year		
	2014	2015	2016
	Total net assets (1,000 dollars)		
ATI	***	***	***
AK Steel	***	***	***
Outokumpu	***	***	***
NAS	***	***	***
Total net assets	5,048,789	4,492,472	4,591,794
	Operating return on assets (percent)		
ATI	***	***	***
AK Steel	***	***	***
Outokumpu	***	***	***
NAS	***	***	***
Average operating return on assets	(2.8)	(3.8)	(1.1)

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

[28] With respect to a company's overall operations, staff notes that a total asset value (i.e., the bottom line number on the asset side of a company's balance sheet) reflects an aggregation of a number of assets which are generally not product specific. Accordingly, high-level allocation factors were required in order to report a total asset value for stainless steel sheet and strip.

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

U.S. IMPORTS

Overview

The Commission issued questionnaires to 24 firms believed to have imported stainless steel sheet and strip since January 2014. Nineteen firms provided data and information in response to the questionnaires. Based on official Commerce statistics and proprietary Customs records for imports of stainless steel sheet and strip, importers' questionnaire data accounted for 52.1 percent of U.S. imports from all sources in 2016 and 71.4 percent of imports from subject sources during 2016. Firms responding to the Commission's questionnaire accounted for the following shares of individual subject country's subject imports:

- *** percent in 2016 and *** percent of the *** short tons of subject imports from Japan during all of January 2014-March 2017
- *** percent in 2016 and *** percent of the *** short tons of subject imports from Korea during all of January 2014-March 2017
- *** percent in 2016 and approximately *** short tons more than the *** short tons of subject imports from Taiwan during all of January 2014-March 2017.

In light of the data coverage by the Commission's questionnaires, subject import data in this report are based on proprietary Customs records to account for all dutiable imports and official Commerce statistics for nonsubject imports of stainless steel sheet and strip.[1]

Imports from subject and nonsubject countries

Table IV-1 presents information on U.S. imports of stainless steel sheet and strip from Japan, Korea, and Taiwan and all other sources. Combined subject import volume during any presented calendar year did not surpass *** short tons or *** percent of the total quantity of imports of stainless steel sheet and strip.

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[1] Import data are based on the following HTS statistical reporting numbers: 7219.13.00.31; 7219.13.00.51, 7219.13.00.71, 7219.13.00.81, 7219.14.00.30, 7219.14.00.65, 7219.14.00.90, 7219.32.00.05, 7219.32.00.20, 7219.32.00.25, 7219.32.00.35, 7219.32.00.36, 7219.32.00.38, 7219.32.00.42, 7219.32.00.44, 7219.33.00.05, 7219.33.00.20, 7219.33.00.25, 7219.33.00.35, 7219.33.00.36, 7219.33.00.38, 7219.33.00.42, 7219.33.00.44, 7219.34.00.05, 7219.34.00.20, 7219.34.00.25, 7219.34.00.30, 7219.34.00.35, 7219.35.00.05, 7219.35.00.15, 7219.35.00.30, 7219.35.00.35, 7219.90.00.10, 7219.90.00.20, 7219.90.00.25, 7219.90.00.60, 7219.90.00.80, 7220.12.10.00, 7220.12.50.00, 7220.20.10.10, 7220.20.10.15, 7220.20.1 0.60, 7220.20.10.80, 7220.20.60.05, 7220.20.60.10, 7220.20.60.15, 7220.20.60.60, 7220.20.60.80, 7220.20.70.05, 7220.20.70.10, 7220.20.70.15, 7220.20.70.60, 7220.20.70.80, 7220.20.80.00, 7220.20.90.30, 7220.20.90.60, 7220.90.00.10, 7220.90.00.15, 7220.90.00.60, and 7220.90.00.80.

Table IV-1
Stainless steel sheet and strip: U.S. imports by source, 2014-16, January-March 2016, and January-March 2017

Item	Calendar year			January-March	
	2014	2015	2016	2016	2017
	Quantity (short tons)				
U.S. imports from.--Japan	***	***	***	***	***
Korea	***	***	***	***	***
Taiwan	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	351,996	344,249	346,910	74,511	85,030
	Value (1,000 dollars)				
U.S. imports from.--Japan	***	***	***	***	***
Korea	***	***	***	***	***
Taiwan	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	939,502	848,111	750,800	164,826	188,071
	Unit value (dollars per short ton)				
U.S. imports from.--Japan	***	***	***	***	***
Korea	***	***	***	***	***
Taiwan	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	2,668	2,463	2,164	2,212	2,212
	Share of quantity (percent)				
U.S. imports from.--Japan	***	***	***	***	***
Korea	***	***	***	***	***
Taiwan	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)				
U.S. imports from.--Japan	***	***	***	***	***
Korea	***	***	***	***	***
Taiwan	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	100.0	100.0	100.0	100.0	100.0

Table continued on next page.

Table IV-1—Continued
Stainless steel sheet and strip: U.S. imports by source, 2014-16, January-March 2016, and January-March 2017

Item	Calendar year			January-March	
	2014	2015	2016	2014	2015
	Ratio to U.S. production (percent)				
U.S. imports from.--					
Japan	***	***	***	***	***
Korea	***	***	***	***	***
Taiwan	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	17.9	19.8	18.2	16.6	16.8

Note 1.-- Nonsubject excludes out-of-scope product from ***.
Note 2.-- Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

Source: Proprietary Customs records for 60 statistical reporting numbers, and official Commerce statistics, accessed August 3, 2017. See footnote 1 for details.

Table IV-2 presents data on nonsubject U.S. imports by source. The largest source of U.S. imports of stainless steel sheet and strip is Mexico. ***. As discussed in Part I of this report, certain stainless steel sheet and strip products from Japan have been excluded from the scope of the antidumping order on that country and multiple suppliers of stainless steel sheet and strip from Korea and Taiwan are no longer subject to the trade remedy orders.

In 2014, 2015, and the first quarter of 2016, China was the largest source of U.S. imports of stainless steel sheet and strip. In February 2016, petitions were filed by U.S. producers seeking relief from dumped and subsidized imports of stainless steel sheet and strip from China. Commerce issued countervailing duty and antidumping duties on stainless steel sheet and strip from China in April 2017.[2]

[2] These orders set cash deposit rates of 75.60 – 190.71 percent (countervailing duty order) and 45.26– 58.04 percent (antidumping duty order). 82 FR 16160 and 16166, April 3, 2017.

Table IV-2
Stainless steel sheet and strip: U.S. imports from major nonsubject sources, 2014-16, January-March 2016, and January-March 2017

Item	Calendar year			January-March	
	2014	2015	2016	2016	2017
	Quantity (short tons)				
Nonsubject U.S. imports from.--					
Mexico	69,145	54,285	64,697	14,924	17,999
France	29,165	40,801	49,792	11,480	13,281
China[1]	92,874	99,634	29,696	16,198	925
Vietnam	14,464	12,838	27,605	2,603	8,477
Taiwan nonsubject	***	***	***	***	***
Italy	7,450	10,932	22,260	3,604	5,134
Korea nonsubject	***	***	***	***	***
Brazil	10,292	12,964	21,951	4,174	3,937
India	10,112	11,119	12,942	2,119	4,597
South Africa	13,608	12,130	12,087	1,328	2,950
Germany	14,517	10,229	9,858	2,296	1,682
Japan nonsubject	***	***	***	***	***
Indonesia	3,771	4,043	6,918	1,005	3,271
United Kingdom	1,688	1,802	3,082	891	667
All other sources	54,548	35,193	35,055	***	***
All nonsubject sources	***	***	***	***	***
	Share of total U.S. imports (percent)				
Nonsubject U.S. imports from.--					
Mexico	19.6	15.8	18.6	20.0	21.2
France	8.3	11.9	14.3	15.4	15.6
China[1]	26.4	28.9	8.6	21.7	1.1
Vietnam	4.1	3.7	8.0	3.5	10.0
Taiwan nonsubject	***	***	***	***	***
Italy	2.1	3.2	6.4	4.8	6.0
Korea nonsubject	***	***	***	***	***
Brazil	2.9	3.8	6.3	5.6	4.6
India	2.9	3.2	3.7	2.8	5.4
South Africa	3.9	3.5	3.5	1.8	3.5
Germany	4.1	3.0	2.8	3.1	2.0
Japan nonsubject	***	***	***	***	***
Indonesia	1.1	1.2	2.0	1.3	3.8
United Kingdom	0.5	0.5	0.9	1.2	0.8
All other source	15.5	10.2	10.1	9.0	12.2
All nonsubject sources	***	***	***	***	***

[1] Effective June 27, 2016, Commerce made an affirmative preliminary countervailing duty determination with regard to U.S. imports of stainless steel sheet and strip from China. FR 81 41519. Effective September 19, 2016, Commerce made an affirmative preliminary antidumping duty determination with regard to U.S. imports of stainless steel sheet and strip from China. 81 FR 64135. On February 8, 2017, Commerce made affirmative final antidumping and countervailing duty determinations with regard to U.S. imports of stainless steel sheet and strip from China. 82 FR 9714 and 82 FR 9716. On April 3, 2017, Commerce issued antidumping and countervailing duty orders on U.S. imports of stainless steel sheet and strip from China. 82 FR 16160 and 82 FR 16166.

Note 1. – Shaded rows indicate sources subject to the original investigations.

Note 2.—*** excludes out-of-scope product from ***.

Source: Official Commerce statistics for 60 statistical reporting numbers, accessed June 12, 2017. See footnote 1 for details.

U.S. IMPORTERS' IMPORTS SUBSEQUENT TO MARCH 31, 2017

The Commission requested importers to indicate whether they had imported or arranged for the importation of stainless steel sheet and strip from subject countries for delivery after March 31, 2017. Data for arranged imports are presented in table IV-3.

Table IV-3
Stainless steel sheet and strip: U.S. importers' arranged imports, April-June 2017 – January-March 2018

Item	Period				
	Apr-Jun 2017	Jul-Sept 2017	Oct-Dec 2017	Jan-Mar 2018	12 months
	Quantity (short tons)				
Imports arranged from Japan	***	***	***	***	***
Imports arranged from Korea	***	***	***	***	***
Imports arranged from Taiwan	***	***	***	***	***
Imports arranged from subject sources	***	***	***	***	***
Imports arranged from all other sources	***	***	***	***	***
Total arranged imports	29,720	31,672	24,780	19,057	105,229

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

U.S. IMPORTERS' INVENTORIES

Table IV-4 presents data for inventories of U.S. imports of stainless steel sheet and strip from Japan, Korea, Taiwan, and all other sources held in the United States.

Table IV-4
Stainless steel sheet and strip: U.S. importers' end-of-period inventories of imports, by source, 2014-16, January-March 2016, and January-March 2017

Item	Calendar year			January-March	
	2014	2015	2016	2016	2017
Imports from Japan: Inventories (short tons)	***	***	***	***	***
Ratio to U.S. imports (percent)	***	***	***	***	***
Ratio to U.S. shipments of imports (percent)	***	***	***	***	***
Ratio to total shipments of imports (percent)	***	***	***	***	***
Imports from Korea: Inventories (short tons)	***	***	***	***	***
Ratio to U.S. imports (percent)	***	***	***	***	***
Ratio to U.S. shipments of imports (percent)	***	***	***	***	***
Ratio to total shipments of imports (percent)	***	***	***	***	***
Imports from Taiwan: Inventories (short tons)	***	***	***	***	***
Ratio to U.S. imports (percent)	***	***	***	***	***
Ratio to U.S. shipments of imports (percent)	***	***	***	***	***
Ratio to total shipments of imports (percent)	***	***	***	***	***
Imports from subject sources: Inventories (short tons)	***	***	***	***	***
Ratio to U.S. imports (percent)	***	***	***	***	***
Ratio to U.S. shipments of imports (percent)	***	***	***	***	***
Ratio to total shipments of imports (percent)	***	***	***	***	***
Imports from nonsubject sources: Inventories (short tons)	***	***	***	***	***
Ratio to U.S. imports (percent)	***	***	***	***	***
Ratio to U.S. shipments of imports (percent)	***	***	***	***	***
Ratio to total shipments of imports (percent)	***	***	***	***	***
Imports from all sources: Inventories (short tons)	17,605	13,032	11,126	13,936	13,687
Ratio to U.S. imports (percent)	9.0	5.9	6.0	8.1	12.3
Ratio to U.S. shipments of imports (percent)	9.5	6.6	7.3	8.4	12.4
Ratio to total shipments of imports (percent)	9.2	5.8	6.0	8.3	12.2

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

CUMULATION CONSIDERATIONS

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

Fungibility

As presented in table IV-5, U.S. producers' reported commercial U.S. shipments for all requested AISI grades of stainless steel sheet and strip. The *** short tons of commercial U.S. shipments of subject imports from Japan were present in two specified AISI grades, but largely concentrated in the "all other grades" category. All *** short tons of commercial U.S. shipments of subject imports from Korea were in AISI grade 304 and the large majority of commercial U.S. shipments from Taiwan were in AISI grade 430, with the "all other grades" category and AISI grade 304 accounting for the balance.

Table IV-5
Stainless steel sheet and strip: U.S. producers' and importers' commercial U.S. shipments, by grade, 2016

Item	U.S. producers' and importers' commercial U.S. shipments 2016			
	Quantity (short tons)	Value (1,000 dollars)	Unit values (dollars per short ton)	Share of quantity (percent)
US producers: Grade 201	130,373	213,371	1,637	8.4
Grade 304	610,099	1,099,553	1,802	39.5
Grade 316	99,614	243,091	2,440	6.4
Grade 409	181,716	205,949	1,133	11.8
Grade 430	103,521	151,190	1,460	6.7
All other grades	420,228	827,728	1,970	27.2
All grades	1,545,551	2,740,882	1,773	100.0
US importers: Japan Grade 201	***	***	***	***
Grade 304	***	***	***	***
Grade 316	***	***	***	***
Grade 409	***	***	***	***
Grade 430	***	***	***	***
All other grades	***	***	***	***
All grades	***	***	***	***
US importers: Korea Grade 201	***	***	***	***
Grade 304	***	***	***	***
Grade 316	***	***	***	***
Grade 409	***	***	***	***
Grade 430	***	***	***	***
All other grades	***	***	***	***
All grades	***	***	***	***
US importers: Taiwan Grade 201	***	***	***	***
Grade 304	***	***	***	***
Grade 316	***	***	***	***
Grade 409	***	***	***	***
Grade 430	***	***	***	***
All other grades	***	***	***	***
All grades	***	***	***	***

Table continued on next page.

Table IV-5--Continued
Stainless steel sheet and strip: U.S. producers' and importers' commercial U.S. shipments, by grade, 2016

Item	U.S. producers' and importers' commercial U.S. shipments 2016			
	Quantity (short tons)	Value (1,000 dollars)	Unit values (dollars per short ton)	Share of quantity (percent)
US importers: Subject sources Grade 201	***	***	***	***
Grade 304	***	***	***	***
Grade 316	***	***	***	***
Grade 409	***	***	***	***
Grade 430	***	***	***	***
All other grades	***	***	***	***
All grades	***	***	***	***
US importers: Nonsubject sources Grade 201	***	***	***	***
Grade 304	***	***	***	***
Grade 316	***	***	***	***
Grade 409	***	***	***	***
Grade 430	***	***	***	***
All other grades	***	***	***	***
All grades	***	***	***	***
US importers: All import sources Grade 201	681	1,519	2,231	0.5
Grade 304	39,032	70,688	1,811	26.2
Grade 316	4,036	8,708	2,158	2.7
Grade 409	4,796	6,806	1,419	3.2
Grade 430	57,906	90,366	1,561	38.8
All other grades	42,796	87,169	2,037	28.7
All grades	149,247	265,256	1,777	100.0

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

Presence in the market

Subject imports from Japan were present in each month during January 2014-May 2017, accounting for no more than *** percent of total U.S. imports of stainless steel sheet and strip in any month (table IV-6). Subject imports from Korea were present in 36 of 41 months during January 2014-May 2017 and, in December 2016, the largest volume in any individual month of their presence, accounted for *** percent of total U.S. imports of stainless steel sheet and strip. Subject imports from Taiwan were present in 10 of the 41 months during January 2014-May 2017. In eight of the ten months of entries, they did not account for more than 0.05 percent of total U.S. imports of stainless steel sheet and strip.

Table IV-6
Stainless steel sheet and strip: Monthly U.S. producers' U.S. shipments and U.S. imports, January 2014 – May 2017

* * * * * * *

Geographical markets

As shown in table IV-7, subject U.S. imports from Japan primarily entered the United States in 2016 through Eastern ports. Such imports accounted for *** percent of total subject imports from Japan and *** percent of the total U.S. imports of stainless steel sheet and strip that entered in the east. Subject imports from Korea entered predominantly through Western ports in 2016 while virtually all subject imports from Taiwan entered through the South.[3]

[3] "Regions" are defined by relevant ports of entry. Namely, primary Customs District of entry in the East include Baltimore, Maryland and Philadelphia, Pennsylvania. Primary Customs District of entry in the North include Chicago, Illinois and Detroit, Michigan. Primary Customs District of entry in the South include Laredo, Texas; Houston-Galveston, Texas; and Mobile, Alabama. Primary Customs District of entry in the West include Los Angeles, California and Seattle, Washington.

Table IV-7
Stainless steel sheet and strip: U.S. imports by source and border of entry, 2016

Item	East	North	South	West	Total
	Quantity (short tons)				
U.S. imports from.--Japan	***	***	***	***	***
Korea	***	***	***	***	***
Taiwan	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	183,204	21,383	96,381	45,941	346,910
	Share across (percent)				
U.S. imports from.--Japan	***	***	***	***	***
Korea	***	***	***	***	***
Taiwan	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	52.8	6.2	27.8	13.2	100.0
	Share down (percent)				
U.S. imports from.--Japan	***	***	***	***	***
Korea	***	***	***	***	***
Taiwan	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	100.0	100.0	100.0	100.0	100.0

Source: Proprietary Customs records for 60 statistical reporting numbers, and official Commerce statistics, accessed June 12, 2017. See footnote 1 for details.

THE INDUSTRY IN JAPAN

Overview

During the original investigations there were reportedly 11 stainless steel sheet and strip producers in Japan with a combined capacity of more than 2.6 million short tons. None of the companies provided responses to Commission questionnaires. During the first reviews, Hitachi Metals and Takasago Tekko K.K. returned questionnaires, with ***

***.[4] During the second reviews, a questionnaire response was received from Nippon Steel Trading Co., Ltd. ("Nippon") and Hitachi Metals, Inc. In the current proceedings, one producer, Hitachi Metals,[5] submitted a questionnaire response.

Operations on stainless steel sheet and strip

Table IV-8 presents data provided by Hitachi Metals concerning its stainless steel sheet and strip operations. Hitachi Metals is not an integrated producer of stainless steel sheet and strip, but instead purchases HRAP stainless steel sheet and strip that it then cold rolls. Its cold-rolling equipment is mostly used to produce products other than stainless steel sheet and strip (see table IV-9). As shown in table IV-8, for each period, reported capacity is equivalent to production. The volume of Hitachi Metals' production of stainless steel sheet and strip ranged from *** short tons in 2014 to *** short tons in 2016. Hitachi Metal reported that it produces specialty stainless steel sheet and strip products, thus the low production volume and relatively high unit values. The large majority of its shipments are internally consumed. Its largest export markets are ***, followed by the United States.

Table IV-8
Stainless steel sheet and strip: Hitachi Metal's capacity, production, shipments, and inventories, 2014-16, January-March 2016, and January-March 2017

* * * * * * *

Table IV-9 provides information on overall Japanese stainless steel sheet and strip capacity, shipments, exports, and consumption. During 2014-16, capacity had remained constant whereas total shipments had decreased by *** percent and exports had decreased by 11.2 percent. Likewise, consumption decreased by *** percent.

Table IV-9
Stainless steel sheet and strip: Japan's cold-rolled capacity, total shipments, exports, and consumption, 2014-16

Item	Calendar year		
	2014	2015	2016
	Quantity (short tons)		
Capacity[1]	***	***	***
Total shipments[2]	***	***	***
Exports	757,309	670,644	670,229
Consumption[3]	***	***	***

[4] Confidential Staff Report (Second Review), Memorandum INV-JJ-065, June 22, 2011.

[5] In 2013, Hitachi Metals consolidated Hitachi Cable, Ltd. and in 2015 Hitachi Metals merged with Toyo Seihaku Co., Ltd. in 2015. Hitachi Metal's stainless steel sheet and strip production operations were not affected by these events.

[1] Data may include capacity to produce material outside of the product scope of these investigations, i.e. flat-rolled products narrower than 9.5 mm. and cut-to-length products. Capacity to produce hot-rolled coil is not included in the table because of possible double-counting of hot-rolled product capacity for product that is subsequently cold rolled in the source data. As the great majority of stainless steel sheet and strip is cold rolled, cold-rolled capacity may provide a reasonable estimate of stainless steel sheet and strip capacity.
[2] Data may include material outside of the product scope of these investigations, i.e. flat-rolled products narrower than 9.5 mm cut-to-length products, and plate.
[3] Data may include consumption of material outside of the product scope of these investigations, i.e. flat-rolled products narrower than 9.5 mm cut-to-length products, and plate. Consumption of hot-rolled products is not included in the table because of possible double-counting of hot-rolled product for product that is subsequently cold rolled in the source data. As the great majority of stainless steel sheet and strip is cold rolled, consumption of cold-rolled products may provide a reasonable estimate of stainless steel sheet and strip consumption.

Source: ***. Exports are from official Japanese exports statistics under HTS subheadings 7219.13, 7219.14, 7219.32, 7219.33, 7219.34, 7219.35, 7219.90, 7220.12, 7220.20, and 7220.90 as reported by Japan Ministry of Finance in the IHS/GTA database, accessed July 25, 2017.

Alternative products

As noted above, Hitachi Metals has cold-rolling operations and largely produces products other than stainless steel sheet and strip on this equipment. As shown in table IV-10, the other products category accounted for *** percent of total production of products made on the same equipment and machinery used to produce stainless steel sheet and strip.

Table IV-10
Stainless steel sheet and strip: Hitachi Metal's overall capacity and production on the same equipment as subject production, 2014-16, January-March 2016, and January-March 2017

* * * * * * *

Exports

According to GTA, the leading export markets for stainless steel sheet and strip from Japan are China and Korea (table IV-11). Countries in Asia are the largest export destinations for Japanese-made stainless steel sheet and strip. During 2016, the United States accounted for 1.9 percent of total exports of stainless steel sheet and strip from Japan.

Table IV-11
Stainless steel sheet and strip: Exports from Japan by destination market, 2014-16

Item	Calendar year		
	2014	2015	2016
	Quantity (short tons)		
Japan's exports to the United States	21,060	20,609	13,051
Japan's exports to other major destination markets.--			
China	138,843	127,863	134,344
Korea	161,778	132,080	129,335
Thailand	87,890	89,125	87,522
Taiwan	134,837	80,320	72,403
India	39,449	42,163	49,179
Indonesia	37,425	36,087	34,635
Vietnam	24,671	26,172	29,445
Hong Kong	31,947	30,246	25,682
All other destination markets	79,410	85,978	94,633
Total Japan exports	757,309	670,644	670,229
	Value (1,000 dollars)		
Japan's exports to the United States	67,968	68,334	49,604
Japan's exports to other major destination markets.--			
China	342,013	291,428	285,002
Korea	306,929	224,721	186,641
Thailand	193,315	181,632	173,722
Taiwan	189,993	117,050	94,136
India	66,248	66,947	74,062
Indonesia	76,133	67,141	63,446
Vietnam	34,736	35,123	39,554
Hong Kong	95,197	86,405	71,582
All other destination markets	241,638	236,547	232,564
Total Japan exports	1,614,169	1,375,328	1,270,313

Table continued on next page.

Table IV-11--Continued
Stainless steel sheet and strip: Exports from Japan by destination market, 2014-16

Item	Calendar year		
	2014	2015	2016
	Unit value (dollars per short ton)		
Japan's exports to the United States	3,227	3,316	3,801
Japan's exports to other major destination markets.--			
China	2,463	2,279	2,121
Korea	1,897	1,701	1,443
Thailand	2,200	2,038	1,985
Taiwan	1,409	1,457	1,300
India	1,679	1,588	1,506
Indonesia	2,034	1,861	1,832
Vietnam	1,408	1,342	1,343
Hong Kong	2,980	2,857	2,787
All other destination markets	3,043	2,751	2,458
Total Japan exports	2,131	2,051	1,895
	Share of quantity (percent)		
Japan's exports to the United States	2.8	3.1	1.9
Japan's exports to other major destination markets.--			
China	18.3	19.1	20.0
Korea	21.4	19.7	19.3
Thailand	11.6	13.3	13.1
Taiwan	17.8	12.0	10.8
India	5.2	6.3	7.3
Indonesia	4.9	5.4	5.2
Vietnam	3.3	3.9	4.4
Hong Kong	4.2	4.5	3.8
All other destination markets	10.5	12.8	14.1
Total Japan exports	100.0	100.0	100.0

Source: Official Japanese exports statistics under HTS subheadings 7219.13, 7219.14, 7219.32, 7219.33, 7219.34, 7219.35, 7219.90, 7220.12, 7220.20, and 7220.90 as reported by Japan Ministry of Finance in the IHS/GTA database, accessed July 25, 2017.

THE INDUSTRY IN KOREA

Overview

During the original investigations, there were reportedly four producers of stainless steel sheet and strip in Korea. In the first reviews, the Commission received questionnaires from five Korean firms: POSCO, BNG, DaiYang, INI, and Taihan. During the second reviews, only

POSCO responded with data regarding its production of stainless steel sheet and strip. In the current proceedings, one producer, Hyundai BNG, submitted a questionnaire response.

Taihan, which is subject to both the antidumping and countervailing duty orders on imports from Korea, has become increasingly controlled by POSCO. In January 2007, Taihan spun off its stainless steel division, forming Taihan ST, with POSCO acquiring up to a 20 percent stake in the new endeavor. In May 2009, POSCO bought a 65 percent stake in Taihan ST, increasing its stake to 84.9 percent of the firm.[6]

The firm now known as Hyundai-BNG traces its origins to Samyang Special Steel Co., which was established in 1966. Samyang Special Steel Co. merged with Korea Special Steel Co. in 1975, changing its name to KISCO. In 1982, the firm changed its name to Sammi Integrated Special Steel Co. In 1997, Sammi filed for bankruptcy, and was subsequently taken over by Incheon Steel in 2000. Later in 2000, its name was changed again, to BNG Steel Co. Finally, in 2012, it changed its name to Hyundai-BNG Steel Co. Ltd.[7]

Hyundai Steel dates back to 1953, when Korea Heavy Industry Co., Ltd. was founded. In 1962, it was renamed to Incheon Heavy Industry Co., Ltd. In early 2000, it merged with Kangwon Industries and in late 2000, acquired Sammi Specialty Steel Company. In 2001, it became known as INI Steel. It first merged with Hyundai Hysco's Cold Rolled Steel Division in 2013 then merged with Hyundai Hysco in 2015.[8]

Operations on stainless steel sheet and strip

Table IV-12 presents information on Korean producer Hyundai BNG's stainless steel sheet and strip operations. Capacity did not change during 2014-16 and production volumes were relatively stable, resulting in capacity utilization rates ranging from *** to *** during this period. Total home market shipments accounted for a little over *** of Hyundai's total shipments during each calendar year for which data were collected. Hyundai's exports were largely directed to *** with ***. Hyundai BNG's exports to the United States did not account for more than *** percent of its total shipments in any period presented below.

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[6] *Taihan in the news*, https://www.taihan.com/en/bbs/thNews/vw.asp?bbsInfoId=3737&bbsId=THNews&searchItem=&searchWord=&lang=ko&searchCate1=1&searchCate2=&gotoPage=7, retrieved on June 28, 2017 and *POSCO buys 56 pct of stainless firm Taihan ST*, http://www.reuters.com/article/posco-stainless-idUSSEO3745020090512, retrieved on June 28, 2017.

[7] Hyundai BNG Steel company website, http://www.hyundai-bngsteel.com/m/en/company/history01.jsp, retrieved August 10, 2017.

[8] Source: Hyundai Steel company website, https://www.hyundai-steel.com/en/aboutus/corporateoverview/history.hds, retrieved August 10, 2017.

Table IV-12
Stainless steel sheet and strip: Korean producer Hyundai BNG's capacity, production, shipments, and inventories, 2014-16, January-March 2016, and January-March 2017

* * * * * * *

Table IV-13 provides information on overall Korean stainless steel sheet and strip capacity, shipments, exports, and consumption. During 2014-16, capacity had remained constant. Total shipments increased by *** percent from 2014 to 2016 and exports increased by 8.2 percent during this period. Consumption, however, decreased but by only *** short tons.

Table IV-13
Stainless steel sheet and strip: Korea's cold-rolled capacity, total shipments, exports, and consumption, 2014-16

Item	Calendar year		
	2014	2015	2016
	Quantity (short tons)		
Capacity[1 2]	***	***	***
Total shipments[3]	***	***	***
Exports	1,223,159	1,284,470	1,323,454
Consumption[4]	***	***	***

[1] Data may include capacity to produce material outside of the product scope of these investigations, i.e., flat-rolled products narrower than 9.5 mm. and cut-to-length products. Capacity to produce hot-rolled coil is not included in the table because of possible double-counting of hot-rolled product capacity for product that is subsequently cold rolled in the source data. As the great majority of stainless steel sheet and strip is cold rolled, cold-rolled capacity may provide a reasonable estimate of stainless steel sheet and strip capacity.
[2] Korean producer POSCO, which is not subject to the antidumping or countervailing duty orders being reviewed, accounted for *** short tons (*** percent) of total Korean cold-rolled capacity in each year during 2014-16. POSCO also accounted for *** percent of Korea's *** short tons of hot-rolled capacity in each year during 2014-16.
[3] Data may include material outside of the product scope of these investigations, i.e., flat-rolled products narrower than 9.5 mm, cut-to-length products, and plate.
[4] Data may include consumption of material outside of the product scope of these investigations, i.e. flat-rolled products narrower than 9.5 mm cut-to-length products, and plate. Consumption of hot-rolled products is not included in the table because of possible double-counting of hot-rolled product for product that is subsequently cold rolled in the source data. As the great majority of stainless steel sheet and strip is cold rolled, consumption of cold-rolled products may provide a reasonable estimate of stainless steel sheet and strip consumption.

Source: ***. Official Korean exports statistics under HTS subheadings 7219.13, 7219.14, 7219.32, 7219.33, 7219.34, 7219.35, 7219.90, 7220.12, 7220.20, and 7220.90 as reported by Korea Customs and Trade Development Institution in the IHS/GTA database, accessed July 25, 2017.

Alternative products

Hyundai BNG's stainless steel sheet and strip operations perform the cold-rolling operations, but the firm does not have its own HRAP operations. Instead, it purchases HRAP stainless steel sheet and strip from ***.[9] Over *** percent of Hyundai's production on its reported cold-rolling equipment is stainless steel sheet and strip (table IV-14).

Table IV-14
Stainless steel sheet and strip: Korean producer Hyundai BNG's overall capacity and production on the same equipment as subject production, 2014-16, January-March 2016, and January-March 2017

* * * * * * *

Exports

According to GTA, the leading export markets for stainless steel sheet and strip from Korea is Turkey and the remaining destinations that constitute the top-five markets are in Asia (table IV-15). In 2016, Korea's exports of stainless steel sheet and strip to the United States accounted for 2.2 percent of its total exports of stainless steel sheet and strip.

[9] ***.

Table IV-15
Stainless steel sheet and strip: Exports from Korea by destination market, 2014-16

Item	Calendar year		
	2014	2015	2016
	Quantity (short tons)		
Korea's exports to the United States	14,991	26,274	29,637
Korea's exports to other major destination markets.--			
Turkey	165,730	193,153	190,331
Thailand	200,406	179,292	185,174
Vietnam	110,440	157,575	166,926
China	210,331	142,877	145,766
Italy	104,716	154,667	124,587
Japan	128,223	104,617	124,314
Taiwan	60,616	89,385	80,971
Mexico	18,287	37,006	51,980
All other destination markets	209,417	199,623	223,769
Total Korea's exports	1,223,159	1,284,470	1,323,454
	Value (1,000 dollars)		
Korea's exports to the United States	37,176	45,185	47,041
Korea's exports to other major destination markets.--			
Turkey	321,218	271,091	242,570
Thailand	327,474	259,083	240,225
Vietnam	193,977	224,890	217,604
China	347,005	198,619	187,607
Italy	211,607	269,206	181,831
Japan	277,268	199,081	222,910
Taiwan	75,107	97,148	80,523
Mexico	36,044	70,778	84,832
All other destination markets	391,653	354,746	353,345
Total Korea's exports	2,218,530	1,989,828	1,858,488

Table continued on next page.

Table IV-15--Continued
Stainless steel sheet and strip: Exports from Korea by destination market, 2014-16

Item	Calendar year		
	2014	2015	2016
	Unit value (dollars per short ton)		
Korea's exports to the United States	2,480	1,720	1,587
Korea's exports to other major destination markets.--			
Turkey	1,938	1,404	1,274
Thailand	1,634	1,445	1,297
Vietnam	1,756	1,427	1,304
China	1,650	1,390	1,287
Italy	2,021	1,741	1,459
Japan	2,162	1,903	1,793
Taiwan	1,239	1,087	994
Mexico	1,971	1,913	1,632
All other destination markets	1,870	1,777	1,579
Total Korea's exports	1,814	1,549	1,404
	Share of quantity (percent)		
Korea's exports to the United States	1.2	2.0	2.2
Korea's exports to other major destination markets.--			
Turkey	13.5	15.0	14.4
Thailand	16.4	14.0	14.0
Vietnam	9.0	12.3	12.6
China	17.2	11.1	11.0
Italy	8.6	12.0	9.4
Japan	10.5	8.1	9.4
Taiwan	5.0	7.0	6.1
Mexico	1.5	2.9	3.9
All other destination markets	17.1	15.5	16.9
Total Korea's exports	100.0	100.0	100.0

Source: Official Korean exports statistics under HTS subheadings 7219.13, 7219.14, 7219.32, 7219.33, 7219.34, 7219.35, 7219.90, 7220.12, 7220.20, and 7220.90 as reported by Korea Customs and Trade Development Institution in the IHS/GTA database, accessed July 25, 2017.

THE INDUSTRY IN TAIWAN

Overview

During the original investigations, there were reportedly three firms responsible for the majority of stainless steel sheet and strip production in Taiwan, Yieh United Steel Corp. (or YUSCO), Chia Far Industrial Factory, and Tung Mung Development Co. In the first reviews, only one company, Stanch, provided the Commission with a questionnaire response. In the second

reviews, no firms in Taiwan provided a questionnaire response. In the current proceeding, no firms provided a questionnaire response.

Table IV-16 provides information on Taiwan's overall stainless steel sheet and strip capacity, shipments, exports, and consumption. During 2014-16, capacity had remained constant. Total shipments decreased by *** percent from 2014 to 2016 and exports decreased 4.5 percent during this period. Consumption, however, increased by *** percent from 2014 to 2016 and, in 2016, represented more than *** of total shipment volume.

Table IV-16

Stainless steel sheet and strip: Taiwan's cold-rolled capacity, total shipments, exports, and consumption, 2014-16

Item	Calendar year		
	2014	2015	2016
	Quantity (short tons)		
Capacity[1 2]	***	***	***
Total shipments[3]	***	***	***
Exports	947,602	763,317	904,508
Consumption[4]	***	***	***

Note.—Staff notes that total shipments data and export data are derived from different sources.

[1] Data may include capacity to produce material outside of the product scope of these investigations, i.e. flat-rolled products narrower than 9.5 mm. and cut-to-length products. Capacity to produce hot-rolled coil is not included in the table because of possible double-counting of hot-rolled product capacity for product that is subsequently cold rolled in the source data. As the great majority of stainless steel sheet and strip is cold rolled, cold-rolled capacity may provide a reasonable estimate of stainless steel sheet and strip capacity.

[2] Taiwan producers Chang Mien and Tung Mung are not subject to the antidumping duty order being reviewed. Tung Mung accounted for *** short tons (*** percent) of total Taiwan capacity in each year during 2014-16. *** were reported for Chang Mien.

[3] Data may include material outside of the product scope of these investigations, i.e. flat-rolled products narrower than 9.5 mm cut-to-length products, and plate.

[4] Data may include consumption of material outside of the product scope of these investigations, i.e. flat-rolled products narrower than 9.5 mm, cut-to-length products, and plate. Consumption of hot-rolled products is not included in the table because of possible double-counting of hot-rolled product for product that is subsequently cold rolled in the source data. As the great majority of stainless steel sheet and strip is cold rolled, consumption of cold-rolled products may provide a reasonable estimate of stainless steel sheet and strip consumption.

Source: ***. Official Taiwan exports statistics under HTS subheadings 7219.13, 7219.14, 7219.32, 7219.33, 7219.34, 7219.35, 7219.90, 7220.12, 7220.20, and 7220.90 as reported by Taiwan Customs in the IHS/GTA database, accessed July 25, 2017.

Exports

The United States was the fifth-largest destination for Taiwan stainless steel sheet and strip exports in 2016, accounting for 5.4 percent of the total quantity of exports (table IV-17). Taiwan's largest export markets are geographically diverse, with countries in Europe, Asia, North America, and the Middle East.

Table IV-17
Stainless steel sheet and strip: Exports from Taiwan by destination market, 2014-16

Item	Calendar year		
	2014	2015	2016
	Quantity (short tons)		
Taiwan's exports to the United States	34,810	38,139	49,142
Taiwan's exports to other major destination markets.--			
Italy	80,022	65,389	113,313
Korea	102,817	71,641	82,351
Turkey	61,176	66,279	52,414
Russia	37,739	38,593	47,356
China	53,080	41,321	38,443
Iran	39,875	27,858	36,777
Thailand	33,303	28,293	35,685
Belgium	46,172	15,510	23,951
All other destination markets	458,608	370,295	425,075
Total Taiwan exports	947,602	763,317	904,508
	Value (1,000 dollars)		
Taiwan's exports to the United States	105,211	83,627	91,797
Taiwan's exports to other major destination markets.--			
Italy	168,579	104,276	159,932
Korea	177,775	99,964	92,998
Turkey	105,256	101,178	66,353
Russia	63,842	61,416	66,079
China	119,841	89,298	77,797
Iran	85,291	49,874	57,511
Thailand	63,777	50,043	55,281
Belgium	106,624	26,080	36,751
All other destination markets	1,016,334	719,093	687,165
Total Taiwan exports	2,012,531	1,384,850	1,391,665

Table continued on next page.

Table IV-17--Continued
Stainless steel sheet and strip: Exports from Taiwan by destination market, 2014-16

Item	Calendar year		
	2014	2015	2016
	Unit value (dollars per short ton)		
Taiwan's exports to the United States	3,022	2,193	1,868
Taiwan's exports to other major destination markets.--			
Italy	2,107	1,595	1,411
Korea	1,729	1,395	1,129
Turkey	1,721	1,527	1,266
Russia	1,692	1,591	1,395
China	2,258	2,161	2,024
Iran	2,139	1,790	1,564
Thailand	1,915	1,769	1,549
Belgium	2,309	1,682	1,534
All other destination markets	2,216	1,942	1,617
Total Taiwan exports	2,124	1,814	1,539
	Share of quantity (percent)		
Taiwan's exports to the United States	3.7	5.0	5.4
Taiwan's exports to other major destination markets.--			
Italy	8.4	8.6	12.5
Korea	10.9	9.4	9.1
Turkey	6.5	8.7	5.8
Russia	4.0	5.1	5.2
China	5.6	5.4	4.3
Iran	4.2	3.6	4.1
Thailand	3.5	3.7	3.9
Belgium	4.9	2.0	2.6
All other destination markets	48.4	48.5	47.0
Total Taiwan exports	100.0	100.0	100.0

Source: Official Taiwan exports statistics under HTS subheadings 7219.13, 7219.14, 7219.32, 7219.33, 7219.34, 7219.35, 7219.90, 7220.12, 7220.20, and 7220.90 as reported by Taiwan Directorate General of Customs in the IHS/GTA database, accessed July 25, 2017.

ANTIDUMPING OR COUNTERVAILING DUTY ORDERS IN THIRD-COUNTRY MARKETS

There are antidumping duty orders imposed in third-country markets on stainless steel sheet and strip from Japan, Korea, and Taiwan. Table IV-18 presents a list of countries with current remedies in effect and the year in which duties were imposed for Japan, Korea, and Taiwan, respectively.

Table IV-18

Stainless steel sheet and strip: Third-country trade remedy orders on subject countries

Country imposing remedy	Product	Year of duty imposition
Japan		
Thailand	Flat cold-rolled stainless steel	Order imposed March 2003, last continuation February 2015
Korea		
Thailand	Flat cold-rolled stainless steel	Order imposed March 2003, last continuation February 2015
	Cold rolled flat products of stainless steel	Orders imposed December 2010; continued December 2015
India	Stainless steel cold rolled flat products 400 series having width below 600mm	Order imposed October 2012
Taiwan	Flat-rolled products of stainless steel, cold-rolled, whether in coils or sheets,	Order imposed August 2013
Brazil	Cold-rolled stainless steel sheet, grades 304, 304L and 430	Order imposed October 2013
Taiwan[1]		
Thailand	Flat cold-rolled stainless steel	Order imposed March 2003, last continuation February 2015
India	Cold rolled flat products of stainless steel	Order imposed February 2010, continued December 2015
Brazil	Cold-rolled stainless steel sheet, grades 304, 304L and 430	Order imposed October 2013
Vietnam	Cold rolled stainless steel	Order imposed October 2014
European Union	Stainless steel cold rolled flat products	Order imposed August 2015

[1] Turkey instituted an antidumping investigation on cold-rolled stainless steel flats from Taiwan in August 2015 but the complaint was withdrawn in October 2016.

Source: World Trade Organization, *Semi-annual Report under Article 16.4 of the Agreement* for the period July 1 2016 – December 31, 2016, for Brazil, India, Thailand, and Vietnam.

GLOBAL MARKET

Production capacity and consumption

Asia accounted for *** percent of global cold-rolled stainless steel sheet and strip capacity in 2016; China alone accounted for *** percent (table IV-19). Capacity increased in Asia during 2014-16 by *** percent (*** short tons). In contrast, capacity remained stable in most other regions with the exception of Western Europe and North America in which capacity decreased by *** percent and *** percent, respectively.

Table IV-19

Stainless steel cold-rolled sheet and strip: Capacity, actual and projected, by country and region, 2014-19

* * * * * * *

Consumption in Asia increased by *** percent during 2014-16 with consumption increases in China and Taiwan of *** percent and *** percent, respectively; consumption decreased by *** percent in Japan and by *** percent in Korea (table IV-20). In the rest of the world, the greatest relative changes in consumption in the larger consumers of stainless steel sheet and strip occurred in Eastern Europe (increase of *** percent) and Latin America (decrease of *** percent).

Table IV-20

Stainless steel cold-rolled flat products: Apparent consumption, actual and projected, by country and region, 2014-19

* * * * * * *

Foreign demand

Firms' responses regarding demand outside the United States since 2011 and anticipated future demand are summarized in table IV-21. The majority of firms reported that demand outside of the United States has increased or fluctuated since 2011, and indicated that they expect these trends to continue. Firms specifically cited increased auto production in Mexico and strong growth in China, but lower demand in Europe. Purchaser *** stated that worldwide demand for stainless steel has grown by about 10 percent annually and is expected to slow slightly to 6 to 8 percent per year as demand in China slows. *** stated that demand for stainless steel sheet and strip has increased steadily in all markets

Table IV-21

Stainless steel sheet and strip: Firms' perceptions regarding demand outside of the United States

Item	Increase	No change	Decrease	Fluctuate
Demand outside of the United States:				
U.S. producers	3	1	0	0
Importers	4	3	1	3
Purchasers	6	4	0	3
Foreign producers	2	0	0	0
Demand in home market:				
Foreign producers (Japan)	1	0	0	0
Foreign producers (Korea)	1	0	0	0
Anticipated future demand in outside the United States:				
U.S. producers	2	0	0	1
Importers	4	3	0	4
Purchasers	6	5	0	2
Foreign producers	2	0	0	0
Anticipated future demand in home market:				
Foreign producers (Japan)	1	0	0	0
Foreign producers (Korea)	1	0	0	0

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

Prices

During January 2011 and December 2013, average world prices reached a peak in April 2011 before declining irregularly through 2013 (figure IV-1). During January 2014 and March 2017, prices rose irregularly through June 2014, declined to their lowest point in early 2016, and then increased through March 2017. Subsequently, prices ***.

Figure IV-1

Stainless steel cold-rolled coil: Average world prices for grades 304 and 316, monthly, January 2011-June 2017

* * * * * * *

Producers and importers were asked to compare prices of stainless steel sheet and strip in U.S. and foreign markets. U.S. producers and importers did not answer the question with the exception of one importer that stated that prices in Canada were similar to U.S. prices. *** provided MEPS data from March 2017, which showed that for grade 304, prices were highest in Japan, followed by the EU, the United States, and Korea. For grade 430, the order from highest to lowest price was Japan, Korea, the United States, and the EU. ***.

Data on prices for stainless steel cold-rolled sheet in AISI grades 304, 316, 409, and 430 are presented in the following tables.

Table IV-22

Stainless steel sheet and strip: Monthly U.S. negotiated prices for stainless steel cold-rolled coil AISI grade 304, by country, January 2011 through June 2017

Month	Prices (dollars per short ton)				
	United States	Japan	Korea	Taiwan	World
	2011				
January	***	***	***	***	3,298
February	***	***	***	***	3,540
March	***	***	***	***	3,691
April	***	***	***	***	3,743
May	***	***	***	***	3,664
June	***	***	***	***	3,464
July	***	***	***	***	3,338
August	***	***	***	***	3,276
September	***	***	***	***	3,281
October	***	***	***	***	3,051
November	***	***	***	***	2,902
December	***	***	***	***	2,851

Table continued on next page.

Table IV-22--Continued

Stainless steel sheet and strip: Monthly U.S. negotiated prices for stainless steel cold-rolled coil AISI grade 304, by country, January 2011 through June 2017

Month	Prices (dollars per short ton)				
	United States	Japan	Korea	Taiwan	World
	2012				
January	***	***	***	***	2,826
February	***	***	***	***	2,985
March	***	***	***	***	3,035
April	***	***	***	***	2,858
May	***	***	***	***	2,762
June	***	***	***	***	2,660
July	***	***	***	***	2,597
August	***	***	***	***	2,523
September	***	***	***	***	2,485
October	***	***	***	***	2,554
November	***	***	***	***	2,578
December	***	***	***	***	2,565
	2013				
January	***	***	***	***	2,624
February	***	***	***	***	2,598
March	***	***	***	***	2,573
April	***	***	***	***	2,499
May	***	***	***	***	2,468
June	***	***	***	***	2,358
July	***	***	***	***	2,270
August	***	***	***	***	2,249
September	***	***	***	***	2,297
October	***	***	***	***	2,304
November	***	***	***	***	2,277
December	***	***	***	***	2,300
	2014				
January	***	***	***	***	2,308
February	***	***	***	***	2,326
March	***	***	***	***	2,378
April	***	***	***	***	2,448
May	***	***	***	***	2,648
June	***	***	***	***	2,804
July	***	***	***	***	2,793
August	***	***	***	***	2,770
September	***	***	***	***	2,740
October	***	***	***	***	2,679
November	***	***	***	***	2,521
December	***	***	***	***	2,444

Table continued on next page.

Table IV-22--Continued

Stainless steel sheet and strip: Monthly U.S. negotiated prices for stainless steel cold-rolled coil AISI grade 304, by country, January 2011 through June 2017

Month	Prices (dollars per short ton)				
	United States	Japan	Korea	Taiwan	World
	2015				
January	***	***	***	***	2,452
February	***	***	***	***	2,349
March	***	***	***	***	2,296
April	***	***	***	***	2,221
May	***	***	***	***	2,204
June	***	***	***	***	2,195
July	***	***	***	***	2,089
August	***	***	***	***	1,991
September	***	***	***	***	1,906
October	***	***	***	***	1,828
November	***	***	***	***	1,812
December	***	***	***	***	1,745
	2016				
January	***	***	***	***	1,715
February	***	***	***	***	1,688
March	***	***	***	***	1,698
April	***	***	***	***	1,773
May	***	***	***	***	1,822
June	***	***	***	***	1,820
July	***	***	***	***	1,829
August	***	***	***	***	1,921
September	***	***	***	***	1,966
October	***	***	***	***	1,930
November	***	***	***	***	2,001
December	***	***	***	***	2,053
	2017				
January	***	***	***	***	2,227
February	***	***	***	***	2,275
March	***	***	***	***	2,226
April	***	***	***	***	***
May	***	***	***	***	***
June	***	***	***	***	***

Note.— For average world prices “All prices relate to those to be paid by consumers and stockholders for prime material, ex mill. Prices are for regular business between customers and their local steel mills negotiated during the month for delivery in the short/medium term. Delivery charges and local taxes are excluded. Contract deals arranged in the domestic market or special negotiations for quantities of imported material are also excluded.

Transaction Price is the total amount to be paid for the specified product - including alloy surcharges or alloy adjustment factor (if applicable)." MEPS International Ltd, "Price Definitions - Stainless Steel," http://www.meps.co.uk/definitions.htm.

Source: Data for the United States, Japan, Korea, and Taiwan were compiled from ***. The world average prices for January 2011-March 2017 were compiled from MEPS International Ltd, "World Stainless Steel Prices," http://www.meps.co.uk/Stainless%20Prices.htm. Average world prices for April-June 2017 were compiled from ***.

Table IV-23
Stainless steel sheet and strip: Monthly U.S. negotiated prices for stainless steel cold-rolled coil AISI grade 316, by country, January 2011 through June 2017

Month	Prices (dollars per short ton)				
	United States	Japan	Korea	Taiwan	World
	2011				
January	***	***	***	***	4,757
February	***	***	***	***	5,078
March	***	***	***	***	5,284
April	***	***	***	***	5,350
May	***	***	***	***	5,249
June	***	***	***	***	5,001
July	***	***	***	***	4,812
August	***	***	***	***	4,717
September	***	***	***	***	4,705
October	***	***	***	***	4,386
November	***	***	***	***	4,196
December	***	***	***	***	4,112
	2012				
January	***	***	***	***	4,088
February	***	***	***	***	4,315
March	***	***	***	***	4,413
April	***	***	***	***	4,193
May	***	***	***	***	4,051
June	***	***	***	***	3,922
July	***	***	***	***	3,820
August	***	***	***	***	3,721
September	***	***	***	***	3,631
October	***	***	***	***	3,743
November	***	***	***	***	3,738
December	***	***	***	***	3,683

Table continued on next page.

Table IV-23--Continued
Stainless steel sheet and strip: Monthly U.S. negotiated prices for stainless steel cold-rolled coil AISI grade 316, by country, January 2011 through June 2017

Month	Prices (dollars per short ton)				
	United States	Japan	Korea	Taiwan	World
	2013				
January	***	***	***	***	3,768
February	***	***	***	***	3,762
March	***	***	***	***	3,700
April	***	***	***	***	3,597
May	***	***	***	***	3,563
June	***	***	***	***	3,435
July	***	***	***	***	3,320
August	***	***	***	***	3,250
September	***	***	***	***	3,282
October	***	***	***	***	3,301
November	***	***	***	***	3,265
December	***	***	***	***	3,307
	2014				
January	***	***	***	***	3,301
February	***	***	***	***	3,325
March	***	***	***	***	3,388
April	***	***	***	***	3,470
May	***	***	***	***	3,761
June	***	***	***	***	4,000
July	***	***	***	***	4,040
August	***	***	***	***	3,963
September	***	***	***	***	3,916
October	***	***	***	***	3,836
November	***	***	***	***	3,556
December	***	***	***	***	3,443
	2015				
January	***	***	***	***	3,445
February	***	***	***	***	3,319
March	***	***	***	***	3,251
April	***	***	***	***	3,132
May	***	***	***	***	3,120
June	***	***	***	***	3,080
July	***	***	***	***	2,959
August	***	***	***	***	2,784
September	***	***	***	***	2,670
October	***	***	***	***	2,564
November	***	***	***	***	2,525
December	***	***	***	***	2,419

Table continued on next page.

Table IV-23--Continued
Stainless steel sheet and strip: Monthly U.S. negotiated prices for stainless steel cold-rolled coil AISI grade 316, by country, January 2011 through June 2017

Month	Prices (dollars per short ton)				
	United States	Japan	Korea	Taiwan	World
	2016				
January	***	***	***	***	2,379
February	***	***	***	***	2,356
March	***	***	***	***	2,366
April	***	***	***	***	2,468
May	***	***	***	***	2,527
June	***	***	***	***	2,558
July	***	***	***	***	2,615
August	***	***	***	***	2,706
September	***	***	***	***	2,767
October	***	***	***	***	2,726
November	***	***	***	***	2,774
December	***	***	***	***	2,831
	2017				
January	***	***	***	***	2,995
February	***	***	***	***	3,053
March	***	***	***	***	2,992
April	***	***	***	***	***
May	***	***	***	***	***
June	***	***	***	***	***

Note.— For average world prices “All prices relate to those to be paid by consumers and stockholders for prime material, ex mill. Prices are for regular business between customers and their local steel mills negotiated during the month for delivery in the short/medium term. Delivery charges and local taxes are excluded. Contract deals arranged in the domestic market or special negotiations for quantities of imported material are also excluded.

Transaction Price is the total amount to be paid for the specified product - including alloy surcharges or alloy adjustment factor (if applicable).” MEPS International Ltd,, “Price Definitions - Stainless Steel,” http://www.meps.co.uk/definitions.htm.

Source: Data for the United States, Japan, Korea, and Taiwan were compiled from ***. The world average prices for January 2011-March 2017 were compiled from MEPS International Ltd, “World Stainless Steel Prices,” http://www.meps.co.uk/Stainless%20Prices.htm. Average world prices for April-June 2017 were compiled from ***.

Table IV-24
Stainless steel sheet and strip: Monthly U.S. negotiated prices for stainless steel cold-rolled coil AISI grade 409, United States and Korea, January 2011 through June 2017

* * * * * * *

***.

Table IV-25
Stainless steel sheet and strip: Monthly U.S. negotiated prices for stainless steel cold-rolled coil AISI grade 430, by country, January 2011 through June 2017

* * * * * * *

PART V: PRICING DATA[1]

FACTORS AFFECTING PRICES

Raw material costs

Stainless steel is an iron alloy that contains at least 10.5 percent chromium and no more than 1.2 percent carbon. The primary raw materials used in the production of stainless steel sheet and strip include alloy materials (particularly chromium, nickel, and molybdenum), stainless steel scrap, and iron scrap. The amount of alloying elements varies by the grade of stainless steel sheet and strip. Common grades of stainless steel sheet and strip include AISI grades 304, 316, 409, and 430.[2] Grades 304 and 316 contain substantial amounts of nickel, while grades 409 and 430 do not (table V-1).

Table V-1
Stainless steel sheet and strip: Chemical analysis of grades 304, 316, 409, and 430

Grade	Chemical analysis								
	Quantity (maximum percent)								
	Carbon	Manganese	Phosphorus	Sulfur	Silicon	Chromium	Nickel	Molybdenum	Other
304	0.08	2.00	0.045	0.030	1.00	18.00-20.00	8.00-10.50	0	0
316	0.08	2.00	0.045	0.030	1.00	16.00-18.00	10.00-14.00	2.00-3.00	0
409	0.08	1.00	0.045	0.045	1.00	10.50-11.75	0.50	0	([1])
430	0.12	1.00	0.040	0.030	1.00	16.00-18.00	0.75	0	0

[1]Titanium is an alloying element in grade 409. The minimum percentage of titanium is 6 times the amount of carbon to a maximum of 0.75 percent of titanium.

Source: Specialty Steel Industry of North America, *Designer Handbook: Design Guidelines for the Selection and Use of Stainless Steel*, tables 8 and 11, pp. 8, 10.

Prices for the primary raw materials used in the production of stainless steel sheet and strip fluctuated but decreased overall during January 2011-March 2017. Between January 2011 and March 2017, prices for iron and steel scrap decreased by 28 percent, with most of the decline occurring during 2014 and 2015 (figure V-1).[3] Scrap prices trended upwards in 2016 and the first quarter of 2017. The costs of the alloying agents nickel, chrome, and molybdenum ***

[1] U.S. producers' responses to questions in the importer questionnaires which duplicate their answers in the producer questionnaire have not been included in this part of the report.

[2] *Stainless Steel Sheet and Strip from China*, *Inv. Nos. 701-TA-557 and 731-TA-1312 (Final)*, USITC Publication 4676, March 2017, p. V-1.

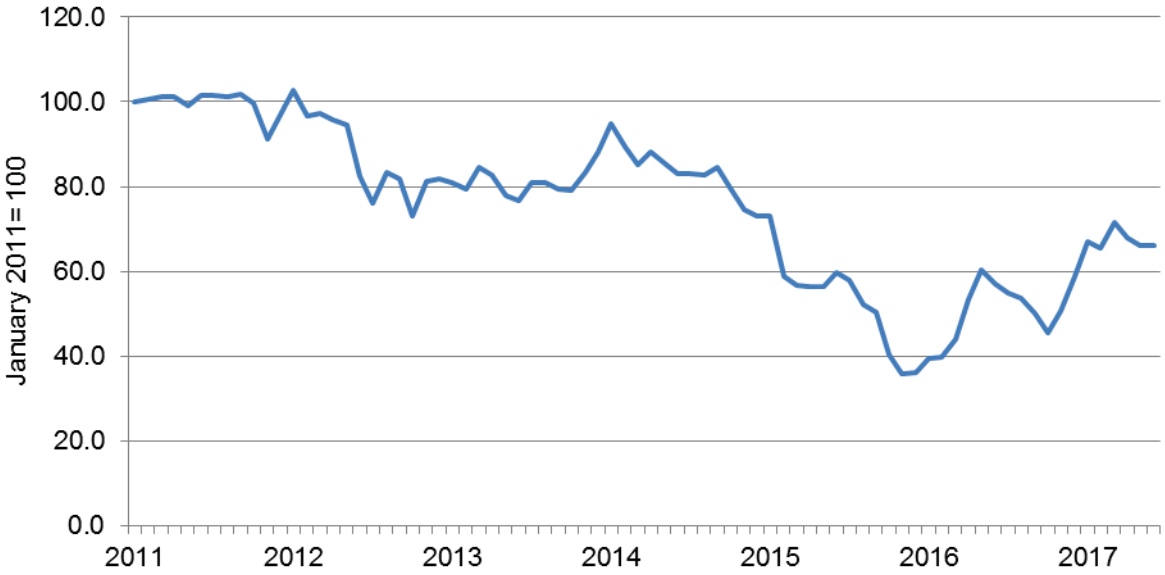
[3] During January 2011-December 2013, scrap prices decreased by 12 percent. During January 2014-March 2017, scrap prices declined by 24 percent. Subsequently, during April 2017-June 2017, scrap prices decreased by 2 percent.

(figure V-2). During January 2011-March 2017, nickel and molybdenum prices ***, respectively, and chrome prices ***.[4]

U.S. producers' raw material costs as a share of the cost of goods sold ("COGS") decreased from 65.8 percent in 2014 to 60.1 percent in 2016. Raw material costs accounted for 58.2 percent of COGS in January-March 2016 and 64.6 percent in January-March 2017.

Three of the four U.S. producers and 4 of 12 responding importers reported that raw material prices have decreased since January 2011, and one U.S. producer and 5 importers reported that raw material prices have fluctuated.[5] U.S. producer *** stated that raw material prices were reflected in the monthly surcharge to customers; *** stated that overall stainless prices have declined; and *** reported that there have been many fluctuations affecting surcharges. All responding producers and most responding importers reported that they expect raw material prices to fluctuate.

Figure V-1
Raw materials: Producer price index of iron and steel scrap in the United States, monthly, January 2011-June 2017



Source: U.S. Bureau of Labor Statistics, retrieved August 1, 2017.

Figure V-2
Raw materials: Alloy cost indices of nickel, chrome, and molybdenum spot prices, by month, January 2011-June 2017

* * * * * * *

[4] During January 2011-December 2013, nickel, chrome, and molybdenum prices *** respectively. During January 2014-March 2017, nickel and molybdenum prices ***. Subsequently, during April 2017-June 2017, ***.

[5] In addition, ***.

One of the four U.S. producers and seven of 12 responding importers reported that their spot prices for stainless steel sheet and strip were indexed to raw material costs, and one U.S. producer and three importers reported that their contract prices were indexed to raw material costs. Firms that reported that their prices were indexed to raw material prices generally noted their prices included a surcharge which is indexed to raw material costs.

Energy costs

Energy costs are an additional factor in stainless steel sheet and strip production. Electricity prices fluctuated slightly from January 2011 to March 2017, mainly due to monthly fluctuations in demand for electricity, and increased by 3 percent overall (figure V-3).[6] Natural gas prices fluctuated during January 2011-March 2017, declining between January 2011 and May 2012, increasing through February 2014, declining until June 2016, and then increasing through January 2017. Overall, natural gas prices decreased by 29 percent between January 2011 and March 2017.[7]

U.S. inland transportation costs

All four U.S. producers and 5 of 9 responding importers reported that they typically arrange transportation to their customers. U.S. producers reported that U.S. inland transportation costs were 2 to 4 percent of the delivered cost of stainless steel sheet and strip. Importers reported U.S. inland transportation costs ranging from 2 to 10 percent.[8]

PRICING PRACTICES

Pricing structure

U.S.-produced stainless steel sheet and strip prices consist of two components: a surcharge and a base price. Surcharges largely reflect the price of alloying materials used in stainless steel and are used when index costs for the alloys exceed a specific threshold.[9]

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[6] During January 2011-December 2013, electricity prices increased by 3 percent, and during January 2014-March 2017, they decreased by 3 percent. Subsequently, during April 2017-May 2017, they increased by 2 percent.

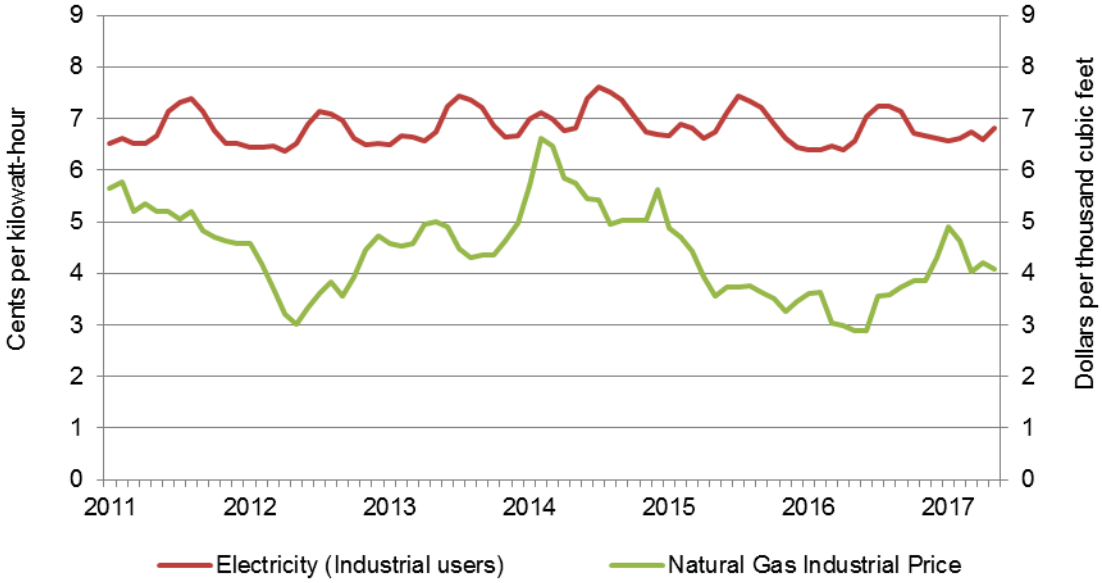
[7] During January 2011-December 2013, natural gas prices decreased by 12 percent, and during January 2014-March 2017, they decreased by 29 percent. Subsequently, during April 2017-June 2017, they decreased by 3 percent.

[8] Two importers reported 2 percent, and one importer each reported 5, 6, and 10 percent.

[9] If the costs for the alloying elements used in stainless steel do not exceed the threshold, the costs for the alloys are covered under the base price. *Stainless Steel Sheet and Strip from China, Inv. Nos. 701-TA-557 and 731-TA-1312 (Final)*, USITC Publication 4676, March 2017, p. V-5.

Figure V-3

Industrial natural gas and electricity: Monthly prices, January 2011-May 2017



Note.--Data not available for June 2017.

Source: Energy Information Administration, www.eia.gov, retrieved August 8, 2017.

Surcharge lists are often published.[10] [11] U.S. producers typically issue their surcharge lists on a monthly basis, and other firms, including importers, use these lists in quoting their own prices. Base prices consist, in part, of all other inputs to making stainless steel sheet and strip.

Surcharges

Surcharges typically reflect prices of the alloying elements used in the production of stainless steel. The amount of alloying elements used in different grades of stainless steel varies, as different grades use different amounts or different alloys altogether. Some firms include energy costs in their surcharge lists, and some include it in their base price. NAS

[10] U.S. producers' current raw material surcharge lists are available at: http://www.northamericanstainless.com/NAS_App/Surcharge1?language=E&type=F, http://www.outokumpu.com/en/pricing-aaf/surcharges-north-america, http://www.aksteel.com/markets_products/surcharges/stainless.aspx, https://www.atimetals.com/businesses/atiflatrolledproducts/Pages/surcharge-history.aspx.

[11] NAS estimated that surcharges accounted for approximately 60 percent of the total sale price; however, it noted that this share can shift due to the large fluctuations in raw material prices. *Stainless Steel Sheet and Strip from China, Inv. Nos. 701-TA-557 and 731-TA-1312 (Final)*, USITC Publication 4676, March 2017, p. V-6.

indicated that its surcharges are based on prices published by Platts and the London Metal Exchange (LME), while the other U.S. producers reported using various combinations of Platts, LME, American Metal Market (AMM), metalprices.com, and NYMEX (for natural gas).[12] All four U.S. producers reported surcharges for nickel, chromium, molybdenum, manganese, iron scrap, and fuel for transport. In addition, three producers reported a surcharge for energy (electricity and/or natural gas),[13] three reported a surcharge for niobium, two reported a surcharge for titanium, and one reported a surcharge for copper. U.S. producers' surcharges are typically adjusted monthly, and U.S. producers reported that their surcharges are based on the month during which an order ships.

Two importers (***) reported surcharges for nickel, chromium, molybdenum, manganese, and iron. One importer (***) reported surcharges for energy and no importer reported a surcharge for fuel for transport. Four importers reported other surcharges such as surcharges based on U.S. producers' published surcharge tables or surcharges based on monthly publications such as Metal Exchange. Most importers reported adjusting surcharges monthly.

U.S. producers use similar formulas to calculate the surcharge for the high-value alloying elements used in stainless steel such as nickel, chromium, and molybdenum. The surcharge is equal to the price of the alloy minus its trigger price, times the alloy content in the stainless steel grade, times a yield factor of 1.2.[14]

Three U.S. producers indicated that surcharge formulas had changed since 2011. These producers indicated that the chrome index used had recently changed.[15] *** also reported the addition of niobium to surcharge formulas and shortening of the reference period for certain raw material indices.

Base prices

Base prices consist of the cost of production, such as costs of labor, industrial gases, acids, and all other components of conversion.[16] In addition, all four U.S. producers reported that base prices are determined by market conditions. When a firm seeks to initiate changes to the price of its stainless steel sheet and strip products, it typically does so through changes in

[12] *Stainless Steel Sheet and Strip from China*, *Inv. Nos. 701-TA-557 and 731-TA-1312 (Final)*, USITC Publication 4676, March 2017, p. V-6.

[13] *** does not have an energy surcharge.

[14] According to TISCO, the U.S. industry introduced the surcharge mechanism in the 1980s using a yield factor of 1.1. In 1994, the industry raised the yield factor to 1.2. *Stainless Steel Sheet and Strip from China*, *Inv. Nos. 701-TA-557 and 731-TA-1312 (Final)*, USITC Publication 4676, March 2017, pp. V-6 -7.

[15] ***.

[16] *Stainless Steel Sheet and Strip from China*, *Inv. Nos. 701-TA-557 and 731-TA-1312 (Final)*, USITC Publication 4676, March 2017, p. V-7.

the base price. These changes are done at the discretion of each firm, though when one firm changes its base price it is not uncommon for others to do so.[17]

Two U.S. producers and one importer indicated that the base price includes raw material costs that are not included in their surcharges. U.S. producers *** reported that raw material surcharges are not imposed until the current market rate exceeds a specific base rate. Importer *** reported that iron ore, energy, and fuel affect its mill's base price which in turn affects its base price.

Most U.S. producers and importers reported no set frequency for base price adjustments. Two U.S. producers *** reported that base price adjustments depends on market conditions, *** reported that base prices are changed rarely, and *** reported that there is no regular interval for base price adjustments. Importers *** reported that the frequency of base price adjustments depend on the supplier, market, or customer negotiations. Three importers reported that they adjusted their base price monthly, two reported weekly, and one reported annually.

Pricing methods

U.S. producers and importers reported selling stainless steel sheet and strip primarily on a transaction-by-transaction basis and through contracts (table V-2). All four U.S. producers reported using transaction-by-transaction negotiations, three producers reported using contracts, and one producer (***) reported using set price lists. *** sets a base price to which it adds surcharges based on the month of the order, and freight and packaging costs. *** stated that its spot prices are based on published price lists which are adjusted based on current market prices. Among importers, most responding firms reported using transaction-by-transaction negotiations, and smaller numbers of firms reported using contracts, set price lists, and other methods.[18]

Table V-2
Stainless steel sheet and strip: U.S. producers' and importers' reported price setting methods, by number of responding firms[1]

Method	U.S. producers	Importers
Transaction-by-transaction	4	11
Contract	3	4
Set price list	1	2
Other	0	2
Responding firms	4	13

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

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

[17] *Stainless Steel Sheet and Strip from China*, *Inv. Nos. 701-TA-557 and 731-TA-1312 (Final)*, USITC Publication 4676, March 2017, p. V-7.

[18] Other methods reported were six month firm pricing and a monthly price list.

U.S. producers reported that about half of their sales were on a spot basis in 2016, and importers of subject product reported that the vast majority of their sales were on a spot basis (table V-3). The majority of U.S. producers' contract sales were annual contracts and short-term contracts, with only a small share of long-term contracts.[19] U.S. producer *** reported that its short-term contracts averaged *** days and *** reported that their short-term contracts averaged about 180 days. All four U.S. producers reported that both their short-term contracts and annual contracts did not allow for price renegotiation. Three of the four U.S. producers reported that both their short-term contracts and annual contracts fixed both price and quantity and did not have a meet-or-release provision. *** long-term contracts averaged ***.

Table V-3
Stainless steel sheet and strip: U.S. producers' and importers' shares of U.S. commercial shipments by type of sale, 2016

Type of sale	U.S. producers	Importers
Long-term contracts	1.5	0.0
Annual contracts	29.3	6.3
Short-term contracts	18.4	6.3
Spot sales	50.8	87.4
Total	100.0	100.0

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

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

Most responding importers (7 of 8) reported selling in the spot market, with five of these firms selling exclusively in the spot market. Two importers reported short-term contracts (with average durations of 90 and 180 days), and three reported annual contracts. Importers reported that their short-term and annual contracts did not allow for price renegotiation, and fixed both price and quantity. Short-term contracts did not have a meet-or-release provision and one importer reported that its annual contracts have a meet-or-release provision and one importer reported that its annual contracts do not have a meet-or-release provision. No importers reported selling via long-term contracts. ***.

Fourteen of 22 responding purchasers reported that they purchase stainless steel sheet and strip daily, two purchase weekly, three purchase monthly, and one purchases annually.[20] Nearly all responding purchasers (22 of 23) reported that they did not expect their purchasing patterns to change in the next two years. Most purchasers reported contacting 1 to 5 suppliers before making a purchase.

[19] ***.

[20] In addition, one purchaser reported daily receipt under annual contracts, and one reported that the frequency varied based on lead time and demand.

Sales terms and discounts

All four U.S. producers and most importers typically quote prices on an f.o.b. basis. All four U.S. producers reported offering quantity discounts and two reported offering total volume discounts. U.S. producer *** stated that it may provide additional discounts based on "competitive feedback." Most importers (11 of 13) reported no discount policy, although two importers (***) reported offering quantity discounts. Most U.S. producers and importers reported that typical payment terms were net 30 days. Three U.S. producers also reported other payment terms including ½ to 1 percent discount for payment within 10 days.

The majority of purchasers (17 of 23) reported that their purchases usually involve negotiations with their suppliers. The most cited factors by purchasers in their negotiations with suppliers were price, delivery terms, and lead times. Other factors included: volume, packaging, quality requirements, discounts, rebates, and payment terms.

Price leadership

Eighteen of 23 purchasers listed one or more price leaders, with 17 of the 18 responding purchasers listing NAS.[21] Purchasers reported that NAS is typically the first firm to make price changes (both price increases and decreases). *** stated that NAS led at least four price increases in 2016, as well as increased chrome surcharges. Two purchasers identified Outokumpu as a price leader, one purchaser identified AK Steel, and one purchaser identified Ryerson, Specialty Rolled Metals, and Olympic Steel.

PUBLISHED PRICES

Published prices of grades 304 and 316 stainless steel coil fluctuated from January 2011-March 2017, but decreased overall by *** percent and *** percent, respectively (figure V-4).[22]

Prices for grades 409 and 430 were relatively more stable, but decreased overall as well, by *** percent and *** percent, respectively.[23]

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[21] In the second reviews, 20 of 21 purchasers that reported price leaders listed one or more U.S. producers, including NAS (reported by 15), AK Steel (reported by 9) and Allegheny Ludlum (reported by 5), and only two purchasers listed non-domestic producers as price leaders (one from China and one from Mexico). *Stainless Steel Sheet and Strip from Germany, Italy, Japan, Korea, Mexico, and Taiwan*, *Inv. Nos. 701-TA-382 and 731-TA-798-803 (Second Review)*, USITC Publication 4244, July 2011, p. V-7. Price leaders were not discussed in the staff reports of the original investigations and first reviews.

[22] During January 2011-December 2013, prices for grades 304 and 316 ***. During January 2014-March 2017, prices of grades 304 and 316 ***, respectively. Subsequently, during April 2017-June 2017, grade 304 prices ***, and prices of grade 316 ***.

[23] During January 2011-December 2013, prices for grades 409 and 430 ***, respectively. During January 2014-March 2017, prices of grades 409 and 430 ***, respectively. Subsequently, during March 2017-June 2017, grade 409 prices and grade 430 prices ***.

Figure V-4

Stainless steel sheet and strip: Prices of U.S. ex-mill cold-rolled AISI grades 304 and 316 stainless steel, including alloy surcharges, by month, January 2011-June 2017

* * * * * * *

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 stainless steel sheet and strip products shipped to unrelated U.S. customers during January 2014-March 2017.

Product 1.--AISI Grade 304, 0.075 inch nominal thickness (0.068-0.082 inch actual), width 48-60 inches, in coils, 2B finish.

Product 2.--AISI Grade 304, 0.029 inch nominal thickness (0.0260-0.032 inch actual), width 48-60 inches, in coils, 2B finish.

Product 3.--AISI Grade 304, 0.036 inch nominal thickness (0.032-0.040 inch actual), width 48-60 inches, in coils, 2B finish.

Product 4.--AISI Grade 316L, 0.060 inch nominal thickness (0.054-0.066 inch actual), width 48-60 inches, 2B finish.

Product 5.--AISI Grade 409, 0.048 inch nominal thickness (0.0450-0.0510 inch actual), width 48-60 inches, in coils, 2B finish.

Product 6.--AISI Grade 430, 0.036 inch nominal thickness (0.032-0.040 inch actual), width 36-48 inches, in coils, polished.

Four U.S. producers and one importer provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.[24] Pricing data reported by these firms accounted for approximately 3.4 percent of U.S. producers' shipments of stainless steel sheet and strip and 15.7 percent of U.S. shipments of subject imports from Taiwan in 2016, ***. No price data were reported for Japan or Korea. Price data for products 1-6 are presented in tables V-4 to V-5 and figures V-5 to V-6.

[24] 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-4
Stainless steel sheet and strip: Weighted-average f.o.b. prices and quantities of domestic products 1-4, by quarters, January 2014-March 2017

* * * * * * *

Table V-5
Stainless steel sheet and strip: Weighted-average f.o.b. prices and quantities of domestic and imported products 5 and 6 and margins of underselling/(overselling), by quarters, January 2014-March 2017

* * * * * * *

Figure V-5
Stainless steel sheet and strip: Weighted-average prices and quantities of domestic products 1-4, by quarters, January 2014-March 2017

* * * * * * *

Figure V-6
Stainless steel sheet and strip: Weighted-average prices and quantities of domestic and imported products 5-6, by quarters, January 2014-March 2017

* * * * * * *

Price trends

Prices of products 1-4, 300 series grades, increased during the first three quarters of 2014, declined through first quarter 2016, and then increased through first quarter 2017.[25]

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[25] See also testimony of U.S. producers regarding price movements in the Commission's 2016-17 investigations on *Stainless Steel Sheet and Strip from China*:

- "Aggressive pricing by Chinese imports pushed prices for spot sales of stainless sheet and strip ever lower over the course of 2015. Even contract sales with customers that wanted to maintain NAS as a consistent supplier were affected by the prices being offered on the Chinese imports, as customers used those offers to push our price down." March 2016 staff conference testimony (Lyons, NAS).
- "The massive increase in the volumes of low-priced Chinese product to enter the United States has devastated pricing of stainless steel sheet and strip in the U.S. market. Pricing is currently at levels we had not seen for more than a decade." March 2016 staff conference testimony (Pfeiffer, AK Steel).
- "We saw prices in 2015 fall to absurdly low levels. By the 4th quarter of 2015 overall pricing and base prices were at levels we had not seen for more than a decade. The low-priced Chinese Imports were the cause of these price declines and I would add that these imports negatively

(*continued*...)

Prices of products 5 and 6, 400 series grades, showed a similar trend, but price variations were much smaller than for the 300 series pricing products. The larger price fluctuations for the 300 series pricing products are consistent with the price fluctuations for alloying agents, particularly nickel, which is present in much larger quantities in the 300 series products.

Table V-6 summarizes the price trends, by country and by product. As shown in the table, domestic prices for products 1-4 decreased by *** to *** percent and domestic prices of products 5 and 6 increased by *** percent and *** percent, respectively.

Table V-6
Stainless steel sheet and strip: Summary of weighted-average f.o.b. prices for products 1-6 from the United States and Taiwan

Item	Number of quarters	Low price (dollars per short ton)	High price (dollars per short ton)	Change in price[1] (percent)
Product 1: United States	13	***	***	***
Product 2: United States	13	***	***	***
Product 3: United States	13	***	***	***
Product 4: United States	13	***	***	***
Product 5: United States	13	***	***	***
Product 6: United States	13	***	***	***
Product 6: Taiwan	2	***	***	***

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

Note.—U.S. producers' prices for all six products were lowest in January-March 2016. U.S. producers' 300 series prices were highest in July-September 2014, while 400 series prices were highest in January-March 2017.

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

*** NAS announced price increases in the U.S. market in January and April of 2017, ***.[26] As shown earlier in figure V-4, *** data show after initial increases in the first part of 2017, prices declined in May and June.

(…*continued*)

affected our prices whether we were selling to customers through a short-term contract, a long-term contract or on the spot market." January 2017 hearing testimony (Pfeiffer, AK Steel).

[26] Hearing transcript, p. 76 (Lyons). Domestic interested parties' posthearing brief, exh. 1., p. 14.

Price comparisons[27]

Price comparisons were available for only two quarters, and only for product 6 from Taiwan. In April-June 2016, the price of product 6 from Taiwan was *** percent lower than the domestic price, and in October-December 2016, the price of product 6 from Taiwan was *** percent higher than the domestic price.

Purchasers' perceptions of relative price trends

Purchasers were asked how the prices of stainless steel sheet and strip from the United States had changed relative to the prices of product from Japan, Korea, and Taiwan since 2011. A majority of purchasers reported either no change in prices or that prices of domestic and imported product had changed by the same amount. Of the firms that reported relative price changes, all reported that U.S. product prices had increased relative to prices of product from Korea and Taiwan. Purchasers reported mixed answers for Japan, with 4 reporting that the U.S. price was now relatively higher than the price of imports from Japan, and 3 reporting that the price of the product from Japan was now relatively higher.

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[27] In the original investigations, imports from the countries currently subject to the orders were priced lower than domestic product in 70 of 93 comparisons. Specifically, imports from each subject country were priced lower than domestic product in the following number of comparisons: Japan- 21 of 36; Korea- 9 of 16; and Taiwan- 40 of 41. Imports from countries that are no longer subject to the orders (France, Germany, Italy, Mexico, and the UK) were priced lower than the domestic product in 142 of 243 instances. Confidential staff report for the original investigations (memorandum INV-W-150, July 6, 1999), p. V-31.

In the first reviews, imports from the countries currently subject to the orders were priced lower than domestic product in 14 of 23 comparisons. Specifically, imports from each subject country were priced lower than domestic product in the following number of comparisons: Japan- 0 of 1; Korea- 10 of 17; and Taiwan- 4 of 5. Imports from countries that are no longer subject to the orders (France, Germany, Italy, Mexico, and the UK) were priced lower than the domestic product in 74 of 193 instances. Confidential staff report for the first reviews (memorandum INV-CC-070, May 23, 2005), table V-11, pp. V-20-21.

In the second reviews, imports from the countries currently subject to the orders were priced lower than domestic product in 14 of 25 comparisons. Specifically, imports from each subject country were priced lower than domestic product in the following number of comparisons: Japan- 0 of 1; Korea- 14 of 20; and Taiwan- 0 of 4. Imports from countries that are no longer subject to the orders (Germany, Italy, and Mexico) were priced lower than the domestic product in 25 of 75 instances. Confidential staff report for the second reviews (memorandum INV-JJ-065, June 22, 2011), table V-11, p. V-3.

Note that imports from Korean producer POSCO are now excluded from the orders, but were subject product in the original investigations and first and second reviews.

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
81 FR 43238, July 1, 2016	*Stainless Steel Sheet and Strip From Japan, Korea, and Taiwan; Institution of Five-Year Reviews*	https://www.gpo.gov/fdsys/pkg/FR-2016-07-01/pdf/2016-15369.pdf
81 FR 43185, July 1, 2016	*Initiation of Five-Year ("Sunset") Review*	https://www.gpo.gov/fdsys/pkg/FR-2016-07-01/pdf/2016-15722.pdf
81 FR 71533, October 17, 2016	*Stainless Steel Sheet and Strip From Japan, Korea, and Taiwan; Notice of Commission Determination To Conduct Full Five-Year Reviews*	https://www.gpo.gov/fdsys/pkg/FR-2016-10-17/pdf/2016-24985.pdf
81 FR 78114, November 7, 2016	*Stainless Steel Sheet and Strip in Coils From Japan, the Republic of Korea, and Taiwan: Final Results of the Expedited Sunset Reviews of the Antidumping Duty Orders*	https://www.gpo.gov/fdsys/pkg/FR-2016-11-07/pdf/2016-26848.pdf
81 FR 78111, November 7, 2016	*Stainless Steel Sheet and Strip in Coils From the Republic of Korea: Final Results of Expedited Sunset Review of the Countervailing Duty Order*	https://www.gpo.gov/fdsys/pkg/FR-2016-11-07/pdf/2016-26850.pdf
82 FR 12843, March 7, 2017	*Stainless Steel Sheet and Strip From Japan, Korea, and Taiwan Scheduling of Full Five-Year Reviews*	https://www.gpo.gov/fdsys/pkg/FR-2017-03-07/pdf/2017-04372.pdf

Note.—The press release announcing the Commission's determinations concerning adequacy and to conduct a full or expedited reviews can be found at https://www.usitc.gov/press_room/news_release/2016/er1004ll666.htm. A summary of the Commission's votes concerning adequacy and to conduct a full or expedited review can be found at https://pubapps2.usitc.gov/sunset/caseProfSuppAttmnt/download/11888. The Commission's explanation of its determinations can be found at https://pubapps2.usitc.gov/sunset/caseProfSuppAttmnt/download/11887.

APPENDIX B

LIST OF HEARING WITNESSES

CALENDAR OF PUBLIC HEARING

Those listed below appeared as witnesses at the United States International Trade Commission's hearing:

Subject: Stainless Steel Sheet and Strip from Japan, Korea, and Taiwan

Inv. Nos.: 701-TA-382 and 731-TA-800, 801, and 803 (Third Review)

Date and Time: July 25, 2017 - 9:30 a.m.

Sessions were held in connection with these investigations in the Main Hearing Room (room 101), 500 E Street, SW, Washington, DC.

OPENING REMARKS:

In Support of Continuation (**Kathleen W. Cannon**, Kelley Drye & Warren LLP)
In Opposition to Continuation (**Jeffrey M. Winton**, Law Office of Jeffrey M. Winton, PLLC)

In Support of the Continuation of the Antidumping and Countervailing Duty Orders:

Kelley Drye & Warren LLP
Washington, DC
on behalf of

AK Steel Corporation
Allegheny Ludlum, LLC d/b/a ATI Flat Rolled Products
North American Stainless
Outokumpu Stainless USA, LLC

Terrence L. Hartford, Vice President of ATI Defense,
Allegheny Technologies Incorporated

Des Schnur, Product Manager for Sheet and Strip,
ATI Flat Rolled Products

Geoff Pfeiffer, General Manager, Specialty Steel Sales,
AK Steel Corporation

In Support of the Continuation of the
Antidumping and Countervailing Duty Orders (continued):

Dan Lebherz, Manager, Specialty Products & Markets,
AK Steel Corporation

Chris Lyons, Vice President, Commercial, North American
Stainless

Brian Romans, National Sales Manager, North American
Stainless

Stephen J. Letnich, Vice President of Sales for Coil
Americas, Outokumpu Stainless, LLC

Brad Hudgens, Economic Consultant, Georgetown
Economic Services

Kathleen W. Cannon)
John H. Herrmann) – OF COUNSEL
Grace W. Kim)

In Opposition to the Continuation of the
Antidumping and Countervailing Duty Orders:

The Law Office of Jeffrey M. Winton, PLLC
Washington, DC
on behalf of

Hyundai BNG Steel Co., Ltd. ("Hyundai BNG")

Joo Seok Cha, General Manager, Hyundai BNG

Dong Jin Kang, Assistant Manager, Hyundai BNG

Sean Inkwon Kahng, Of Counsel, Kim & Chang

Jeffrey M. Winton)
) – OF COUNSEL
Daniel E. Parga)

REBUTTAL/CLOSING REMARKS:

In Support of Continuation **(Kathleen W. Cannon**, Kelley Drye & Warren LLP)
In Opposition to Continuation **(Jeffrey M. Winton**, Law Office of Jeffrey M. Winton, PLLC)

-END-

APPENDIX C

SUMMARY DATA

Table C-1
Stainless steel sheet and strip: Summary data concerning the U.S. total market, 2014-16, January to March 2016, and January to March 2017
(Quantity=short tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short tons; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	Calendar year			January to March		Calendar year			Jan-Mar
	2014	2015	2016	2016	2017	2014-16	2014-15	2015-16	2016-17
U.S. total market consumption quantity:									
Amount	1,954,572	1,779,458	1,978,372	467,975	480,373	1.2	(9.0)	11.2	2.6
Producers' share (fn1)	82.0	80.7	82.5	84.1	82.3	0.5	(1.3)	1.8	(1.8)
Importers' share (fn1):									
Japan	***	***	***	***	***	***	***	***	***
Korea	***	***	***	***	***	***	***	***	***
Taiwan	***	***	***	***	***	***	***	***	***
Subject sources	***	***	***	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***	***	***	***
All import sources	18.0	19.3	17.5	15.9	17.7	(0.5)	1.3	(1.8)	1.8
U.S. total market consumption value:									
Amount	4,689,501	3,715,191	3,617,546	806,786	1,038,893	(22.9)	(20.8)	(2.6)	28.8
Producers' share (fn1)	80.0	77.2	79.2	79.6	81.9	(0.7)	(2.8)	2.1	2.3
Importers' share (fn1):									
Japan	***	***	***	***	***	***	***	***	***
Korea	***	***	***	***	***	***	***	***	***
Taiwan	***	***	***	***	***	***	***	***	***
Subject sources	***	***	***	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***	***	***	***
All import sources	20.0	22.8	20.8	20.4	18.1	0.7	2.8	(2.1)	(2.3)
U.S. imports.--									
Japan:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Korea:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Taiwan:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Subject sources:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Nonsubject sources:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
All import sources:									
Quantity	351,996	344,249	346,910	74,500	85,030	(1.4)	(2.2)	0.8	14.1
Value	939,502	848,111	750,800	164,826	188,071	(20.1)	(9.7)	(11.5)	14.1
Unit value	$2,669	$2,464	$2,164	$2,212	$2,212	(18.9)	(7.7)	(12.2)	(0.0)
Ending inventory quantity	17,605	13,032	11,126	13,936	13,687	(36.8)	(26.0)	(14.6)	1.8

Table continued on next page.

Table C-1--Continued
Stainless steel sheet and strip: Summary data concerning the U.S. total market, 2014-16, January to March 2016, and January to March 2017
(Quantity=short tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short tons; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	Calendar year			January to March		Calendar year			Jan-Mar
	2014	2015	2016	2016	2017	2014-16	2014-15	2015-16	2016-17
U.S. producers':									
Average capacity quantity	2,507,812	2,659,635	2,654,960	679,740	690,849	5.9	6.1	(0.2)	1.6
Production quantity	1,964,833	1,735,351	1,902,216	449,407	504,784	(3.2)	(11.7)	9.6	12.3
Capacity utilization (fn1)	78.3	65.2	71.6	66.1	73.1	(6.7)	(13.1)	6.4	7.0
U.S. shipments:									
Quantity	1,602,576	1,435,209	1,631,462	393,475	395,343	1.8	(10.4)	13.7	0.5
Value	3,749,999	2,867,080	2,866,746	641,960	850,822	(23.6)	(23.5)	(0.0)	32.5
Unit value	$2,340	$1,998	$1,757	$1,632	$2,152	(24.9)	(14.6)	(12.0)	31.9
Export shipments:									
Quantity	337,377	328,960	285,523	73,668	105,856	(15.4)	(2.5)	(13.2)	43.7
Value	801,275	657,426	499,999	123,216	212,175	(37.6)	(18.0)	(23.9)	72.2
Unit value	$2,375	$1,998	$1,751	$1,673	$2,004	(26.3)	(15.9)	(12.4)	19.8
Ending inventory quantity	221,861	193,043	178,274	175,307	181,859	(19.6)	(13.0)	(7.7)	3.7
Inventories/total shipments (fn1)	11.4	10.9	9.3	9.4	9.1	(2.1)	(0.5)	(1.6)	(0.3)
Production workers	2,968	2,718	2,660	2,202	2,520	(10.4)	(8.4)	(2.1)	14.4
Hours worked (1,000s)	6,355	5,909	5,869	1,360	1,477	(7.6)	(7.0)	(0.7)	8.6
Wages paid ($1,000)	225,674	221,148	215,724	52,790	53,210	(4.4)	(2.0)	(2.5)	0.8
Hourly wages (dollars)	$35.51	$37.43	$36.76	$38.82	$36.03	3.5	5.4	(1.8)	(7.2)
Productivity (short tons per 1,000 hours)	309.2	293.7	324.1	330.4	341.8	4.8	(5.0)	10.4	3.4
Unit labor costs	$115	$127	$113	$117	$105	(1.3)	11.0	(11.0)	(10.3)
Net sales:									
Quantity	1,939,953	1,764,169	1,916,985	467,143	501,199	(1.2)	(9.1)	8.7	7.3
Value	4,551,274	3,524,506	3,366,746	765,176	1,062,997	(26.0)	(22.6)	(4.5)	38.9
Unit value	$2,346	$1,998	$1,756	$1,638	$2,121	(25.1)	(14.8)	(12.1)	29.5
Cost of goods sold (COGS)	4,533,690	3,572,994	3,279,618	808,297	933,922	(27.7)	(21.2)	(8.2)	15.5
Gross profit or (loss)	17,584	(48,488)	87,128	(43,121)	129,075	395.5	(375.8)	(279.7)	(399.3)
SG&A expenses	157,081	122,908	139,309	35,296	40,852	(11.3)	(21.8)	13.3	15.7
Operating income or (loss)	(139,497)	(171,396)	(52,181)	(78,417)	88,223	(62.6)	22.9	(69.6)	(212.5)
Net income or (loss)	(220,839)	(343,402)	(167,622)	(108,601)	64,361	(24.1)	55.5	(51.2)	(159.3)
Capital expenditures	***	***	***	***	***	***	***	***	***
Unit COGS	$2,337	$2,025	$1,711	$1,730	$1,863	(26.8)	(13.3)	(15.5)	7.7
Unit SG&A expenses	$81	$70	$73	$76	$82	(10.3)	(14.0)	4.3	7.9
Unit operating income or (loss)	($72)	($97)	($27)	($168)	$176	(62.1)	35.1	(72.0)	(204.9)
Unit net income or (loss)	($114)	($195)	($87)	($232)	$128	(23.2)	71.0	(55.1)	(155.2)
COGS/sales (fn1)	99.6	101.4	97.4	105.6	87.9	(2.2)	1.8	(4.0)	(17.8)
Operating income or (loss)/sales (fn1)	(3.1)	(4.9)	(1.5)	(10.2)	8.3	1.5	(1.8)	3.3	18.5
Net income or (loss)/sales (fn1)	(4.9)	(9.7)	(5.0)	(14.2)	6.1	(0.1)	(4.9)	4.8	20.2

Notes:

fn1.--Reported data are in percent and period changes are in percentage points.
fn2.--Undefined.

Source: Responses to Commission questionnaires, proprietary Customs records for 60 statistical reporting numbers (see Part IV, footnote 1 for details), and official Commerce statistics.

APPENDIX C

SUMMARY DATA COMPILED IN PRIOR PROCEEDINGS

Table C-1
Stainless steel sheet & strip: Summary data concerning the U.S. market, 2005-10

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

	Reported data						Period changes					
Item	2005	2006	2007	2008	2009	2010	2005-10	2005-06	2006-07	2007-08	2008-09	2009-10
U.S. consumption quantity:												
Amount	1,671,537	1,969,248	1,645,385	1,492,172	1,121,848	1,508,745	-9.7	17.8	-16.4	-9.3	-24.8	34.5
Producers' share (1)	83.6	80.7	79.9	79.0	86.7	83.2	-0.4	-2.8	-0.9	-0.9	7.7	-3.6
Importers' share (1):												
Germany	***	***	***	***	***	***	***	***	***	***	***	***
Italy	***	***	***	***	***	***	***	***	***	***	***	***
Japan	***	***	***	***	***	***	***	***	***	***	***	***
Korea	***	***	***	***	***	***	***	***	***	***	***	***
Mexico	***	***	***	***	***	***	***	***	***	***	***	***
Taiwan	***	***	***	***	***	***	***	***	***	***	***	***
Subtotal (subject)	7.0	7.0	8.1	7.6	7.1	6.9	-0.0	0.0	1.1	-0.6	-0.5	-0.2
All other sources	9.4	12.2	12.0	13.4	6.2	9.9	0.4	2.8	-0.2	1.5	-7.3	3.7
Total imports	16.4	19.3	20.1	21.0	13.3	16.8	0.4	2.8	0.9	0.9	-7.7	3.6
U.S. consumption value:												
Amount	3,914,925	5,156,980	5,834,553	5,114,235	2,400,958	4,111,376	5.0	31.7	13.1	-12.3	-53.1	71.2
Producers' share (1)	82.2	80.3	77.8	77.6	84.8	82.1	-0.1	-1.9	-2.5	-0.1	7.2	-2.6
Importers' share (1):												
Germany	***	***	***	***	***	***	***	***	***	***	***	***
Italy	***	***	***	***	***	***	***	***	***	***	***	***
Japan	***	***	***	***	***	***	***	***	***	***	***	***
Korea	***	***	***	***	***	***	***	***	***	***	***	***
Mexico	***	***	***	***	***	***	***	***	***	***	***	***
Taiwan	***	***	***	***	***	***	***	***	***	***	***	***
Subtotal (subject)	6.9	6.8	7.6	7.3	7.4	6.7	-0.2	-0.0	0.8	-0.3	0.1	-0.7
All other sources	10.9	12.9	14.6	15.1	7.9	11.2	0.3	2.0	1.7	0.5	-7.2	3.3
Total imports	17.8	19.7	22.2	22.4	15.2	17.9	0.1	1.9	2.5	0.1	-7.2	2.6
U.S. imports from:												
Germany:												
Quantity	***	***	***	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***
Italy:												
Quantity	***	***	***	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***
Japan:												
Quantity	***	***	***	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***
Korea:												
Quantity	***	***	***	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***
Mexico:												
Quantity	***	***	***	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***
Taiwan:												
Quantity	***	***	***	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***
Subtotal (subject):												
Quantity	116,786	138,462	133,921	112,823	79,741	104,708	-10.3	18.6	-3.3	-15.8	-29.3	31.3
Value	269,861	352,993	444,736	373,050	176,798	273,532	1.4	30.8	26.0	-16.1	-52.6	54.7
Unit value	$2,311	$2,549	$3,321	$3,307	$2,217	$2,612	13.1	10.3	30.3	-0.4	-32.9	17.8
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***

Table continued on next page.

Table C-1--Continued
Stainless steel sheet & strip: Summary data concerning the U.S. market, 2005-10

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

	Reported data						Period changes					
Item	2005	2006	2007	2008	2009	2010	2005-10	2005-06	2006-07	2007-08	2008-09	2009-10
U.S. imports from:												
All other sources:												
Quantity	157,697	240,822	197,273	200,622	69,036	149,057	-5.5	52.7	-18.1	1.7	-65.6	115.9
Value	426,577	664,081	853,162	771,678	188,891	460,905	8.0	55.7	28.5	-9.6	-75.5	144.0
Unit value	$2,705	$2,758	$4,325	$3,846	$2,736	$3,092	14.3	1.9	56.8	-11.1	-28.9	13.0
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***
All sources:												
Quantity	274,483	379,284	331,194	313,445	148,777	253,765	-7.5	38.2	-12.7	-5.4	-52.5	70.6
Value	696,438	1,017,074	1,297,898	1,144,728	365,689	734,438	5.5	46.0	27.6	-11.8	-68.1	100.8
Unit value	$2,537	$2,682	$3,919	$3,652	$2,458	$2,894	14.1	5.7	46.1	-6.8	-32.7	17.7
Ending inventory quantity	19,015	24,302	28,010	22,540	19,528	32,444	70.6	27.8	15.3	-19.5	-13.4	66.1
U.S. producers':												
Average capacity quantity	2,142,965	2,090,489	2,130,199	2,201,706	3,076,463	2,748,775	28.3	-2.4	1.9	3.4	39.7	-10.7
Production quantity	1,570,547	1,728,441	1,477,805	1,309,379	1,150,747	1,544,772	-1.6	10.1	-14.5	-11.4	-12.1	34.2
Capacity utilization (1)	73.3	82.7	69.4	59.5	37.4	56.2	-17.1	9.4	-13.3	-9.9	-22.1	18.8
U.S. shipments:												
Quantity	1,397,054	1,589,964	1,314,191	1,178,727	973,071	1,254,980	-10.2	13.8	-17.3	-10.3	-17.4	29.0
Value	3,218,487	4,139,906	4,536,655	3,969,507	2,035,269	3,376,938	4.9	28.6	9.6	-12.5	-48.7	65.9
Unit value	$2,304	$2,604	$3,452	$3,368	$2,092	$2,691	16.8	13.0	32.6	-2.4	-37.9	28.6
Export shipments:												
Quantity	135,683	158,668	204,116	189,594	177,813	290,797	114.3	16.9	28.6	-7.1	-6.2	63.5
Value	325,891	439,875	720,670	667,534	392,295	835,038	156.2	35.0	63.8	-7.4	-41.2	112.9
Unit value	$2,402	$2,772	$3,531	$3,521	$2,206	$2,872	19.6	15.4	27.4	-0.3	-37.3	30.2
Ending inventory quantity	338,904	318,713	278,211	219,269	219,132	218,127	-35.6	-6.0	-12.7	-21.2	-0.1	-0.5
Inventories/total shipments (1)	22.1	18.2	18.3	16.0	19.0	14.1	-8.0	-3.9	0.1	-2.3	3.0	-4.9
Production workers	3,236	3,316	3,214	3,133	2,560	2,989	-7.6	2.5	-3.1	-2.5	-18.3	16.8
Hours worked (1,000s)	7,356	7,663	7,097	6,929	5,389	6,456	-12.2	4.2	-7.4	-2.4	-22.2	19.8
Wages paid ($1,000s)	220,119	246,642	240,322	251,451	199,606	236,989	7.7	12.0	-2.6	4.6	-20.6	18.7
Hourly wages	$29.92	$32.19	$33.86	$36.29	$37.04	$36.71	22.7	7.6	5.2	7.2	2.1	-0.9
Productivity (tons/1,000 hours)	213.5	225.6	208.2	189.0	213.5	239.3	12.1	5.6	-7.7	-9.2	13.0	12.1
Unit labor costs	$140.15	$142.70	$162.62	$192.04	$173.46	$153.41	9.5	1.8	14.0	18.1	-9.7	-11.6
Net sales:												
Quantity	1,532,737	1,748,632	1,518,307	1,368,321	1,150,884	1,545,756	0.8	14.1	-13.2	-9.9	-15.9	34.3
Value	3,544,378	4,579,781	5,257,324	4,637,041	2,427,566	4,211,902	18.8	29.2	14.8	-11.8	-47.6	73.5
Unit value	$2,312	$2,619	$3,463	$3,389	$2,109	$2,725	17.8	13.3	32.2	-2.1	-37.8	29.2
Cost of goods sold (COGS)	3,224,268	4,036,980	4,519,031	4,402,371	2,596,804	4,021,106	24.7	25.2	11.9	-2.6	-41.0	54.8
Gross profit or (loss)	320,110	542,801	738,293	234,670	(169,238)	190,796	-40.4	69.6	36.0	-68.2	(2)	(2)
SG&A expenses	109,132	125,493	128,981	115,763	98,054	119,653	9.6	15.0	2.8	-10.2	-15.3	22.0
Operating income or (loss)	210,978	417,308	609,312	118,907	(267,292)	71,143	-66.3	97.8	46.0	-80.5	(2)	(2)
Capital expenditures	***	***	***	***	***	***	***	***	***	***	***	***
Unit COGS	$2,104	$2,309	$2,976	$3,217	$2,256	$2,601	23.7	9.7	28.9	8.1	-29.9	15.3
Unit SG&A expenses	$71	$72	$85	$85	$85	$77	8.7	0.8	18.4	-0.4	0.7	-9.1
Unit operating income or (loss)	$138	$239	$401	$87	($232)	$46	-66.6	73.4	68.2	-78.3	(2)	(2)
COGS/sales (1)	91.0	88.1	86.0	94.9	107.0	95.5	4.5	-2.8	-2.2	9.0	12.0	-11.5
Operating income or (loss)/ sales (1)	6.0	9.1	11.6	2.6	(11.0)	1.7	-4.3	3.2	2.5	-9.0	-13.6	12.7

(1) "Reported data" are in percent and "period changes" are in percentage points.
(2) Undefined.

Note.--Financial data are reported on a fiscal year basis and may not necessarily be comparable to data reported on a calendar year basis. Because of rounding, figures may not add to the totals shown. Unit values and shares are calculated from the unrounded figures.

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

Table D-1
Certain stainless steel sheet & strip: Summary data concerning the U.S. market, 1999-2004

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

	Reported data						Period changes					
Item	1999	2000	2001	2002	2003	2004	1999-2004	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004
U.S. consumption quantity:												
Amount	1,986,791	1,945,290	1,595,049	1,734,565	1,704,087	1,895,410	-4.6	-2.1	-18.0	8.7	-1.8	11.2
Producers' share (1)	83.3	85.6	87.2	87.2	86.9	84.0	0.7	2.3	1.6	0.1	-0.4	-2.8
Importers' share (1):												
France	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Germany	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Italy	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Japan	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Korea	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Mexico	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Taiwan (subject)	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
United Kingdom	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Subtotal (subject)	9.7	7.6	7.3	6.5	7.5	8.5	-1.2	-2.1	-0.3	-0.8	1.1	1.0
All other sources (2)	7.0	6.8	5.6	6.3	5.6	7.4	0.5	-0.1	-1.3	0.7	-0.7	1.8
Total imports	16.7	14.4	12.8	12.8	13.1	16.0	-0.7	-2.3	-1.6	-0.1	0.4	2.8
U.S. consumption value:												
Amount	3,018,882	3,567,415	2,490,197	2,729,118	2,812,312	4,197,633	39.0	18.2	-30.2	9.6	3.0	49.3
Producers' share (1)	82.1	83.8	85.8	86.6	85.4	83.3	1.2	1.7	2.0	0.8	-1.2	-2.1
Importers' share (1):												
France	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Germany	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Italy	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Japan	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Korea	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Mexico	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Taiwan (subject)	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
United Kingdom	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Subtotal (subject)	10.4	8.4	8.0	6.9	7.9	8.4	-2.0	-1.9	-0.5	-1.1	1.1	0.5
All other sources (2)	7.5	7.7	6.2	6.5	6.6	8.3	0.8	0.2	-1.5	0.3	0.1	1.7
Total imports	17.9	16.2	14.2	13.4	14.6	16.7	-1.2	-1.7	-2.0	-0.8	1.2	2.1
U.S. shipments of imports from:												
France:												
Quantity	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Value	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Unit value	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Ending inventory quantity	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Germany:												
Quantity	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Value	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Unit value	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Ending inventory quantity	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Italy:												
Quantity	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Value	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Unit value	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Ending inventory quantity	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Japan:												
Quantity	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Value	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Unit value	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Ending inventory quantity	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Korea:												
Quantity	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Value	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Unit value	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Ending inventory quantity	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Mexico:												
Quantity	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Value	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Unit value	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Ending inventory quantity	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Taiwan (subject):												
Quantity	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Value	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Unit value	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Ending inventory quantity	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
United Kingdom:												
Quantity	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Value	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Unit value	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Ending inventory quantity	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Subtotal (subject):												
Quantity	192,440	147,477	116,234	112,301	128,293	161,607	-16.0	-23.4	-21.2	-3.4	14.2	26.0
Value	312,888	301,309	198,942	187,263	223,195	353,031	12.8	-3.7	-34.0	-5.9	19.2	58.2
Unit value	$1,626	$2,043	$1,712	$1,668	$1,740	$2,185	34.4	25.7	-16.2	-2.6	4.3	25.6
Ending inventory quantity	7,253	23,130	13,813	14,047	13,793	10,589	46.0	218.9	-40.3	1.7	-1.8	-23.2

Table continued on next page.

Table D-1--Continued
Certain stainless steel sheet & strip: Summary data concerning the U.S. market, 1999-2004

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

	Reported data						Period changes					
Item	1999	2000	2001	2002	2003	2004	1999-2004	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004
U.S. shipments of imports from:												
All other sources (2):												
Quantity	138,540	132,787	88,590	109,144	95,747	140,875	1.7	-4.2	-33.3	23.2	-12.3	47.1
Value	227,103	276,008	154,562	178,061	186,231	348,026	53.2	21.5	-44.0	15.2	4.6	86.9
Unit value	$1,639	$2,079	$1,745	$1,631	$1,945	$2,470	50.7	26.8	-16.1	-6.5	19.2	27.0
Ending inventory quantity	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
All sources:												
Quantity	330,979	280,264	204,824	221,446	224,040	302,482	-8.6	-15.3	-26.9	8.1	1.2	35.0
Value	539,991	577,317	353,504	365,323	409,425	701,057	29.8	6.9	-38.8	3.3	12.1	71.2
Unit value	$1,631	$2,060	$1,726	$1,650	$1,827	$2,318	42.1	26.3	-16.2	-4.4	10.8	26.8
Ending inventory quantity	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
U.S. producers':												
Average capacity quantity	2,025,067	2,104,373	2,132,834	2,262,623	2,233,900	2,262,807	11.7	3.9	1.4	6.1	-1.3	1.3
Production quantity	1,818,664	1,736,738	1,446,691	1,638,714	1,591,328	1,670,643	-8.1	-4.5	-16.7	13.3	-2.9	5.0
Capacity utilization (1)	89.8	82.5	67.8	72.4	71.2	73.8	-16.0	-7.3	-14.7	4.6	-1.2	2.6
U.S. shipments:												
Quantity	1,655,812	1,665,026	1,390,225	1,513,119	1,480,047	1,592,928	-3.8	0.6	-16.5	8.8	-2.2	7.6
Value	2,478,891	2,990,098	2,136,693	2,363,795	2,402,887	3,496,576	41.1	20.6	-28.5	10.6	1.7	45.5
Unit value	$1,497	$1,796	$1,537	$1,562	$1,624	$2,195	46.6	20.0	-14.4	1.6	3.9	35.2
Export shipments:												
Quantity	71,822	74,970	78,961	109,075	146,919	89,411	24.5	4.4	5.3	38.1	34.7	-39.1
Value	153,499	165,523	162,274	160,063	192,257	179,065	16.7	7.8	-2.0	-1.4	20.1	-6.9
Unit value	$2,137	$2,208	$2,055	$1,467	$1,309	$2,003	-6.3	3.3	-6.9	-28.6	-10.8	53.0
Ending inventory quantity	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Inventories/total shipments (1)	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
Production workers	4,729	5,106	4,262	4,196	4,457	4,407	-6.8	8.0	-16.5	-1.6	6.2	-1.1
Hours worked (1,000s)	10,054	10,686	8,804	8,772	9,184	8,605	-14.4	6.3	-17.6	-0.4	4.7	-6.3
Wages paid ($1,000s)	263,090	274,445	226,852	229,932	236,150	233,925	-11.1	4.3	-17.3	1.4	2.7	-0.9
Hourly wages	$26.17	$25.68	$25.77	$26.21	$25.71	$27.19	3.9	-1.9	0.3	1.7	-1.9	5.7
Productivity (tons/1,000 hours)	182.9	164.2	166.0	189.1	175.1	196.7	7.5	-10.2	1.1	13.9	-7.4	12.4
Unit labor costs	$142.42	$155.76	$154.80	$138.35	$146.36	$137.32	-3.6	9.4	-0.6	-10.6	5.8	-6.2
Net sales:												
Quantity	1,852,672	1,740,618	1,469,627	1,622,745	1,627,982	1,680,804	-9.3	-6.0	-15.6	10.4	0.3	3.2
Value	2,814,625	3,173,050	2,310,402	2,537,555	2,608,020	3,692,443	31.2	12.7	-27.2	9.8	2.8	41.6
Unit value	$1,519	$1,823	$1,572	$1,564	$1,602	$2,197	44.6	20.0	-13.8	-0.5	2.4	37.1
Cost of goods sold (COGS)	2,441,039	2,685,379	2,232,820	2,389,911	2,841,863	3,332,922	36.5	10.0	-16.9	7.0	18.9	17.3
Gross profit or (loss)	373,586	487,671	77,582	147,644	(233,843)	359,521	-3.8	30.5	-84.1	90.3	(3)	(3)
SG&A expenses	166,573	158,606	135,003	127,600	137,978	127,398	-23.5	-4.8	-14.9	-5.5	8.1	-7.7
Operating income or (loss)	207,013	329,065	(57,421)	20,044	(371,821)	232,123	12.1	59.0	(3)	(3)	(3)	(3)
Capital expenditures	233,051	163,749	195,224	111,502	220,784	123,039	-47.2	-29.7	19.2	-42.9	98.0	-44.3
Unit COGS	$1,318	$1,543	$1,519	$1,473	$1,746	$1,983	50.5	17.1	-1.5	-3.1	18.5	13.6
Unit SG&A expenses	$90	$91	$92	$79	$85	$76	-15.7	1.3	0.8	-14.4	7.8	-10.6
Unit operating income or (loss)	$112	$189	($39)	$12	($228)	$138	23.6	69.2	(3)	(3)	(3)	(3)
COGS/sales (1)	86.7	84.6	96.6	94.2	109.0	90.3	3.5	-2.1	12.0	-2.5	14.8	-18.7
Operating income or (loss)/ sales (1)	7.4	10.4	(2.5)	0.8	(14.3)	6.3	-1.1	3.0	-12.9	3.3	-15.0	20.5

(1) "Reported data" are in percent and "period changes" are in percentage points.
(2) Includes nonsubject imports from Taiwan.
(3) Undefined.

Note.--Financial data are reported on a fiscal year basis and may not necessarily be comparable to data reported on a calendar year basis. Because of rounding, figures may not add to the totals shown. Unit values and shares are calculated from the unrounded figures.

Source: Compiled from data submitted in response to Commission questionnaires and from official Commerce statistics.

Table C-1
Certain stainless steel sheet and strip: Summary data concerning the U.S. market, 1996-98

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

	Reported data			Period changes		
Item	1996	1997	1998	1996-98	1996-97	1997-98
U.S. consumption quantity:						
Amount	1,563,725	1,640,800	1,747,442	11.7	4.9	6.5
Producers' share (1)	80.8	81.3	79.6	-1.3	0.4	-1.7
Importers' share (1):						
France	***	***	***	***	***	***
Germany	***	***	***	***	***	***
Italy	***	***	***	***	***	***
Japan	***	***	***	***	***	***
Korea	***	***	***	***	***	***
Mexico	***	***	***	***	***	***
Taiwan	***	***	***	***	***	***
United Kingdom	***	***	***	***	***	***
Subtotal	14.9	14.9	15.9	1.0	0.0	0.9
Other sources	4.3	3.8	4.6	0.3	-0.4	0.7
Total imports	19.2	18.7	20.4	1.3	-0.4	1.7
U.S. consumption value:						
Amount	3,177,392	3,048,654	2,883,292	-9.3	-4.1	-5.4
Producers' share (1)	80.5	81.4	79.9	-0.6	0.9	-1.5
Importers' share (1):						
France	***	***	***	***	***	***
Germany	***	***	***	***	***	***
Italy	***	***	***	***	***	***
Japan	***	***	***	***	***	***
Korea	***	***	***	***	***	***
Mexico	***	***	***	***	***	***
Taiwan	***	***	***	***	***	***
United Kingdom	***	***	***	***	***	***
Subtotal	14.2	14.2	15.2	0.9	-0.0	1.0
Other sources	5.3	4.4	4.9	-0.3	-0.9	0.6
Total imports	19.5	18.6	20.1	0.6	-0.9	1.5
U.S. shipments of imports from:						
France:						
Quantity	***	***	***	***	***	***
Value	***	***	***	***	***	***
Unit value	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***
Germany:						
Quantity	***	***	***	***	***	***
Value	***	***	***	***	***	***
Unit value	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***
Italy:						
Quantity	***	***	***	***	***	***
Value	***	***	***	***	***	***
Unit value	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***
Japan:						
Quantity	***	***	***	***	***	***
Value	***	***	***	***	***	***
Unit value	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***
Korea:						
Quantity	***	***	***	***	***	***
Value	***	***	***	***	***	***
Unit value	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***
Mexico:						
Quantity	***	***	***	***	***	***
Value	***	***	***	***	***	***
Unit value	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***
Taiwan (2):						
Quantity	***	***	***	***	***	***
Value	***	***	***	***	***	***
Unit value	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***

Table continued on next page.

Table C-1--Continued
Certain stainless steel sheet and strip Summary data concerning the U.S. market, 1996-98

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

Item	Reported data			Period changes		
	1996	1997	1998	1996-98	1996-97	1997-98
U.S. shipments of imports from:						
United Kingdom:						
Quantity	***	***	***	***	***	***
Value	***	***	***	***	***	***
Unit value	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***
Subtotal (subject):						
Quantity	232,717	244,541	277,015	19.0	5.1	13.3
Value	452,416	432,831	437,633	-3.3	-4.3	1.1
Unit value	$1,944.06	$1,769.97	$1,579.82	-18.7	-9.0	-10.7
Ending inventory quantity	27,155	41,071	48,399	78.2	51.2	17.8
Other sources (2):						
Quantity	67,077	63,083	80,178	19.5	-6.0	27.1
Value	167,274	133,023	141,982	-15.1	-20.5	6.7
Unit value	$2,493.76	$2,108.70	$1,770.83	-29.0	-15.4	-16.0
Ending inventory quantity	470	1,356	926	97.0	188.5	-31.7
All sources:						
Quantity	299,794	307,624	357,193	19.1	2.6	16.1
Value	619,690	565,854	579,615	-6.5	-8.7	2.4
Unit value	$2,067.05	$1,839.43	$1,622.69	-21.5	-11.0	-11.8
Ending inventory quantity	27,625	42,427	49,325	78.5	53.6	16.3
U.S. producers':						
Average capacity quantity	1,913,709	2,004,648	2,092,165	9.3	4.8	4.4
Production quantity	1,370,283	1,405,072	1,429,041	4.3	2.5	1.7
Capacity utilization (1)	73.0	71.6	69.6	-3.4	-1.4	-1.9
U.S. shipments:						
Quantity	1,263,931	1,333,176	1,390,249	10.0	5.5	4.3
Value	2,557,702	2,482,800	2,303,677	-9.9	-2.9	-7.2
Unit value	$2,023.61	$1,862.32	$1,657.02	-18.1	-8.0	-11.0
Export shipments:						
Quantity	41,020	57,152	73,432	79.0	39.3	28.5
Value	95,416	114,085	129,857	36.1	19.6	13.8
Unit value	$2,326.08	$1,996.17	$1,768.40	-24.0	-14.2	-11.4
Ending inventory quantity	296,410	311,154	276,694	-6.7	5.0	-11.1
Inventories/total shipments (1)	22.7	22.4	18.9	-3.8	-0.3	-3.5
Production workers	8,441	8,316	8,154	-3.4	-1.5	-1.9
Hours worked (1,000s)	18,093	18,106	16,563	-8.5	0.1	-8.5
Wages paid ($1,000s)	351,095	371,548	353,294	0.6	5.8	-4.9
Hourly wages	$19.41	$20.52	$21.33	9.9	5.7	3.9
Productivity (tons per 1,000 hours)	77.6	78.8	86.8	11.9	1.6	10.2
Unit labor costs	$250.17	$260.49	$245.75	-1.8	4.1	-5.7
Net sales:						
Quantity	1,306,807	1,391,247	1,463,511	12.0	6.5	5.2
Value	2,659,658	2,599,825	2,433,455	-8.5	-2.2	-6.4
Unit value	$2,035.23	$1,868.70	$1,662.75	-18.3	-8.2	-11.0
Cost of goods sold (COGS)	2,317,256	2,319,212	2,254,260	-2.7	0.1	-2.8
Gross profit or (loss)	342,402	280,613	179,195	-47.7	-18.0	-36.1
SG&A expenses	117,891	127,743	134,431	14.0	8.4	5.2
Operating income or (loss)	224,511	152,870	44,764	-80.1	-31.9	-70.7
Capital expenditures	195,859	191,623	97,404	-50.3	-2.2	-49.2
Unit COGS	$1,773.22	$1,667.00	$1,540.31	-13.1	-6.0	-7.6
Unit SG&A expenses	$90.21	$91.82	$91.86	1.8	1.8	0.0
Unit operating income or (loss)	$171.80	$109.88	$30.59	-82.2	-36.0	-72.2
COGS/sales (1)	87.1	89.2	92.6	5.5	2.1	3.4
Operating income or (loss)/ sales (1)	8.4	5.9	1.8	-6.6	-2.6	-4.0

(1) "Reported data" are in percent and "period changes" are in percentage points.
(2) Reported import shipments and inventories from Taiwan do not include imports from Chang Mien; these imports are included in figures for other sources.

Note.--Financial data are reported on a fiscal year basis and may not necessarily be comparable to data reported on a calendar year basis.

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

APPENDIX D

COMMENTS BY U.S. PRODUCERS, IMPORTERS, PURCHASERS, AND FOREIGN PRODUCERS REGARDING THE EFFECTS OF THE ORDERS AND THE LIKELY EFFECTS OF REVOCATION

Table D-1
Stainless steel sheet and strip: Producers' comments on effect of orders

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Table D-2
Stainless steel sheet and strip: Producers' comments on likely effect of revocation of orders

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Table D-3
Stainless steel sheet and strip: Importers' comments on effect of orders

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Table D-4
Stainless steel sheet and strip: Importers' comments on likely effect of revocation of orders

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Table D-5
Stainless steel sheet and strip: Purchasers' comments on effect of orders

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Table D-6
Stainless steel sheet and strip: Purchasers' comments on likely effect of revocation of orders

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