Clad Steel Plate from Japan

Investigation No. 731-TA-739 (Fourth Review)

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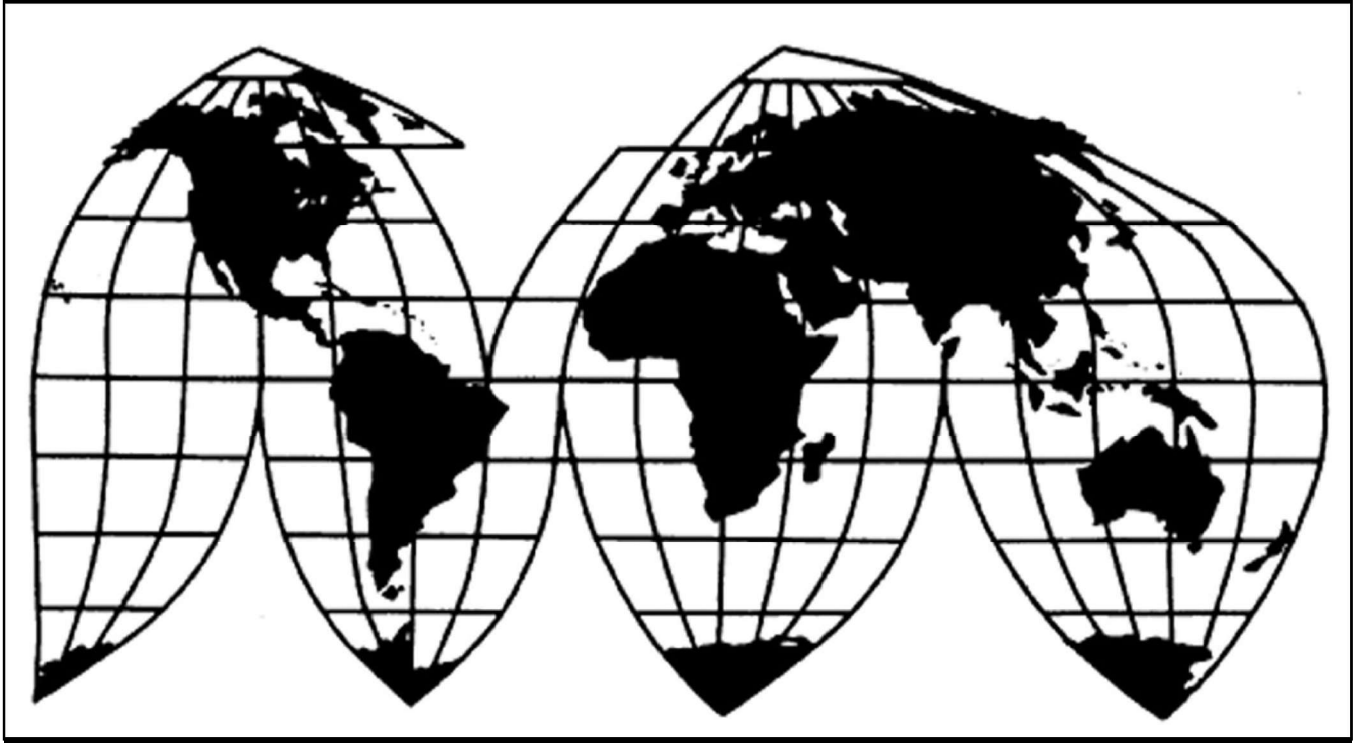
U.S. International Trade Commission



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U.S. International Trade Commission

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UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation No. 731-TA-739 (Fourth Review)

Clad Steel Plate from Japan

DETERMINATION

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

BACKGROUND

The Commission, pursuant to section 751(c) of the Act (19 U.S.C. 1675(c)), instituted this review on January 2, 2018 (83 F.R. 148) and determined on April 9, 2018 that it would conduct a full review (83 F.R. 17446, April 19, 2018). 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 July 17, 2018 (83 F.R. 33250). The Commission cancelled the hearing scheduled on October 18, 2018 following a request by the sole party to the proceeding (83 F.R. 53295, October 22, 2018). In lieu of a hearing, the domestic producers responded to written questions submitted by the Commission, as part of their post-hearing brief.

Lisa R. Barton
Secretary to the Commission

Issued:

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

Views of the Commission

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

I. Background

A. Original Investigation

In September 1995, the Commission received a petition alleging that an industry in the United States was materially injured and threatened with material injury by reason of clad steel plate from Japan that was being sold in the United States at less than fair value ("LTFV"). On June 25, 1996, the Commission determined that a domestic industry was materially injured by reason of imports of clad steel plate from Japan that the U.S. Department of Commerce ("Commerce") had determined were being sold at LTFV.[1] Commerce issued an antidumping duty order on clad steel plate from Japan on July 2, 1996.[2]

B. Prior Reviews

On June 1, 2001, the Commission instituted its first five-year review of the antidumping duty order on clad steel plate from Japan.[3] In October 2001, the Commission reached an affirmative determination after conducting an expedited review.[4] As a result, effective November 16, 2001, Commerce issued a continuation of the antidumping duty order.[5]

On October 2, 2006, the Commission instituted its second five-year review of the antidumping duty order on clad steel plate from Japan.[6] In March 2007, the Commission

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[1] *Clad Steel Plate from Japan*, Inv. No. 731-TA-739 (Final), USITC Publication 2972 (June 1996) ("Original Determination").

[2] Notice of Antidumping Order: Clad Steel Plate from Japan, 61 Fed. Reg. 34421 (July 2, 1996).

[3] Clad Steel Plate from Japan: Institution of a Five-Year Review, 66 Fed. Reg. 29829 (June 1, 2001).

[4] *Clad Steel Plate from Japan*, Inv. No. 731-TA-739 (Review), USITC Publication 3459 (October 2001) ("First Review Determination").

[5] Continuation of Countervailing and Antidumping Duty Orders: Pasta from Italy and Turkey, and Clad Steel Plate from Japan, 66 Fed. Reg. 57703 (Nov. 16, 2001).

[6] Clad Steel Plate from Japan: Institution of a Five-Year Review, 71 Fed. Reg. 57996 (Oct. 2, 2006).

reached an affirmative determination after conducting an expedited review.[7] Consequently, Commerce issued a continuation of the antidumping duty order, effective March 22, 2007.[8]

On February 1, 2012, the Commission instituted its third five-year review of the antidumping duty order on clad steel plate from Japan.[9] In January 2013, after conducting a full review, the Commission reached an affirmative determination.[10] Consequently, Commerce issued a continuation of the antidumping duty order on imports of clad steel plate from Japan, effective February 11, 2013.[11]

C. Current Review

On January 2, 2018, the Commission instituted the instant five-year review.[12] NobelClad ("NobelClad" or "domestic producer"),[13] a domestic producer of clad steel plate, filed the sole response to the notice of institution. On April 9, 2018, the Commission determined that NobelClad's individual response and the domestic interested party group response was adequate. The Commission did not receive a response from any respondent interested party and determined that the respondent interested party group response to the notice of institution was inadequate. The Commission, however, determined that in light of changes in conditions of competition that had occurred in the U.S. market, such as the imposition of tariffs under Section 232 of the Trade Expansion Act of 1962 ("Section 232"), as amended (19 U.S.C. § 1862),[14] that cover clad steel plate from Japan, it would conduct a full review pursuant to section 751(c)(5) of the Act.[15]

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[7] *Clad Steel Plate from Japan*, Inv. No. 731-TA-739 (Second Review), USITC Publication 3907 (March 2007) ("Second Review Determination").

[8] Clad Steel Plate From Japan: Continuation of Antidumping Duty Order, 72 Fed. Reg. 13478 (March 22, 2007).

[9] Clad Steel Plate from Japan: Institution of a Five-Year Review, 77 Fed. Reg. 5052 (Feb. 1, 2012).

[10] *Clad Steel Plate from Japan*, Inv. No. 731-TA-739 (Third Review), USITC Publication 4370 (January 2013) ("Third Review Determination"). Commissioners Pearson and Broadbent determined that revocation of the order would not be likely to lead to continuation or recurrence of material injury to the domestic clad steel plate industry within a reasonably foreseeable time. *See id.*, Dissenting Views.

[11] Clad Steel Plate From Japan: Continuation of Antidumping Duty Order, 78 Fed. Reg. 9676 (Feb. 11, 2013).

[12] *Clad Steel Plate from Japan: Institution of a Five-Year Review*, 83 Fed. Reg. 148 (Jan. 2, 2018). Commerce initiated its five-year review on the same date. *Initiation of Five-Year (Sunset) Reviews*, 83 Fed. Reg. 148 (Jan. 2, 2018). It issued the results of its expedited review thereafter. *Clad Steel Plate From Japan: Final Results of the Expedited Fourth Sunset Review of the Antidumping Duty Order*, 83 Fed. Reg. 22008 (May 11, 2018).

[13] NobelClad is a subsidiary of Dynamic Materials Corporation Global Inc. ("DMC"), which purchased DuPont, one of the three domestic producers in the original investigation, in 1996. CR at I-27, PR at I-19.

[14] *See* Section III.B.3, *infra*.

[15] *Clad Steel Plate from Japan; Notice of Commission Determination to Conduct a Full Five-Year Review*, 83 Fed. Reg. 17446 (April 19, 2018); Explanation of Commission Determination on Adequacy,

U.S. industry data are based on the questionnaire responses of four U.S. producers of clad steel plate that are believed to account for the vast majority of domestic production of clad steel plate in 2017.[16] U.S. import data and related information are based on official Commerce import statistics and the questionnaire responses of three U.S. importers of clad steel plate that accounted for more than *** percent of total U.S. imports during 2012-2017.[17] Foreign industry data and related information are based on the questionnaire responses of two producers of clad steel plate in Japan that accounted for *** percent of total Japanese production in 2017.[18]

The Commission received prehearing, posthearing, and final comments submissions from NobelClad.[19] No respondent party responded to the notice of institution or otherwise participated in this review. The Commission cancelled the hearing in this review following a request by the domestic producer.[20]

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."[21] 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."[22] The Commission's

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referenced in Confidential Report, Memorandum INV-QQ-133 ("CR") (Nov. 6, 2018) at App. A; Public Report ("PR") at App. A. Commissioner Williamson voted to conduct an expedited review, and Commissioner Kearns did not participate in the adequacy determination.

[16] CR at I-16, PR at I-10.

[17] CR at I-16, PR at I-10. There were no subject imports of clad steel plate from Japan from 2012 to 2017. CR at IV-1, PR at IV-1. Based on proprietary Customs data, U.S. imports during 2012-17 totaled *** short tons. After adjusting the data for companies which certified that they did not import clad steel plate, the three responding U.S. importers accounted for *** percent of the remaining total. We note that this percentage may be understated due to the presence of out-of-scope merchandise in the proprietary Customs data. *Id.*, n. 3.

[18] CR at I-16, PR at I-11.

[19] NobelClad's Prehearing Brief, October 10, 2018 ("NobelClad's Prehearing Br."); NobelClad's Posthearing Brief, October 25, 2018 ("NobelClad's Posthearing Br."); NobelClad's Final Comments, November 13, 2018.

[20] NobelClad submitted the sole request to appear at the scheduled hearing, and its counsel subsequently filed a request to cancel the hearing, which was granted by the Commission. *Clad Steel Plate from Japan: Cancellation of Hearing for Full Five-Year Review*, 83 Fed. Reg. 53295 (Oct. 22, 2018).

[21] 19 U.S.C. § 1677(4)(A).

[22] 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

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.[23]

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

> {A}ll clad[24] steel plate of a width of 600 millimeters ("mm") or more and a composite thickness of 4.5mm or more. Clad steel plate is a rectangular finished steel mill product consisting of a layer of cladding material (usually stainless steel or nickel) which is metallurgically bonded to a base or backing of ferrous metal (usually carbon or low alloy steel) where the latter predominates by weight.
>
> Stainless clad steel plate is manufactured to American Society for Testing and Materials ("ASTM") specifications A263 (400 series stainless types) and A264 (300 series stainless types). Nickel and nickel-base alloy clad steel plate is manufactured to ASTM specification A265. These specifications are illustrative but not necessarily all-inclusive.
>
> Clad steel plate within the scope of the order is classifiable under the Harmonized Tariff Schedule of the United States (HTSUS) subheading 7210.90.1000. Although the HTSUS subheading is provided for convenience and customs purposes, our written description of the scope of the order is dispositive.[25]

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).

[23] *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).

[24] Cladding is the association of layers of metals of different colors or natures by molecular interpenetration of the surfaces in contact. This limited diffusion is characteristic of clad products and differentiates them from products metalized in other manners (e.g., by normal electroplating). The various cladding processes include pouring molten cladding metal onto the basic metal followed by rolling; simple hot-rolling of the cladding metal to ensure efficient welding to the basic metal; any other method of deposition of superimposing of the cladding metal followed by any mechanical or thermal process to ensure welding (e.g., electrocladding), in which the cladding metal (nickel, chromium, etc.) is applied to the basic metal by electroplating, molecular interpenetration of the surfaces in contact then being obtained by heat treatment at the appropriate temperature with subsequent cold rolling. *See* Harmonized Commodity Description and Coding System Explanatory Notes, Chapter 72, General Note (IV)(C)(2)(e).

[25] *Clad Steel Plate from Japan: Final Results of the Expedited Fourth Sunset Review of the Antidumping Duty Order*, 83 Fed. Reg. 22008 (May 11, 2018). The HTS statistical reporting number

Clad steel plate is used to manufacture vessels or structures for heavy industry projects in which corrosion-resistance qualities are essential. End users of clad steel plate include chemical and petrochemical companies, the shipbuilding industry, electric utilities, pulp and paper companies, and other producers of industrial and defense equipment.[26] The petrochemical industry, specifically the hydrocarbon processing industry (which includes petroleum refining and petrochemical and chemical processing), consistently has been the largest market for clad steel plate, likely consuming as much as *** percent of clad products used in the United States in the mid-1990s, according to petitioner's estimates during the original investigation. Processing vessels for the chemical and petroleum refining industries continue to be a major end-use market for clad steel plate.[27] Clad steel plate also is used in flue-gas desulfurization systems that remove sulfur from exhaust gas in coal-fired power plants and in the manufacture of clad steel pipe for sour-drilling applications and ocean development of natural-gas deposits.

Clad steel plate is produced by either roll bonding or explosion bonding. Roll bonding is accomplished by heating and rolling on a conventional steel plate mill, a pack comprising plates of cladding alloy and steel backing that are welded together around the edges.[28] Explosion bonding is accomplished by placing a sheet or plate of cladding material over a plate of backing steel and then covering the cladding plate with a layer of explosives.[29]

In its original determination and all prior five-year reviews, the Commission defined a single domestic like product to include all clad steel plate of a width of 600 mm or more and a composite thickness of 4.5 mm or more, coextensive with Commerce's scope of investigation.[30]

The record in the current review provides no evidence to suggest that reconsideration of the domestic like product definition is warranted.[31] Moreover, no party has argued for a different definition of the domestic like product in this fourth five-year review. We therefore again define a single domestic like product consisting of all clad steel plate coextensive with the scope of the review.

B. Domestic Industry

Section 771(4)(A) of the Tariff Act defines the relevant industry as the domestic "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of

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7210.90.1000 is a basket category and contains out-of-scope merchandise, including stainless steel products. *See* CR at IV-1, n.1, PR at IV-1, n.1.

[26] CR at I-20, PR at I-13.

[27] CR at I-20, PR at I-14.

[28] CR at I-21, PR at I-14.

[29] CR at I-24, PR at I-17.

[30] Original Determination. USITC Pub. 2972 at 5; First Review Determination, USITC Pub. 3459 at 4; Second Review Determination. USITC Pub. 3907 at 5; Third Review Determination, USITC Pub. 4370 at 6.

[31] *See generally* CR at I-19 to I-27, PR at I-13 to I-19.

the product."[32] In defining the domestic industry, the Commission's general practice has been to include in the industry producers of all domestic production of the like product, whether toll-produced, captively consumed, or sold in the domestic merchant market.

In the original investigation and prior five-year reviews, the Commission defined a single domestic industry comprised of all domestic producers of clad steel plate.[33]

As with the definition of the domestic like product, the record here contains no information that would warrant a reconsideration of the Commission's prior determinations regarding the domestic industry and no party has argued that the domestic industry should be defined differently.[34] We therefore again define the domestic industry as all domestic producers of clad steel plate.

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

A. Legal Standards

In a five-year review conducted under section 751(c) of the Tariff Act, Commerce will revoke an antidumping or countervailing duty order unless: (1) it makes a determination that dumping or subsidization is likely to continue or recur and (2) the Commission makes a determination that revocation of the antidumping or countervailing duty order "would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time."[35] The Uruguay Round Agreements Act Statement of Administrative Action ("SAA") states that "under the likelihood standard, the Commission will engage in a counterfactual analysis; it must decide the likely impact in the reasonably foreseeable future of an important change in the status quo – the revocation or termination of a proceeding and the elimination of its restraining effects on volumes and prices of imports."[36] Thus, the likelihood standard is prospective in nature.[37] The U.S. Court of International Trade has found that "likely," as used in the five-year

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

[33] Original Determination, USITC Pub. 2972 at 5; First Review Determination, USITC Pub. 3459 at 4; Second Review Determination, USITC Pub. 3907 at 5; Third Review Determination, USITC Pub. 4370 at 6.

[34] There are no related party issues in this fourth five-year review. *See* 19 U.S.C. § 1677(4)(B).

[35] 19 U.S.C. § 1675a(a).

[36] 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.

[37] 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

review provisions of the Act, means "probable," and the Commission applies that standard in five-year reviews.[38]

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."[39] 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."[40]

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."[41] It directs the Commission to take into account its prior injury determination, whether any improvement in the state of the industry is related to the order or the suspension agreement under review, whether the industry is vulnerable to material injury if an order is revoked or a suspension agreement is terminated, and any findings by Commerce regarding duty absorption pursuant to 19 U.S.C. § 1675(a)(4).[42] 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.[43]

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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.

[38] *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'").

[39] 19 U.S.C. § 1675a(a)(5).

[40] 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*.

[41] 19 U.S.C. § 1675a(a)(1).

[42] 19 U.S.C. § 1675a(a)(1). Commerce has not issued any duty absorption findings in this review. CR at I-17, n.49, PR at I-11, n.49.

[43] 19 U.S.C. § 1675a(a)(5). Although the Commission must consider all factors, no one factor is necessarily dispositive. SAA at 886.

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.[44] 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.[45]

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.[46]

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.[47] All relevant economic factors are to be considered within the context of the business cycle and the conditions of competition that are distinctive to the industry. As instructed by the statute, we have considered the extent to which any improvement in the state of the domestic industry is related to the orders under review and whether the industry is vulnerable to material injury upon revocation.[48]

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[44] 19 U.S.C. § 1675a(a)(2).

[45] 19 U.S.C. § 1675a(a)(2)(A-D).

[46] *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.

[47] 19 U.S.C. § 1675a(a)(4).

[48] 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.

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

1. Demand Conditions

U.S. demand for clad steel plate is derived from demand for downstream products. As the Commission found in the prior proceedings, reported end uses include pressure vessels, heat exchangers, chemical reactors, evaporators, and condensers.[50] In the third review, firms reported that other end uses included cooking equipment, flue gas scrubbing equipment, liquid chillers that incorporate pressure vessels for HVAC, magnesium reservoirs, pipe, pulp and paper making, shipbuilding, and storage containers.[51] The Commission also noted that there were a number of substitutes for clad steel plate, namely solid alloys, carbon steel plate with weld alloys, and non-metallic plate. However, these materials were only substitutes for specific downstream products and the majority of responding firms reported no changes in substitutes since 2006.[52]

In the current review, no responding U.S. producers or importers reported changes in end uses, and none anticipated any changes in end uses in the future.[53] Three of six responding purchasers reported changes in end uses, with one stating that fewer capital investment projects have resulted in decreased demand for clad steel plate, and another stating that there are cost effective solid material substitutes, such as deflationary 2205 stainless steel. Two purchasers also anticipated further changes in end uses.[54] While the majority of responding firms reported no substitutes for clad steel plate,[55] some firms identified substitutes to clad steel plate for specific applications.[56]

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[49] 19 U.S.C. § 1675a(a)(4).

[50] CR at II-8, PR at II-5; *see also* Original Determination, USITC Pub. 2972 at 7; First Review Determination, USITC Pub. 3459 at 7; Second Review Determination, USITC Pub. 3907 at 8; Third Review Determination, USITC Pub. 4370 at 9.

[51] CR at II-8, PR at II-5. Clad steel plate accounts for a varying share of the cost of the products in which it is used. Reported cost shares for the most widely reported application, pressure vessels, ranged from 30 to 70 percent. Other reported applications and their cost shares were as follows: chemical reactors, 70 percent; condensers, 12 percent; and heat exchangers, 15 to 30 percent. *Id.*

[52] Third Review Determination, USITC Pub. 4370 at 12.

[53] CR at II-9, PR at II-5. *** reported that there had been changes in end uses, but explained the change as *** "***." *Id.* n.10.

[54] CR at II-9, PR at II-5 to II-6.

[55] CR at II-13, PR at II-8. Two U.S. producers, one of two responding importers, and four of seven responding purchasers reported that there are no substitutes for clad steel plate. *Id.*

[56] CR at II-13, PR at II-8. *** and six (of seven) purchasers identified substitutes to clad steel plate for some applications. Solid alloy plate was cited as a substitute in pressure vessels, condensers,

Clad steel plate is typically purchased on a spot basis and consumed for specific projects.[57] Thus, demand tends to fluctuate over time. In the current review, a majority of responding firms reported that demand for clad steel plate since January 2012 had either decreased (***, and one purchaser) or fluctuated (*** three purchasers).[58] NobelClad reported that demand has declined and cited reduced capital investment projects in the oil and gas industries, as well as a declining domestic customer base for clad steel plate.[59]

Apparent U.S. consumption declined during the original investigation. Moreover, the Commission found in the first review that apparent U.S. consumption for clad steel plate had declined since the time of the original investigation, and found in the second review that the downward trend had continued.[60] In the third review, the Commission concluded that, in light of the fluctuations in apparent U.S. consumption during the period of review and the mixed perceptions by market participants, future demand was likely to fluctuate with no clear trend.[61] During the current period of review, apparent U.S. consumption of clad steel plate fluctuated between 2015 and 2017 for an overall decline of *** percent; it was *** short tons in 2015, *** short tons in 2016, and *** short tons in 2017.[62]

2. Supply Conditions

In the current review, the U.S. market was supplied exclusively by domestically produced clad steel plate and imports from nonsubject countries, as subject imports were nonexistent.[63] The domestic industry has been and remains the dominant supplier to the U.S.

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and other various applications by *** and four purchasers. Weld overlay was cited as a substitute in pressure vessels by two purchasers and ***, and stainless steel was cited as a substitute in chemical-resistant vessels by one purchaser. *** also stated that explosion bonded plate was a substitute for other clad steel plate for chemical and petrochemical uses. *Id.*

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

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

[59] NobelClad's Prehearing Br. at 4-5. The record indicates that the number of oil and gas rigs were both considerably lower in the final weeks of December 2017, June 2018, and October 2018 than in January 2012. *See* CR at II-10 to II-12, PR at II-6 to II-7.

[60] First Review Determination, USITC Pub. 3459 at 7; Second Review Determination. USITC Pub. 3907 at 8. In the original investigation, apparent U.S. consumption was *** short tons in 1993 and *** short tons in 1995. Third Review Confidential Views at 12, n.54. In the first review, apparent U.S. consumption of clad steel plate had declined *** percent from 1995 to 2000, and continued to decline by *** percent between 2000 and 2005. Second Review Confidential Views at 10.

[61] Third Review Determination, USITC Pub. 4370 at 10. In the third review, apparent U.S. consumption ranged between *** short tons in 2010 and *** short tons in 2008. Third Review Confidential Views at 12.

[62] CR/PR at Table I-7. Apparent U.S. consumption was slightly lower in January-June ("interim") 2018, at *** short tons, than in interim 2017, at *** short tons.

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

market.[64] Notwithstanding imposition of the order, U.S. producers' market share was substantially lower in the first review than in the original investigation. However, the domestic industry's market share in the second review rose to nearly the level present during the original investigation and it was higher in the third review than during the original investigation.[65] In the current review, U.S. producers' share of apparent U.S. consumption was *** percent in 2015, *** in 2016, and *** in 2017; it was *** percent in interim 2017 and *** percent in interim 2018.[66]

There have been some variations in the composition of the domestic industry over the years. In the original investigation, the Commission found that four firms (Ametek, DuPont, DMC, and Lukens) comprised the domestic industry.[67] In the first review, four firms also comprised the domestic industry (Ametek, DMC, Lukens – subsequently Bethlehem Lukens – and Vee Cee Metals).[68] Vee Cee Metals exited the industry after the first review, leaving DMC, Ametek, and Mittal (the successor company to Bethlehem Lukens) as the remaining domestic producers during the second review. Mittal reportedly accounted for the majority of domestic production in 2005.[69] In the third review, the Commission found that six firms comprised the domestic industry, with DMC being the largest producer.[70] In the current review, there are four domestic producers—Ametek, ArcelorMittal, NobelClad, and Regal Technology.[71] ArcelorMittal discontinued clad steel plate production in 2014.[72] NobelClad accounted for the vast majority of U.S. production of clad steel plate during the period of review.[73]

Following imposition of the order, subject imports from Japan declined to minimal levels and were not present during the third or current review.[74]

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[64] The domestic industry's share of apparent U.S. consumption was *** percent in 1995, *** percent in 2000, *** percent in 2005, and *** percent in 2011. CR/PR at Table I-2.

[65] Third Review Determination, USITC Pub. 4370 at 10; CR/PR at Table I-2.

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

[67] Original Determination, USITC Pub. 2972 at 5.

[68] First Review Determination, USITC Pub. 3459 at 8-9.

[69] Second Review Determination, USITC Pub. 3907 at 8.

[70] Third Review Determination, USITC Pub. 4370 at 10.

[71] One of eight purchasers, ***, reported that ArcelorMittal's domestic production stoppage resulted in constraints in supply. *** also reported that it purchased from *** due to delivery issues from ***, and that there was very limited domestic supply of specialty heat-treated alloys "due to government rated orders consuming heat treat capacity," but acknowledged that ***. CR at II-6 to II-7, PR at II-4. NobelClad argues that these instances represent isolated issues and do not equate to market shortages or the domestic industry's inability to supply the market. NobelClad's Prehearing Br. at 5.

[72] CR at I-28, PR at I-20. Although ArcelorMittal ceased production of subject merchandise in 2014, ***. CR/PR at Table III-7.

[73] CR at I-28, PR at I-20. NobelClad constituted *** percent of production in 2017, and Regal Technology suspended its production of clad steel plate at the end of 2017. *Id.*

[74] Third Review Determination, USITC Pub. 4370 at 10; CR at Table I-2. Subject imports' share of apparent U.S. consumption was *** percent in 1995, *** percent in 2000, *** percent in 2005, and *** percent in 2011. Third Review Confidential Views at 13.

Nonsubject imports gained market share lost by U.S. producers and subject imports between the original investigation and first review. In the second review, the Commission observed that nonsubject imports occupied a relatively minor, but growing, share of the clad steel plate market since the original investigation.[75] However, their market share was lower in the third review.[76] In the current review, nonsubject imports' share of apparent U.S. consumption was *** percent in 2015, *** percent in 2016, and *** in 2017; it was higher in interim 2018, at *** percent, than in interim 2017, at *** percent.[77] The record indicates that the leading sources of nonsubject imports during the period of review were ***, and responding U.S. importers reported importing clad steel plate from Austria, France, and Germany.[78]

3. Substitutability and Other Conditions

In the original investigation, the Commission found that subject imports were able to compete directly with the domestic like product.[79] In the first review, the Commission determined that the U.S. market was price sensitive such that price played a key role in determining which supplier would win a bid and that, given the apparent high degree of substitutability between domestic and Japanese clad steel plate, relatively small changes in price could result in significant shifts in market share. The Commission also found that contract negotiations in the industry were characterized by a relatively small number of major bids and that sales were made through a multi-level, competitive bidding process.[80] In the second review, the Commission did not make specific findings regarding substitutability, but simply stated that the conditions of competition were not likely to change significantly in the reasonably foreseeable future.[81]

In the third five-year review, the Commission found that there was a moderate degree of substitutability between domestically produced clad steel plate and imports from Japan and other countries, and that both price and non-price factors (including quality and delivery) were important in purchasing decisions.[82] The Commission also observed that, as in prior proceedings, the industry was characterized by a relatively small number of major bids in a price sensitive market.[83]

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[75] Second Review Determination. USITC Pub. 3907 at 8.

[76] Third Review Determination, USITC Pub. 4370 at 10; CR at Table I-2 and I-8. Nonsubject imports' share of apparent U.S. consumption was *** percent in 1995, *** percent in 2000, *** percent in 2005, and *** percent in 2011. Third Review Confidential Views at 13.

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

[78] CR at IV-2, PR at IV-1.

[79] *See* Original Determination, USITC Pub. 2972 at 7 n.33-34.

[80] First Review Determination, USITC Pub. 3459 at 7-8, 11.

[81] Second Review Determination, USITC Pub. 3907 at 9.

[82] Third Review Determination, USITC Pub. 4370 at 10-11.

[83] Third Review Determination, USITC Pub. 4370 at 12.

In the current review, we find that there is at least a moderate degree of substitutability between domestically produced clad steel plate and subject imports.[84] The majority of responding market participants reported that domestically produced clad steel plate and subject imports were always interchangeable.[85] Clad steel plate produced by the explosion bonding and roll bonding methods are largely interchangeable; roll bonding is more commonly used for thinner plate, whereas explosion bonding is more common for thicker plate.[86]

We also find that both price and non-price factors are important in purchasing decisions for clad steel plate.[87] Six responding firms cited price as one of the top three factors in their purchasing decisions (in addition to quality and availability), and price was most frequently cited as the most important purchasing factor.[88]

U.S. producers reported selling the *** of their clad steel plate in the spot market in 2017.[89] These transactions typically occur through a multi-level competitive bidding process. As in the original investigation and prior reviews, there are currently a relatively small number of major bids in the market.[90] Due to the importance of price in the bidding process and the key role price plays in determining which supplier wins a bid,[91] the market continues to be price sensitive, as it was in the prior reviews, because a relatively small change in price may result in a significant shift in purchasing patterns and thus in market share.[92]

Raw material costs represent the single largest component of the total cost of goods sold ("COGS") for clad steel plate.[93] Raw material costs differ among the various types of clad steel plate products and between producers, particularly with respect to the type of steel backing plate used. The per-short ton value of U.S. producers' raw materials costs irregularly declined from 2015 to 2017, and was also lower in interim 2018 than in interim 2017.[94]

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[84] CR at II-13 to II-14, PR at II-8.

[85] CR/PR at Table II-10. *** domestic producers reported that domestically produced clad steel plate and subject imports were always interchangeable, while *** reported that they were frequently interchangeable. *** and *** both reported that domestically produced clad steel plate and subject imports were always interchangeable. *Id.*

[86] CR at I-26, PR at I-18.

[87] CR/PR at Table II-6. Purchasers reported quality, price, and availability/delivery as their top three factors in purchasing decisions. *Id.*

[88] CR/PR at Table II-6.

[89] CR/PR at Table V-3. ***. CR at V-4, n.3.

[90] NobelClad's Prehearing Br. at 7.

[91] CR at V-10, n.7, PR at V-6, n.7.

[92] *See* First Review Determination, USITC Pub. 3459 at 7-8, 11; Second Review Determination, USITC Pub. 3907 at 9; Third Review Determination, USITC Pub. 4370 at 12.

[93] CR at III-17, PR at III-6.

[94] CR at III-17, PR at III-6.

Five of the eight responding purchasers reported that they require their clad steel plate suppliers to become certified or qualified. Reported qualification times ranged from one to 30 days, with one report of a qualification time of 150 days.[95]

Additional tariffs of 25-percent *ad valorem* were imposed on certain steel mill products, including clad steel plate, in March 2018 under Section 232.[96] The Secretary of Commerce may grant product-specific exclusions from Section 232 tariffs subject to an appeal process,[97] and on June 20, 2018, Commerce announced its first set of product exclusions. While forty-two exclusion requests were granted, covering seven companies importing steel products from Belgium, China, Germany, Japan, and Sweden, no clad steel plate products from Japan were excluded.[98]

C. Likely Volume of Subject Imports

1. The Original Investigation and Prior Reviews

In the original determination, the Commission found the levels of subject imports and import penetration to be significant. The Commission placed particular emphasis on the importance to domestic producers of securing a sufficient number of relatively few large-volume contracts in a given year to allow maintenance of adequate levels of capacity utilization, and the fact that subject imports compete directly for those critical sales. Because the Commission found the market to be price sensitive, it found relatively small volumes of subject imports to be significant.[99]

In the first review, the Commission found, based on the facts available, that subject import volume was likely to increase significantly and would be significant if the order were

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[95] CR at II-17, PR at II-10 to II-11. No purchasers reported that a domestic or foreign supplier had failed in its attempt to qualify product, or had lost its approved status since January 1, 2012. *Id.*

[96] CR at I-8 to I-11, PR at I-6 to I-8. Section 232 authorizes the Secretary of Commerce to conduct investigations to determine the effects of imports on the national security of the United States and authorizes the President to take action to restrict such imports. *See* 19 U.S.C. § 1862. On March 22, 2018, the President authorized the suspension of the Section 232 tariffs before they took effect on steel imports for certain countries other than Japan, "pending discussions of satisfactory long-term alternative means to address the threatened impairment of U.S. national security." *See Presidential Proclamation 9711 of March 22, 2018, Adjusting Imports of Steel Into the United States*, 83 Fed. Reg. 13361 (Mar. 28, 2018). The President's proclamation on steel did not indicate the duration of the Section 232 tariffs. 19 U.S.C. § 1862(c)(1)(A)(ii). Subsequent Presidential proclamations established absolute quotas for steel mill articles from certain countries, not including Japan, while exempting Australia from both the tariffs and the quotas.

[97] Requirements for Submissions Requesting Exclusions From the Remedies Instituted in Presidential Proclamations Adjusting Imports of Steel Into the United States and Adjusting Imports of Aluminum Into the United States; and the Filing of Objections to Submitted Exclusion Requests for Steel and Aluminum; Interim Final Rule, 83 Fed. Reg. 12106-12112 (Mar. 19, 2018).

[98] CR at I-11, PR at I-8.

[99] Original Determination, USITC Pub. 2972 at 15-16.

revoked. As it did in the original investigation, the Commission recognized that given the apparent high degree of substitutability between domestic and Japanese clad steel plate, relatively small changes in price resulted in significant shifts in market share. The Commission found that the Japanese industry was export-oriented, as it exported over one-half of its production volume during the original period of investigation and still depended on substantial quantities of exports. This indicated that the Japanese industry would likely seek to re-enter the U.S. market with significant quantities of subject merchandise, as it did during the original investigation, if the order were revoked.[100]

In the second review, the Commission found that Japanese producers had increased their production capability since the order went into effect. It once again found that the Japanese industry was export-oriented and that it would likely seek to re-enter the U.S. market with significant quantities of subject merchandise if the order were revoked. The Commission also noted that subject producers appeared to have the ability to divert exports from other markets to the U.S. market. The vast majority of Japanese exports of clad steel plate were shipped into markets other than the United States, including Mexico.[101]

In the third review, the Commission found that the volume of subject imports, both in absolute terms and relative to production and consumption in the United States, would likely be significant in the reasonably foreseeable future absent the restraining effect of the order.[102] It based this conclusion on a number of factors, including the subject producers' significant excess capacity and increased capacity, their incentive to produce and export more product, the fact that demand in Asia was not expected to increase significantly enough in the reasonably foreseeable future to absorb these exports, and the small size of the U.S. market.[103]

2. Current Review

There were no subject imports during any year of the current period of review. Based on the record, however, we find that should the order be revoked, the likely volume of subject imports from Japan would be significant, as it was in the original investigation.[104]

The industry in Japan has more than ample excess capacity to produce additional subject merchandise and has the incentive to ship it to the U.S. market in large quantities absent the restraining effect of the order. We recognize that the record contains data from only two producers of clad steel plate in Japan that accounted for *** percent of total Japanese production in 2017.[105] These data indicate that the responding Japanese producers' clad steel plate capacity remained stable over the period of review at *** short tons, but their capacity

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[100] First Review Determination, USITC Pub. 3459 at 10-11.

[101] Second Review Determination, USITC Pub. 3907 at 10-11.

[102] Third Review Determination, USITC Pub. 4370 at 13-17.

[103] Third Review Determination, USITC Pub. 4370 at 17.

[104] In the original investigation, subject imports were *** short tons in 1993, *** short tons in 1994, and *** short tons in 1995. Confidential Original Report at Table C-1.

[105] CR at I-16, PR at I-10; *see also* CR/PR at Table II-3. A third Japanese producer, ***, contacted the Commission but declined to submit a questionnaire response. CR at IV-8, PR at IV-3.

utilization decreased from *** percent in 2015 to *** percent in 2016 to *** percent in 2017.[106] Although the unused capacity reported by the two responding foreign producers is considerable—it was *** short tons in 2017, almost *** times the *** short tons of apparent U.S. consumption in that year—the total excess capacity for the entire industry in Japan is likely considerably larger. In particular, ***—did not provide data in response to the Commission's questionnaires in this review.[107] Therefore, we conclude that should the order be revoked, Japanese producers would have the ability to ship substantial quantities of subject merchandise to the United States without diverting exports from other markets.

The record further indicates that subject producers in Japan are increasingly export-oriented. Japan was the third largest global exporter of cladded metal products during the period of review.[108] In the original investigation, Japanese producers exported more than half of their production volume; they remained export-oriented in the prior reviews[109] and continue to export significant quantities of their production. In this review, responding Japanese producers exported between *** and *** percent of total shipments from 2015 to 2017.[110] Moreover, responding producers have shown an ability to shift shipments among export destinations. They reported an increase in exports to the European Union, both in absolute terms and as a share of total shipments (from *** percent of total shipments in 2015 to *** percent in 2017 and *** percent in interim 2018), concurrently with a decrease in exports to Asia and all other markets.[111]

Based on Japanese export statistics, Japanese clad steel plate producers' exports had a global reach, including to markets in Europe and Asia, during the period of review.[112] While

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[106] CR/PR at Table IV-6. The data indicates that Japanese producers' capacity utilization was higher in interim 2018, at *** percent, than in interim 2017, at *** percent. *Id.*

[107] NobelClad Prehearing Br. at 14. In the third review, four Japanese producers, including ***, provided usable data and together were believed to have accounted for all known Japanese production of clad steel plate. Accordingly, we rely as appropriate on the facts available from the third review with respect to the clad steel plate industry in Japan. In the third review, the responding subject producers' reported capacity increased from *** short tons in 2006 to *** short tons in 2007, *** short tons in 2008, and *** short tons in 2009 through 2011. Capacity utilization was *** percent in 2006, *** percent in 2007, *** percent in 2008, *** percent in 2009, *** percent in 2010, and *** percent in 2011. Third Review Confidential Views at 18, n.87 and n.88.

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

[109] First Review Determination, USITC Pub. 3459 at 10; Second Review Determination, USITC Pub. 3907 at 10; Third Review Determination, USITC Pub. 4370 at 14.

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

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

[112] NobelClad's Prehearing Br. at Exhibit 3; CR/PR at Table IV-10. The export data compiled by Trade Data Monitor and submitted by NobelClad uses Japan's official export statistics for HTS 7210.90.10, which is a subheading and thus narrower than the official export statistics based on HTS 7210.90. We recognize that the subheading is under-inclusive, as it does not encompass all subject clad steel plate, but the 6-digit HTS data likely includes a significant amount of nonsubject merchandise. Thus, we rely on the 8-digit subheading for the official Japanese export statistics. *Id.*

these data showed a decrease in Japanese exports from 2015 to 2017, exports were higher for January-August 2018 than in January-August 2017.[113] In addition, Japanese export statistics show notable fluctuations in exports to different markets on a year-over-year basis, indicating a potential for a high degree of responsiveness to changes in demand in the U.S. market.[114]

Moreover, subject producers are well-positioned to serve the U.S. market if the order is revoked, and the United States is likely to be an attractive market for them. NobelClad reports that subject producers currently maintain ties with the United States, including headquarters of affiliates and business support services offices in New York, Houston, Los Angeles, Detroit, and Chicago.[115] Qualification/certification for new suppliers ranges from one to 30 days, with one purchaser reporting a qualification time of 150 days.[116] Thus, the qualification process would not present a significant barrier to re-entering the U.S. market within a reasonably foreseeable time. In addition, the record indicates that prices are generally higher in the U.S. market than in other Japanese export markets.[117]

Evidence on the record of this review indicates that the 25 percent tariff on clad steel plate from Japan imposed under the Section 232 trade action likely would not by itself deter a significant volume of subject imports from Japan from entering the U.S. market if the order were revoked. The limited available information in the current record, covering a period of review that ended immediately following the imposition of the Section 232 tariffs, does not indicate that the tariffs have resulted in significant changes in market conditions for the

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Japanese producers have also demonstrated a recent interest in North America, with exports of 55 short tons of clad steel plate to Canada in 2017 and 121 short tons in January-August 2018. NobelClad's Prehearing Br. at Exhibit 3.

[113] Japanese exports of clad steel plate were 21,056 short tons in 2015, 22,553 short tons in 2016, and 15,237 short tons in 2017; these exports were 8,117 short tons in January-August 2017 and 9,955 short tons in January-August 2018. NobelClad's Prehearing Br. at Exhibit 3.

[114] NobelClad's Prehearing Br. at 20 and Exhibit 3. For example, Japanese exports of clad steel plate to South Korea were 14,292 short tons in 2015, 13,561 short tons in 2016, and 7,386 short tons in 2017; exports to India were 284 short tons in 2015, 1,775 short tons in 2016, and 2,156 short tons in 2017; exports to China were 2,336 short tons in 2015, 691 short tons in 2016, and 1,818 short tons in 2017; and exports to Saudi Arabia were 90 short tons in 2015, 1,077 short tons in 2016, and 1,770 short tons in 2017. *Id.* at Exhibit 3.

[115] NobelClad's Prehearing Br. at 22.

[116] CR at II-17, PR at II-10.

[117] NobelClad's Prehearing Br. at Exhibit 3; CR/PR at Appendix C. The domestic industry's reported average unit values ("AUVs") for U.S. shipments were $***/ton in 2015, $***/ton in 2016, and $***/ton in 2017. By comparison, Japan's clad steel plate export AUVs to third country markets were significantly lower, with its three largest export markets' AUVs in 2017 reported as $***/ton, $***/ton, and $***/ton, respectively. *Id.* Although we are mindful that the use of AUVs for establishing price trends or comparisons may present product mix issues, *see Accord Allegheny Ludlum Corp. v. United States*, 287 F.3d 1365, 1373–74 (Fed. Cir. 2002), we note that AUVs for Japan's clad steel plate exports are based on a narrow product definition.

domestic clad steel plate industry.[118] Most firms reported that they did not anticipate that additional developments related to the Section 232 investigation and imposition of the tariffs would impact the conditions of competition for clad steel plate in the future.[119] We find that the U.S. market is sufficiently attractive, particularly in light of the Japanese industry's substantial unused capacity and export orientation, to encourage subject producers to again export significant quantities of clad steel plate in the absence of the antidumping duty order even with the Section 232 tariffs in place.

Accordingly, based on the subject producers' significant excess capacity, their export orientation and export patterns, and the size of the U.S. market compared to the subject producers' capacity and excess capacity, we find the volume of subject imports, both in absolute terms and relative to production and consumption in the United States, would likely be significant in the reasonably foreseeable future absent the restraining effect of the order.[120]

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[118] A majority of market participants reported that they were familiar with the Section 232 investigation, and reported that the issuance of proclamations and tariffs had some impact on the conditions of competition for clad steel plate. *** responding U.S. producers, *** importers, and three of six purchasers reported an impact from the issuance of the proclamations and resulting tariffs. CR II-19 to II-20, PR at II-12. *** reported that the additional tariffs on steel plates have increased input costs for clad steel plates, purchaser *** reported that it had an effect on the pricing and availability of the raw materials needed to make explosion-bonded clad steel plate, purchaser *** reported that prices increased with increases in the cost of raw plate, and purchaser *** stated that the additional tariffs led to volatility in the pricing of plate materials used in the manufacturing of clad steel plate. *Id.*

[119] *** U.S. producers, *** importers, and three of six purchasers expected no additional impact on the industry. However, purchaser *** reported that anything that raises prices and increases lead times will be detrimental to domestic supply, particularly since NobelClad is "the only real domestic source of clad plate." CR at II-20, PR at II-12.

[120] Commissioner Broadbent notes that, in her determination in the third review, she concluded from the evidence on the record that any increase in subject imports from Japan would not be significant if the order were revoked. Two changes in the U.S. market and Japanese industry have caused her to reach a different conclusion in this fourth review.

First, the U.S. industry did not demonstrate the same degree of market dominance in this review as in the prior review. In the third review, nonsubject imports peaked at *** percent of apparent U.S. consumption in 2008, and in all other years from 2006 to 2011 never accounted for more than *** percent of apparent U.S. consumption. Third Review Dissenting Opinion at 3. As discussed above, nonsubject imports have recently accounted for a rising share of apparent U.S. consumption during the period of review, reaching period highs of *** percent in 2017 and *** percent in interim 2018. CR/PR at Table I-8. Therefore, the continued absence of subject imports from Japan, one of the largest global producers of clad steel plate, is likely due to the antidumping duty order rather than any structural advantage that domestic producers hold.

Second, data provided by Japanese producers indicate that they have shifted a large share of their total shipments to exports outside of Asia during the current period of review, demonstrating a growing global focus rather than a focus on home-market and regional shipments. During the third review (from 2006 to 2011), the four responding Japanese producers reported exports to non-Asian countries that decreased steadily from *** percent of their total shipments in 2008 to *** percent in

D. Likely Price Effects

1. The Original Investigation and Prior Five-Year Reviews

In the original investigation, the Commission found that subject imports were having a significant adverse effect on U.S. prices.[121] It stated that the market for clad steel plate was price sensitive, with price playing a key role in determining which supplier would win a bid. While a relatively small number of reported bids involved competition between the domestic like product and subject imports, the sales quantities involved in the competitive bids were significant. On the basis of the price sensitive nature of the market, the significant underbidding by Japanese suppliers of clad steel plate on significant volumes of product, the success of Japanese suppliers in winning important large contracts on the basis of price, and the domestic industry's inability to recoup increases in its COGS and SG&A expenses, the Commission found price suppression to a significant degree.[122]

In the subsequent reviews, there was limited pricing data given the significantly reduced volume of subject imports in the U.S. market.[123] The Commission found that the market was price sensitive such that price played a key role in determining which supplier won a bid. It further found it to be likely that if the order were revoked, subject Japanese exporters would offer attractively low prices to U.S. purchasers in order to regain market share. Consequently, prices for domestically produced clad steel plate in the United States would likely decline to a significant degree due to the effects of increased volumes of highly substitutable subject clad steel plate offered at lower prices. The Commission then found that revocation of the order would be likely to result in significant price effects, including significant underselling by the subject imports, as well as significant price depression and suppression in the reasonably foreseeable future.[124]

2011. Third Review Dissenting Opinion at 4. By contrast, in this fourth review, the two responding Japanese producers reported exports to non-Asian countries that fluctuated between *** percent and *** percent of their total shipments between 2015 and interim 2018. In particular, the two Japanese producers reported exporting *** short tons to the European Union in 2017, and this quantity increased to *** short tons in the first half of 2018 alone. CR/PR at Table IV-6. These volumes far surpassed the volume of reported Japanese exports to the European Union during the third review, which ranged from *** short tons to *** short tons. Third Review Confidential Report at Table IV-3. The Japanese industry's rapid and substantial shift toward the European Union market, which has large producers of clad steel plate, provides evidence that the Japanese industry has the ability and willingness to quickly increase exports to the U.S. market upon revocation of the order.

[121] Original Determination, USITC Pub. 2972 at 20-21.

[122] Original Determination, USITC Pub. 2972 at 20-21.

[123] In the first review, there was limited pricing data; in the second review, there was no new product-specific pricing information on the record; and in the third review there was again limited new pricing data. *See* First Review Determination, USITC Pub. 3459 at 11; Second Review Determination, USITC Pub. 3907 at 12; Third Review Determination, USITC Pub. 4370 at 19.

[124] First Review Determination, USITC Pub. 3459 at 11; Second Review Determination, USITC Pub. 3907 at 12; Third Review Determination, USITC Pub. 4370 at 19.

2. Current Review

As described above, the record in the current review indicates that there is at least a moderate degree of substitutability between subject imports from Japan and the domestic like product and that price plays an important role in purchasing decisions. In addition, the market for clad steel plate is price sensitive, with price playing a key role in determining which supplier will win a bid.

Given the absence of subject imports from the U.S. market, the record does not contain any price comparison data for subject imports and domestically produced clad steel plate in the U.S. market during the period of review.[125]

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

Accordingly, we find that subject imports from Japan would likely undersell the domestic like product to a significant degree upon revocation of the order, which would likely result in the subject imports gaining market share at the domestic industry's expense and/or having significant price depressing or suppressing effects within a reasonably foreseeable time.

E. Likely Impact

1. The Original Investigation and Prior Five-Year Reviews

In the original investigation, the Commission found that the domestic industry's financial performance worsened substantially as subject import volumes increased. Although the Commission recognized that fluctuations in the market for clad steel plate may have contributed to the industry's problems, the industry had not achieved operating income levels that were close to positive since the year when subject imports were at their lowest level. The Commission stated that because price was important and low-priced subject imports competed with the domestic like product for a significant volume of critical sales, it found the industry to be materially injured by reason of subject imports.[126]

In the first review, the Commission found the domestic industry to be vulnerable. It found that the volume and price effects of the subject imports would have a significant negative impact on the domestic industry and would likely cause the domestic industry to lose market share. In addition, the price and volume declines would likely have a significant adverse

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[125] CR at V-10, PR at V-6. In the original investigation, Japanese bids were lower than U.S. bids in seven of the 13 reported bid comparisons and the importer offering Japanese product won all but two of the competing bids. In the remaining six instances, the bids by importers of Japanese product were higher than U.S. bids, and the U.S. firms won all six of these bids. CR at V-10, n.7, PR at V-6, n.7.

[126] Original Determination, USITC Pub. 2972 at 24.

impact on the production, shipments, sales, and revenue levels of the domestic industry. These reductions would have a direct adverse impact on the industry's profitability.[127]

In the second review, the Commission stated that the limited evidence in the expedited review was insufficient for it to make a finding on whether the domestic industry was vulnerable. It did, however, find that if the order were revoked, the significant likely volume of low-priced subject clad steel plate, when combined with the likely adverse price effects of those imports, would likely have a significant adverse impact on the production, shipments, sales, and revenue levels of the domestic industry. These reductions would likely have a direct adverse impact on the industry's profitability and employment levels, as well as its ability to raise capital and make and maintain necessary capital investments. The Commission concluded that if the order were revoked, subject imports would be likely to have a significant adverse impact on the domestic industry within a reasonably foreseeable time.[128]

In the third review, the Commission noted that the indicators of the domestic industry's performance were mixed.[129] Specifically, the Commission observed that the industry was profitable, its operating income declined substantially, its operating income margin fell, capital expenditures decreased, and research and development expenses increased over the period of review. In addition, the domestic industry's market share was high throughout the period of review, and employment indicators fluctuated. In light of the foregoing, the Commission declined to find that the domestic industry was vulnerable to injury if the order was revoked. However, it concluded that based on the likely significant increase in subject import volume and the likely adverse price effects, the domestic industry would need to respond to subject imports by either foregoing sales and ceding market share, or by cutting and/or restraining prices. The resulting loss of production and/or revenues would likely cause further deterioration in the financial performance of the domestic industry with demand not likely to increase in the reasonably foreseeable future. In addition, the Commission found that deterioration in financial performance would result in likely losses of employment and declining investment. The Commission also considered the role of other factors so as not to attribute likely injury from those factors to the subject imports. The Commission indicated that nonsubject imports had a very small portion of the market, and no other causes were alleged or apparent from the record.[130]

2. Current Review

The condition of the domestic industry, which was greatly reduced in size due the suspension of clad steel plate production by both ArcelorMittal and Regal Technology,[131] generally declined over the period of review. Although the domestic industry's capacity was

[127] First Review Determination, USITC Pub. 3459 at 12-13.
[128] Second Review Determination, USITC Pub. 3907 at 13.
[129] Third Review Determination, USITC Pub. 4370 at 22.
[130] Third Review Determination, USITC Pub. 4370 at 22.
[131] CR at I-28, PR at I-19.

stable from 2015 to 2017, it was lower in interim 2018 as *** suspended its clad steel plate operations.[132] The domestic industry's production and capacity utilization steadily declined over the period of review.[133] The domestic industry's U.S. shipments and market share declined throughout the period of review.[134]

The domestic industry's employment indicators, including the number of production and related workers ("PRWs"), hours worked, and wages paid, also declined from 2015 to 2017, but were slightly higher in interim 2018 than in interim 2017.[135] Worker productivity declined throughout the period of review, but hourly wages increased from 2015 to 2017.[136]

The domestic industry's net sales declined throughout the period of review.[137] The industry's operating and net income as well as gross profits irregularly declined over the period

[132] CR/PR at Table III-2. The domestic industry's capacity was stable at *** short tons from 2015 to 2017; it was *** short tons in interim 2017 and *** short tons in interim 2018. *Id.*

[133] CR/PR at Table III-2. The domestic industry's total production decreased each year, from *** short tons in 2015 to *** short tons in 2016 and *** short tons in 2017, a decrease of *** percent; it was *** short tons in interim 2017 and *** short tons in interim 2018. Capacity utilization also decreased each year, from *** percent in 2015 to *** in 2016 and *** percent in 2017, a decrease of *** percentage points; it was *** percent in interim 2017 and *** percent in interim 2018. *Id.* *** U.S. producers held *** clad steel plate in inventory at the end of 2015, while *** inventories of clad steel plate in 2016 or 2017. CR/PR at Table III-7.

[134] CR/PR at Table III-3. The domestic industry's U.S. shipments declined from *** short tons in 2015 to *** short tons in 2016 and *** short tons in 2017; its U.S. shipments were *** short tons in interim 2017 and *** short tons in interim 2018. *Id*. The domestic industry's market share was *** percent in 2015, *** percent in 2016, and *** in 2017. CR/PR at Table I-8. Its market share was lower in interim 2018, at *** percent, than in interim 2017, at *** percent. *Id.*

[135] CR/PR at Table III-9. PRWs were *** in 2015, *** in 2016, *** in 2017, *** in interim 2017, and *** in interim 2018. Total hours worked were *** hours in 2015, *** hours in 2016, *** hours in 2017, *** hours in interim 2017, and *** hours in interim 2018. Total wages paid were $*** in 2015, $*** in 2016, $*** in 2017, $*** in interim 2017, and $*** in interim 2018. *Id.*

[136] CR/PR at Table III-9. Worker productivity was *** short tons per 1,000 hours in 2015, *** short tons per 1,000 hours in 2016, and *** short tons per 1,000 hours in 2017; it was *** short tons per 1,000 hours in interim 2017 and *** short tons per 1,000 hours in interim 2018. Hourly wages were $*** in 2015, $*** in 2016, $*** in 2017, $*** in interim 2017 and $*** in interim 2018. *Id.*

[137] CR/PR at Table III-10. The domestic industry's total net sales were $*** in 2015, $*** in 2016, and $*** in 2017; they were $*** in interim 2017 and $*** in interim 2018. *Id.*

of review, and were lower in interim 2018 than in interim 2017.[138] Capital expenditures and research and development expenses increased over the period.[139]

In light of the foregoing, we conclude that the domestic industry is currently vulnerable to injury by likely increased subject imports. The industry's production, capacity utilization, market share, shipments, net sales, operating income margin, net income, PRWs, total hours worked, worker productivity, and wages paid all decreased during the period of review. Although the industry was profitable, it experienced a decline in net sales and operating income over the period of review. The deteriorating demand conditions during the current review period are not likely to improve significantly in the reasonably foreseeable future. These conditions have left the domestic industry particularly susceptible to injury from reduced sales or lower prices as a result of renewed competition with low-priced subject imports.

As explained above, we have found that revocation of the order would likely result in a significant increase in the volume of low-priced subject imports that would likely have adverse price effects on the domestic industry. The likely significant volume of the subject imports would likely have an adverse impact on the production, shipments, sales, market share, and revenues of the domestic industry. These reductions would likely have a direct adverse impact on the industry's profitability and employment, as well as its ability to raise capital and make and maintain necessary capital investments. We therefore conclude that subject imports from Japan would likely have a significant impact on the domestic industry upon revocation of the order within a reasonably foreseeable time.

We have also considered the role of nonsubject imports in the U.S. market. There is no indication on this record that the presence of nonsubject imports would prevent subject imports from Japan from significantly increasing their presence in the U.S. market in the event of revocation of the order, given the export orientation of the subject industry and the relative attractiveness of the U.S. market. Given the fact that the domestic industry still has a much higher market share than nonsubject imports, and the substitutability between the subject imports and the domestic like product, the likely increase in subject imports upon revocation would likely take significant market share from the domestic industry, or otherwise cause significant adverse price effects, despite the presence of nonsubject imports in the U.S. market. Moreover, any competition for sales between low-priced subject clad steel plate and nonsubject clad steel plate would likely affect market prices negatively to the detriment of the

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[138] CR/PR at Table III-10. The domestic industry's operating income was $*** in 2015, $*** in 2016, and $*** in 2017; it was $*** in interim 2017 and $*** in interim 2018. The operating income margin was *** percent in 2015, *** percent in 2016, and *** percent in 2017; it was *** percent in interim 2017 and *** percent in interim 2018. The domestic industry's net income was $*** in 2015, $*** in 2016, and $*** in 2017; it was $*** in interim 2017 and $*** in interim 2018. The net income margin was *** percent in 2015, *** percent in 2016, and *** percent in 2017; it was *** percent in interim 2017 and *** percent in interim 2018. The domestic industry's gross profits were $*** in 2015, $*** in 2016, and $*** in 2017; they were $*** in interim 2017 and $*** in interim 2018. *Id.*

[139] CR/PR at Table III-14. Capital expenditures were $*** in 2015, $*** in 2016, and $*** in 2017; they were $*** in interim 2017 and $*** in interim 2018. Research and development expenses were $*** in 2015, $*** in 2016, and $*** in 2017; they were $*** in interim 2017 and $*** in interim 2018. *Id.*

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

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

IV. Conclusion

For the foregoing reasons, we determine that revocation of the antidumping duty order on clad steel plate from Japan would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

PART I: INTRODUCTION

BACKGROUND

On January 2, 2018, the U.S. International Trade Commission ("Commission" or "USITC") gave notice, pursuant to section 751(c) of the Tariff Act of 1930, as amended ("the Act"),[1] that it had instituted a review to determine whether revocation of the antidumping duty order on clad steel plate from Japan would likely lead to the continuation or recurrence of material injury to a domestic industry.[2] [3] On April 9, 2018, the Commission determined that it would conduct a full review pursuant to section 751(c)(5) of the Act.[4] The following tabulation presents information relating to the background and schedule of this proceeding:[5]

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

[2] *Clad Steel Plate From Japan; Institution of a Five-Year Review,* 83 FR 148*,* January 2, 2018. All interested parties were requested to respond to this notice by submitting the information requested by the Commission.

[3] In accordance with section 751(c) of the Act, the U.S. Department of Commerce ("Commerce") published a notice of initiation of five-year reviews of the subject antidumping and countervailing duty orders concurrently with the Commission's notice of institution. *Initiation of Five-Year (Sunset) Reviews,* 83 FR 148, January 2, 2018*.*

[4] *Clad Steel Plate from Japan; Notice of Commission Determination to Conduct a Full Five-Year Review,* 83 FR 17446, April 19, 2018*.* The Commission concluded that conducting a full review was warranted in light of changes in conditions of competition that have occurred in the U.S. market, such as the imposition of Section 232 tariffs that cover clad steel plate from Japan.

[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. Information regarding the Commission's proposed hearing is contained in Appendix B.

Effective date	Action
February 11, 2013	Commerce's antidumping duty order on clad steel plate from Japan (78 FR 9676)
January 2, 2018	Commerce's initiation of five-year reviews (83 FR 100)
January 2, 2018	Commission's institution of five-year reviews (83 FR 148)
April 9, 2018	Commission's determinations to conduct full five-year reviews (83 FR 17446; April 19, 2018)
May 11, 2018	Commerce's final results of the expedited fourth sunset review of the antidumping duty order (83 FR 22008)
July 17, 2018	Commission's scheduling of the reviews (83 FR 33250)
October 18, 2018	Commission's hearing, subsequently cancelled[6]
November 16, 2018	Commission's vote
December 6, 2018	Commission's determination and views

ORIGINAL INVESTIGATION

The original investigation resulted from a petition filed by Lukens Steel Company, Coatesville, Pennsylvania, on September 29, 1995, alleging that an industry in the United States is materially injured and threatened with material injury by reason of less-than-fair-value ("LTFV") imports of clad steel plate from Japan. Following notification of a final determination by Commerce that imports of steel clad plate from Japan were being sold at LTFV, the Commission determined on June 25, 1996 that a domestic industry was materially injured by reason of LTFV imports of clad steel plate from Japan.[7] Commerce issued the antidumping duty order on clad steel plate from Japan on July 2, 1996.[8]

SUBSEQUENT FIVE-YEAR REVIEWS

In October 2001, the Commission completed its first expedited five-year review of the subject order and determined that revocation of the antidumping duty order on clad steel plate from Japan would be likely to lead to the continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[9] Following affirmative determinations in the first five-year review by Commerce and the Commission,[10] Commerce

[6] *Clad Steel Plate From Japan; Cancellation of Hearing for Full Five-Year Review*, 83 FR 53295, October 22, 2018

[7] *Clad Steel Plate from Japan*, *Inv. No. 731-TA-739 (Final)*, USITC Publication 2972 (June 1996).

[8] *Notice of Antidumping Order: Clad Steel Plate from Japan*, 61 FR 34421, July 2, 1996.

[9] *Clad Steel Plate From Japan*, *Inv. No. 731-TA-739 (Review)*, USITC Publication 3459 (October 2001).

[10] *Clad Steel Plate from Japan*, 66 FR 55697, November 2, 2001; *Final Results of Expedited Sunset Review: Clad Steel Plate from Japan*, 66 FR 51007, October 5, 2001.

issued a continuation of the antidumping order on imports of clad steel plate from Japan, effective November 16, 2001.[11]

In March 2007, the Commission completed its second expedited five-year review of the subject order and determined that revocation of the antidumping duty order on clad steel plate from Japan would be likely to lead to the continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[12] Following affirmative determinations in the second five-year review by Commerce and the Commission,[13] Commerce issued a continuation of the antidumping order on imports of clad steel plate from Japan, effective March 22, 2007.[14]

In January 2013, the Commission completed a full five-year review of the subject order and determined that revocation of the antidumping duty order on clad steel plate from Japan would be likely to lead to the continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[15] Following affirmative determinations in the third five-year review by Commerce and the Commission,[16] Commerce issued a continuation of the antidumping order on imports of clad steel plate from Japan, effective February 11, 2013.[17]

PREVIOUS AND RELATED INVESTIGATIONS

Related investigations

Following a petition filed on October 6, 1981, by Lukens Steels Co., the Commission conducted an antidumping duty investigation on imports of stainless steel clad plate from Japan. Following a determination of sales at LTFV by Commerce, the Commission determined on July 20, 1982 that an industry in the United States was materially injured by reason of

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[11] *Continuation of Countervailing and Antidumping Duty Orders: Pasta from Italy and Turkey, and Clad Steel Plate From Japan, 66 FR 57703*, November 16, 2001.

[12] *Clad Steel Plate From Japan*, *Inv. No. 731-TA-739 (Second Review)*, USITC Publication 3907 (March 2007).

[13] *Clad Steel Plate From Japan; Determination,* 72 FR 10556, March 8, 2007; Clad Steel Plate from Japan; Final Results of the Expedited Sunset Review (Second Review) of the Antidumping Duty Order, 72 FR 4482, January 31, 2007.

[14] *Clad Steel Plate From Japan: Continuation of Antidumping Duty Order,* 72 FR 13478, March 22, 2007.

[15] *Clad Steel Plate From Japan*, *Inv. No. 731-TA-739 (Third Review)*, USITC Publication 3907 (March 2007). Commissioners Pearson and Broadbent determined that revocation of the order would not be likely to lead to continuation or recurrence of material injury to the domestic clad steel plate industry within a reasonably foreseeable time.

[16] *Clad Steel Plate From Japan; Determination,* 78 FR 7451, February 1, 2013; *Clad Steel Plate From Japan: Final Results of the Expedited Third Sunset Review of the Antidumping Duty Order*, 77 FR 31834, May 30, 2012.

[17] *Clad Steel Plate From Japan: Continuation of Antidumping Duty Order,* 78 FR 9676, February 11, 2013.

imports of stainless steel clad plate from Japan.[18] Commerce issued an antidumping duty order on imports of stainless steel clad plate from Japan on August 6, 1982, which it subsequently revoked on September 20, 1985.[19]

On June 30, 1992, petitions were filed with Commerce and the Commission alleging that an industry in the United States was materially injured or threatened with material injury by reason of subsidized imports of cut-to-length ("CTL") plate from 10 countries; hot-rolled products from 7 countries; cold-rolled products from 11 countries; and corrosion-resistant products (including clad steel plate) from 8 countries.[20] The petitions further alleged that an industry in the United States was materially injured or threatened with material injury by reason of dumped imports of CTL plate from 15 countries; hot-rolled products from 9 countries; cold-rolled products from 15 countries; and corrosion-resistant products (including clad steel plate) from 9 countries.[21] Following affirmative final determinations of subsidization and sales at LTFV by Commerce, the Commission found clad steel plate to be a separate domestic like product produced by a separate domestic industry. The Commission reached negative determinations with respect to subject imports of clad steel plate from France and Japan, and noted that to the extent that any such determination was deemed necessary, it would have reached negative determinations with respect to other subject countries because there were no imports of clad steel plate from those countries during the period examined.[22]

Section 201 investigations

In July 1984, the Commission determined that carbon and alloy steel plates were being imported into the United States in such increased quantities as to be a substantial cause of serious injury to the domestic industry producing such articles, and recommended quantitative restrictions of imports for a period of five years.[23] In September 1984, the President

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[18] *Stainless Steel Clad Plate from Japan*, *Inv. No. 731-TA-50 (Final)*, USITC publication 1270, July 1982, p. 1.

[19] *Stainless Steel Clad Plate from Japan; Antidumping Duty Order*, 47 FR 34178, August 6, 1982; *Stainless Steel Clad Plate from Japan; Final Results of Changed Circumstances and Revocation of Antidumping Duty Order*, 50 FR 38151, September 20, 1985.

[20] The petitions were filed by Armco, Bethlehem, Geneva, Gulf States, Ispat/Inland, Laclede Steel, LTV, Likens, National, Sharon, USX, and WCI.

[21] *Certain Flat-Rolled Carbon Steel Products from Argentina, Australia, Austria, Belgium, Brazil, Canada, Finland, France, Germany, Italy, Japan, Korea, Mexico, the Netherlands, New Zealand, Poland, Romania, Spain, Sweden, Taiwan, and the United Kingdom, Inv. Nos. 701-TA-319-354 and 731-TA-573-620 (Preliminary)*, USITC Publication 2549, August 1992.

[22] *Certain Flat-Rolled Carbon Steel Products from Australia, Austria, Belgium, Brazil, Canada, Finland, France, Germany, Italy, Japan, Korea, Mexico, the Netherlands, New Zealand, Poland, Romania, Spain, Sweden, and the United Kingdom, Inv. Nos. 701-TA-319-322, 334, 336-342, 344, and 347-353 and 731-TA-573-579, 581-592, 594-597, 599-609, and 612-619 (Final)*, USITC Publication 2664, August 1993, pp. 1-5.

[23] *Carbon and Alloy Steel Products, Inv. No. TA-201-51*, USITC Publication 1553, July 1984, p. 2.

determined that import relief under section 201 of the Trade Act of 1974 was not in the national interest.[24] At the President's direction, quantitative limitations under voluntary restraint agreements ("VRAs") were negotiated for a five-year period ending September 30, 1989. In July 1989, the VRAs were extended for two-and-a-half years until March 31, 1992.

In 2001, the Commission conducted a safeguard investigation under section 201 of the Trade Act of 1974 concerning certain steel products, which included clad steel plate.[25] The Commission instituted that investigation following receipt of a request from the Office of the United States Trade Representative ("USTR") on June 22, 2001.[26] On July 26, 2001, the Commission received a resolution adopted by the Committee on Finance of the United States Senate requesting that the Commission investigate certain steel imports under section 201 of the Trade Act of 1974. Consistent with the Senate Finance Committee's resolution, the Commission consolidated the investigation with the Commission's previously instituted Investigation No. TA-201-73.[27] On December 20, 2001, the Commission issued its determinations and remedy recommendations. It reached an affirmative determination with respect to certain steel products, including clad steel plate. It recommended an additional 20 percent ad valorem duty on clad steel plate in the first year of relief, to be reduced to a 17 percent duty in the second year of relief, 14 percent duty in the third year of relief, and 11 percent duty in the fourth year of relief.[28] On March 5, 2002, the President announced the implementation of steel safeguard measures. Import relief relating to clad steel plate consisted of an additional tariff for a period of three years and one day, with a 30 percent ad valorem on imports in the first year, to be reduced to 24 percent in the second year and 18 percent in the third year.[29] Following receipt of the Commission's mid-term monitoring report in September 2003, and after seeking information from the U.S. Secretary of Commerce and U.S. Secretary of Labor, the President determined that the effectiveness of the action taken had been impaired by changed circumstances. Therefore, he terminated the U.S. measure with respect to increased tariffs on December 4, 2003.[30]

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[24] *Steel Import Relief Determination*, 49 FR 36813, September 20, 1984.

[25] *Steel, Investigation No. TA-201-73, Volume 1*, USITC Publication 3479, December 2001.

[26] *Steel,* 66 FR 35267, July 3, 2001.

[27] *Steel,* 66 FR 44158, August 22, 2001, and *Steel; Correction,* 66 FR 45324, August 28, 2001.

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

[29] *Presidential Proclamation 7529 of March 5, 2002, To Facilitate Positive Adjustment to Competition from Imports of Certain Steel Products*, 67 FR 10553, March 7, 2002. The President also instructed the Secretaries of Commerce and the Treasury to establish a system of import licensing to facilitate steel import monitoring.

[30] *Presidential Proclamation 7741 of December 4, 2003, To Provide for the Termination of Action Taken With Regard to Imports of Certain Steel Products*, 68 FR 68483, December 8, 2003. Import licensing, however, remains in place.

Section 232 investigations

On April 19, 2017, Commerce initiated an investigation under section 232 of the Trade Expansion Act of 1962 as amended (19 U.S.C. 1862), [31] to assess the impact of steel imports on the national security of the United States.[32] Commerce submitted the results of the investigations to the President on January 11, 2018.[33] Commerce recommended the following:

- A global tariff of at least 24 percent on all steel imports from all countries, or
- A tariff of at least 53 percent on all steel imports from 12 countries (Brazil, China, Costa Rica, Egypt, India, Malaysia, Republic of Korea, Russia, South Africa, Thailand, Turkey, and Vietnam) with a quota by product on steel imports from all other countries equal to 100 percent of their 2017 exports to the United States, or
- A quota on all steel products from all countries equal to 63 percent of each country's 2017 exports to the United States.[34]

On March 8, 2018, the President announced his decision to impose 25 percent ad valorem duties on all steel mill products (including clad steel plate) from all U.S. trading partners except Canada and Mexico.[35] [36] On March 22, 2018, the President authorized the suspension of tariffs on steel and aluminum imports from the following countries: Argentina, Australia, Brazil, Canada, Mexico, member countries of the European Union, and South Korea.[37] On April 30, 2018, the President announced the expiration of exemptions on tariffs on steel and

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[31] Section 232 of the Trade Expansion Act of 1962 (19 U.S.C. §1862) authorizes the Secretary of Commerce to conduct these investigations.

[32] U.S. Department of Commerce website: https://www.commerce.gov/news/press-releases/2018/01/statement-department-commerce-submission-steel-section-232-report, retrieved March 26, 2018.

[33] U.S. Department of Commerce website: https://www.commerce.gov/news/pressreleases/2018/01/statement-department-commerce-submission-steel-section-232-report, retrieved March 26, 2018.

[34] U.S. Department of Commerce website: https://www.commerce.gov/news/press-releases/2018/02/secretary-ross-releases-steel-and-aluminum-232-reports-coordination, retrieved March 26, 2018.

[35] *Presidential Proclamation 9705 of March 8, 2018, Adjusting Imports of Steel Into the United States*, 81 FR 11625, March 15, 2018.

[36] For the purposes of this proclamation, "steel articles" are defined at the Harmonized Tariff Schedule (HTS) six-digit level as: 7206.10 through 7216.50, 7216.99 through 7301.10, 7302.10, 7302.40 (continued from footnote 35) through 7302.90, and 7304.10 through 7306.90, including any subsequent revisions to these HTS classifications. Clad steel plate is imported under statistical reporting number 7210.90.1000, and is subject to this proclamation.

[37] *Presidential Proclamation 9711 of March 22, 2018*, *Adjusting Imports of Steel Into the United States*, 83 FR 13361, March 28, 2018.

aluminum imports from Canada, the European Union member states, and Mexico would occur on May 31, 2018.[38] The President also announced the exemptions were extended permanently for South Korea in return for agreeing to product-specific quotas beginning on January 1, 2019.[39] Exemptions for Argentina, Australia, and Brazil were also extended until alternative means could be finalized.[40]

On May 31, 2018, under a Presidential Proclamation issued under Section 232 of the Trade Expansion Act of 1962, the President announced tariffs will no longer be suspended for steel and aluminum imports from Mexico, Canada, and the European Union, effective July 1, 2018. Steel products from these countries, including clad steel plate, would be subject to a 25 percent ad valorem duty.[41]

A subsequent Presidential proclamation established absolute quotas for steel mill articles from Argentina, Brazil, and Korea as an alternate to the 25 percent ad valorem duty, effective June 1, 2018, (leaving Australia as the only country exempt from both the tariff and quota).[42] [43] On August 10, 2018, the President authorized adjusting the ad valorem tariff on steel imports from Turkey from 25 percent to 50 percent.[44]

In the President's proclamation establishing the tariff under Section 232, the Secretary of Commerce was authorized to provide relief from the 25 percent ad valorem duties for any steel articles determined "not to be produced in the United States in a sufficient and reasonably available amount or of a satisfactory quality" and is also authorized to provide such relief based upon specific national security considerations. Such relief shall be provided for any article only after a request for exclusion is made by a directly affected party located in the United States. [45] Approved exclusions are made on a product basis and are limited to the individual or organization that submitted the specific exclusion request, unless Commerce approves a

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[38] *Presidential Proclamation 9740 of April 30, 2018, Adjusting Imports of Steel Into the United States*, 83 FR 20683, May 7, 2018.

[39] *Presidential Proclamation 9740 of April 30, 2018, Adjusting Imports of Steel Into the United States*, 83 FR 20683, May 7, 2018.

[40] *Presidential Proclamation 9740 of April 30, 2018, Adjusting Imports of Steel Into the United States*, 83 FR 20683, May 7, 2018.

[41] *Presidential Proclamation 9759 of May 31, 2018, Adjusting Imports of Steel into the United States*, 83 FR 25857, June 5, 2018.

[42] U.S. Customs and Border Protection, "QB 18-126 Absolute Quotas for Steel Mill Articles: Argentina, Brazil and South Korea," https://www.cbp.gov/trade/quota/bulletins/qb-18-126-absolute-quota-aluminum-products-argentina-brazil-south-korea, retrieved September 20, 2018.

[43] U.S. Customs and Border Protection, "Section 232 Tariffs on Aluminum and Steel," https://www.cbp.gov/trade/programs-administration/entry-summary/232-tariffs-aluminum-and-steel, retrieved September 20, 2018.

[44] Presidential Proclamation 9772 of August 10, 2018, Adjusting Imports of Steel Into the United States, 83 FR 40429, August 15, 2018.

[45] *U.S. Department of Commerce, Bureau of Industry and Security, "Section 232 National Security Investigation of Steel Imports Information on the Exclusion and Objection Process,"* https://www.bis.doc.gov/index.php/232-steel, retrieved September 27, 2018.

broader application of the product-based exclusion request to apply to additional importers.[46] The product exclusion process does not apply to imports from countries that have a quota rather than the tariff.[47] On June 20, 2018, Commerce announced its first set of product exclusions granted from Section 232 tariffs on steel imports. Forty-two exclusion requests were granted, covering seven companies importing steel products from Belgium, China, Germany, Japan, and Sweden.

Table I-1
Clad steel plate: Section 232 global steel tariffs summary

Country	Effective date	Ad valorem duty rate	Absolute quotas
Argentina	June 1, 2018	Exempt	0.17 million metric tons
Australia	June 1, 2018	Exempt	Exempt
Brazil	June 1, 2018	Exempt	4.1 million metric tons
Canada	June 1, 2018	25%	N/A
European Union	June 1, 2018	25%	N/A
Mexico	June 1, 2018	25%	N/A
South Korea	May 1, 2018	Exempt	2.6 million metric tons
Turkey	August 13, 2018	50%	N/A
All other countries	March 23, 2018	25%	N/A

Source: U.S. Customs and Border Patrol website: https://www.cbp.gov/trade/programs-administration/entry-summary/232-tariffs-aluminum-and-steel, retrieved on September 20, 2018.

SUMMARY DATA

Table I-2 presents a summary of data from the original investigation and subsequent five-year reviews.

Table I-2
Clad steel plate: Comparative data from the original investigation and subsequent reviews, 1995, 2000, 2005, 2011, and 2017

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[46] *Requirements for Submissions Requesting Exclusions from the Remedies Instituted in Presidential Proclamations Adjusting Imports of Steel into the United States and Adjusting Imports of Aluminum into the United States; and the Filing Objections to Submitted Exclusion request for Steel and Aluminum,* 83 FR 12106, March 19, 2018.

[47] *Requirements for Submissions Requesting Exclusions from the Remedies Instituted in Presidential Proclamations Adjusting Imports of Steel into the United States and Adjusting Imports of Aluminum into the United States; and the Filing Objections to Submitted Exclusion request for Steel and Aluminum,* 83 FR 12106, March 19, 2018.

STATUTORY CRITERIA AND ORGANIZATION OF THE REPORT

Statutory criteria

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

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

> *(1) IN GENERAL.-- . . . the Commission shall determine whether revocation of an order, or termination of a suspended investigation, would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time. The Commission shall consider the likely volume, price effect, and impact of imports of the subject merchandise on the industry if the order is revoked or the suspended investigation is terminated. The Commission shall take into account--*
>
> *(A) its prior injury determinations, including the volume, price effect, and impact of imports of the subject merchandise on the industry before the order was issued or the suspension agreement was accepted,*
>
> *(B) whether any improvement in the state of the industry is related to the order or the suspension agreement,*
>
> *(C) whether the industry is vulnerable to material injury if the order is revoked or the suspension agreement is terminated, and*
>
> *(D) in an antidumping proceeding . . ., (Commerce's findings) regarding duty absorption . . ..*
>
> *(2) VOLUME.--In evaluating the likely volume of imports of the subject merchandise if the order is revoked or the suspended investigation is terminated, the Commission shall consider whether the likely volume of imports of the subject merchandise would be significant if the order is revoked or the suspended investigation is terminated, either in absolute terms or relative to production or consumption in the United States. In so doing, the Commission shall consider all relevant economic factors, including--*
>
> *(A) any likely increase in production capacity or existing unused production capacity in the exporting country,*
>
> *(B) existing inventories of the subject merchandise, or likely increases in inventories,*
>
> *(C) the existence of barriers to the importation of such merchandise into countries other than the United States, and*
>
> *(D) the potential for product-shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products.*

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

> *(A) there is likely to be significant price underselling by imports of the subject merchandise as compared to domestic like products, and*
> *(B) imports of the subject merchandise are likely to enter the United States at prices that otherwise would have a significant depressing or suppressing effect on the price of domestic like products.*

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

> *(A) likely declines in output, sales, market share, profits, productivity, return on investments, and utilization of capacity,*
> *(B) likely negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment, and*
> *(C) likely negative effects on the existing development and production efforts of the industry, including efforts to develop a derivative or more advanced version of the domestic like product.*

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

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

Organization of report

Information obtained during the course of this review that relates to the statutory criteria is presented throughout this report. A summary of trade and financial data for clad steel plate as collected in this review is presented in appendix C. U.S. industry data are based on the questionnaire responses of four U.S. producers of clad steel plate that are believed to have accounted for the vast majority of domestic production of clad steel plate in 2017. U.S. import data and related information are based on public and proprietary Customs data as well as the questionnaire responses of three U.S. importers of clad steel plate that are believed to have accounted for *** percent of the total U.S. imports during 2012-17. Foreign industry data and related information are based on the questionnaire responses of two producers of clad steel plate in Japan that are believed to have accounted for *** percent of total Japanese production

in 2017.[48] Responses by U.S. producers, importers, purchasers, and foreign producers of clad steel plate to a series of questions concerning the significance of the existing antidumping duty order and the likely effects of revocation of such order are presented in appendix D. Official import statistics for HTS statistical reporting number 7210.90.0000 are presented in appendix E.

COMMERCE'S REVIEWS

Administrative reviews[49]

Commerce has initiated only one administrative review for firms covered by the antidumping duty order on clad steel plate from Japan. In 2000, Commerce initiated, and subsequently rescinded, a review for the period January 4, 1999 through July 30, 2000.[50]

Five-year review

On May 11, 2018, Commerce issued the final results of its expedited review with respect to clad steel plate from Japan. In its final results, Commerce found that revocation of the antidumping duty order on clad steel plate from Japan would likely lead to continuation or recurrence of dumping at margins determined in its original final determination.[51] Table I-3 presents the dumping margins calculated by Commerce in its original investigation and subsequent reviews.

Table I-3
Clad steel plate: Commerce's original and first five-year dumping margins for producers/exporters in Japan

Producer/exporter	Original margin (percent)	First five-year review margin (percent)	Second five-year review margin (percent)	Third five-year review margin (percent)	Fourth five-year review margin (percent)
Firm	118.53	118.53	118.53	118.53	118.53
All others	118.53	118.53	118.53	118.53	118.53

Source: *Notice of Antidumping Duty Order: Clad Steel Plate from Japan*, 61 FR 34421, July 2, 1996; *Final Results of Expedited Sunset Review: Clad Steel Plate from Japan*, 66 FR 51007, October 5, 2001; *Clad Steel Plate from Japan; Final Results of the Expedited Sunset Review (Second Review) of the Antidumping Duty Order*, 72 FR 4482, January 31, 2007; *Clad Steel Plate from Japan: Final Results of the Expedited Third Sunset Review of the Antidumping Duty Order*, 77 FR 31834, May 30, 2012. *Clad Steel Plate from Japan: Final Results of the Expedited Fourth Sunset Review of the Antidumping Duty Order,* 83 FR 22008, May 11, 2018.

[48] *** and *** foreign producer questionnaire response, section II-5.

[49] Commerce has not issued any duty absorption findings with respect to clad steel plate from Japan.

[50] *Clad Steel Plate from Japan: Rescission of Antidumping Duty Administrative Order*, 65 FR 60615, October 12, 2000.

[51] *Clad Steel Plate from Japan: Final Results of the Expedited Fourth Sunset Review of the Antidumping Duty Order*, 83 FR 22008, May 11, 2018.

THE SUBJECT MERCHANDISE

Commerce's scope

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

> *{A}ll clad[52] steel plate of a width of 600 millimeters ("mm") or more and a composite thickness of 4.5mm or more. Clad steel plate is a rectangular finished steel mill product consisting of a layer of cladding material (usually stainless steel or nickel) which is metallurgically bonded to a base or backing of ferrous metal (usually carbon or low alloy steel) where the latter predominates by weight .*
>
> *Stainless clad steel plate is manufactured to American Society for Testing and Materials ("ASTM") specifications A263 (400 series stainless types) and A264 (300 series stainless types). Nickel and nickel-base alloy clad steel plate is manufactured to ASTM specification A265. These specifications are illustrative but not necessarily all-inclusive.*
>
> *Clad steel plate within the scope of the order is classifiable under the Harmonized Tariff Schedule of the United States (HTSUS) subheading 7210.90.1000. Although the HTSUS subheading is provided for convenience and customs purposes, our written description of the scope of the order is dispositive.*[53]

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[52] Cladding is the association of layers of metals of different colors or natures by molecular interpenetration of the surfaces in contact. This limited diffusion is characteristic of clad products and differentiates them from products metalized in other manners (e.g., by normal electroplating). The various cladding processes include pouring molten cladding metal onto the basic metal followed by rolling; simple hot-rolling of the cladding metal to ensure efficient welding to the basic metal; and any other method of deposition of superimposing of the cladding metal followed by any mechanical or thermal process to ensure welding (e.g., electrocladding), in which the cladding metal (nickel, chromium, etc.) is applied to the basic metal by electroplating, molecular interpenetration of the surfaces in contact then being obtained by heat treatment at the appropriate temperature with subsequent cold rolling. See Harmonized Commodity Description and Coding System Explanatory Notes, Chapter 72, General Note (IV)(C)(2) (e).

[53] *Clad Steel Plate from Japan: Final Results of the Expedited Fourth Sunset Review of the Antidumping Duty Order*, 83 FR 22008, May 11, 2018.

Tariff treatment

The subject clad steel plate is currently provided for in the Harmonized Tariff Schedule of the United States ("HTS") subheading 7210.90.10, covering clad flat-rolled products of iron or nonalloy steel of a width of 600 mm or more. The column 1-general rate of duty for HTS subheading 7210.90.10 is "free." Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

At the time of the original investigation (1996), the normal trade relations tariff rate was 5.2 percent ad valorem. However, this subheading was accorded staged reductions starting in 1995 as part of the U.S. commitments under the Uruguay Round, such that the normal trade relations tariff rate was reduced to 2.0 percent ad valorem at the time the first review was instituted in 2001. Starting in 2004, clad steel plate that entered under this subheading has had a general duty rate of free.[54]

As noted earlier, on March 8, 2018, the President announced the implementation of adjustment measures against imports of steel that threatened to impair the national security of the United States. These rates, relevant countries, and exclusions have been partially adjusted since that time.

THE PRODUCT

Description and applications

The imported product subject to this review is clad steel plate, of a width of 600 mm (approximately 24 inches) or more and a thickness of 4.5 mm (approximately 3/16 inch) or more.[55] The product is a flat-rolled, corrosion-resistant, steel plate product composed of a thinner cladding plate bonded to a thicker steel backing plate. The cladding plate is of a corrosion-resistant metal such as stainless steel, a nickel-based alloy, copper, or titanium, and is generally 10 to 20 percent of the total thickness of the composite. The backing plate, which is the remainder of the composite, usually consists of carbon steel and provides the required physical strength of the clad composite.

Clad steel plate is used to manufacture vessels or structures for heavy-industry projects where corrosion-resistance qualities are essential. End users of clad steel plate include chemical and petrochemical companies, the shipbuilding industry, electric utilities, and other producers of industrial and defense equipment.[56] The petrochemical industry, specifically the hydrocarbon processing industry, which includes petroleum refining and petrochemical and chemical processing, consumed as much as *** percent of clad products used in the United States in the mid-1990s according to estimates made by Lukens during the original

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[54] *Harmonized Tariff Schedule of the United States,* 1996-2017.

[55] Clad steel flat-rolled products of a thickness of less than 4.5 mm would generally be considered sheet, rather than plate.

[56] DMC Global Incorporated, "Industrial & Infrastructure", http://www.dmcglobal.com/our-markets#industrial-infrastructure, retrieved February 20, 2018.

investigation.[57] Processing vessels for the chemical and petroleum refining industries continue to be a major end-use market for clad steel plate. Clad steel plate also is used in flue-gas desulfurization systems that remove sulfur from exhaust gas in coal-fired power plants. The manufacture of clad steel pipe for sour-drilling applications and ocean development of natural-gas deposits is another important application for clad steel plate.

Manufacturing processes

Clad steel plate is produced by either roll bonding or explosion bonding. Roll bonding is accomplished by heating and rolling, on a conventional steel plate mill, a pack comprising plates of cladding alloy and steel backing that are welded together around the edges. For most roll-bonded clad steel plate, each pack is comprised of two backing-steel plates and two cladding inserts that are stacked upon each other and that yield two finished clad steel plates.[58] The flow chart for the manufacture of roll-bonded clad steel plate at ArcelorMittalUSA ("AMUSA") Coatesville is shown in figure I-1.[59] The process is illustrated schematically in figure I-2. The thickness and surface dimensions of both the cladding plate and the backing plate are chosen to produce the required finished dimensions after rolling. As illustrated in figure I-2, the backing plates are on the top and bottom of each pack, and the cladding plates are in between. A parting compound is spread on the surfaces between the two cladding plates so that they do not bond to each other during processing. The packs are welded around the outside to hold them together during rolling. Heating and rolling reduces the thickness and also metallurgically bonds the cladding to the backing steel. A reduction in thickness of at least 3:1 is normally required for reliable bonding. After rolling, packs may be heat treated to develop the required strength and corrosion resistance of the clad steel plates.[60] After the edges of the packs are cut off, each pack yields two separate clad steel plates.

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[57] *Clad Steel Plate from Japan, Inv. No. 731-TA-739 (Third Review)*, USITC Publication 4370, January 2013, p. I-15.

[58] Heavier gauge (i.e., thick) roll-bonded clad steel plate may be produced using a 2-ply pack comprising a single backing plate and a single cladding plate.

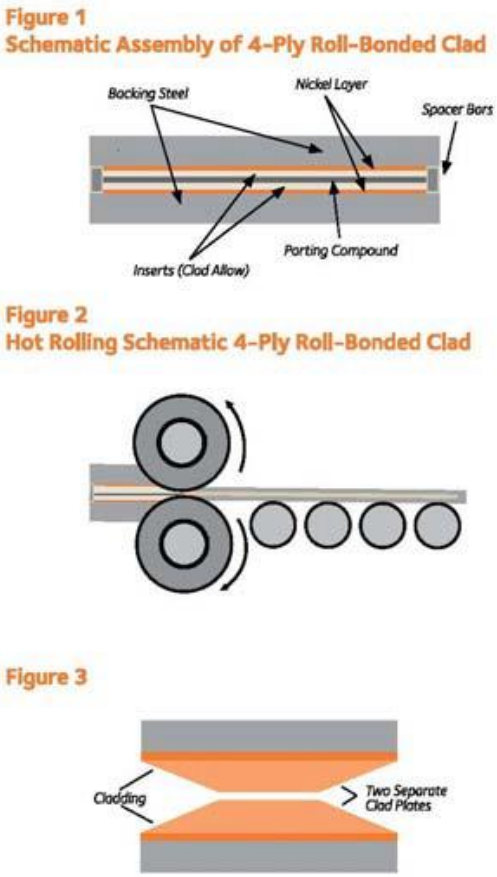
[59] Since the third review, AMUSA has exited the clad steel plate business and ceased operations at its plant in Coatesville, Pennsylvania. The process for other U.S. producers of roll-bonded clad steel plate is similar to that illustrated by AMUSA.

[60] The heat treatment normally required for clad steel plate involves heating of the plate and cooling it in air at a controlled rate. Such heat treatment usually takes place in a continuous furnace (one through which the plate is conveyed on rollers) although it may be done in any type of furnace that allows close control of the temperature.

Figure I-1
Clad steel plate: Overview of roll bonding process as was used by AMUSA

Source: AMUSA, "Clad plates", available at http://industeel.arcelormittal.com/products/clad-plates/, retrieved September 14, 2018.

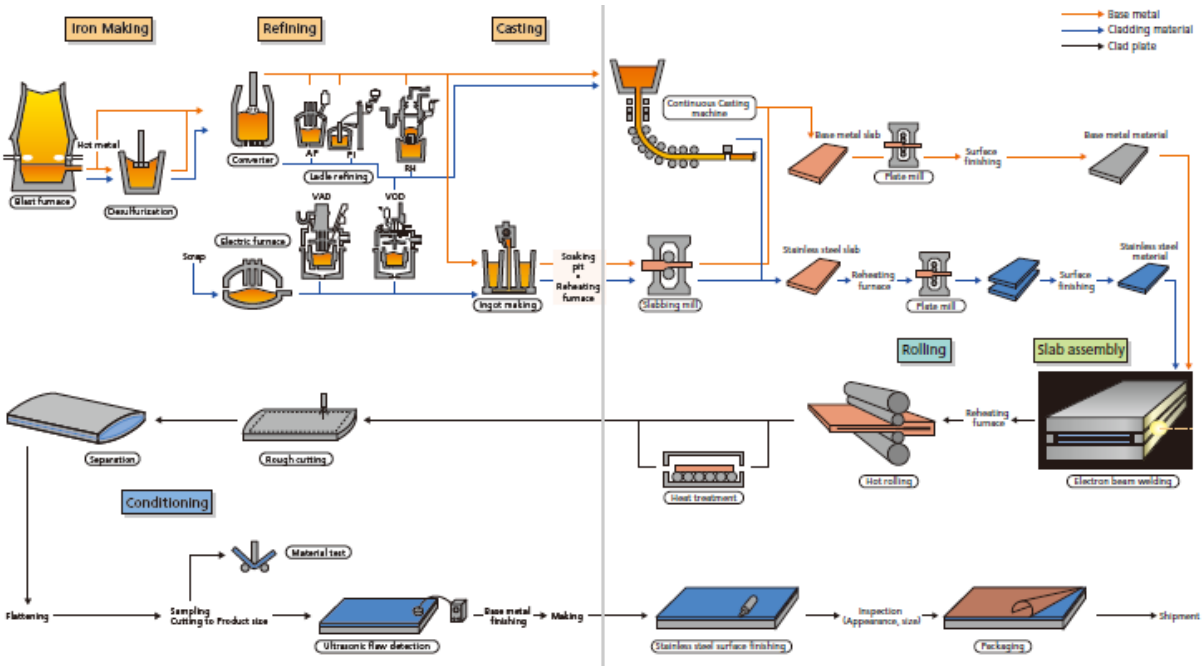
Figure I-2
Clad steel plate: Roll bonding process as was used by AMUSA in 4-ply roll-bonded clad



Source: AMUSA LLC, as cited in *Clad Steel Plate from Japan, Inv. No. 731-TA-739*, USITC Publication 4370, January 2013, figure I-2.

The roll bonding process used by Japanese producer JFE Steel Corporation ("JFE") is similar to that used by U.S. producers and is illustrated in figure I-3.

Figure I-3
Clad steel plate: Roll bonding process as used by JFE



Source: JFE Steel Corp., "Products Catalog," www.jfe-steel.co.jp/en/products/plate/catalog/c1e-009.pdf, retrieved September 14, 2018.

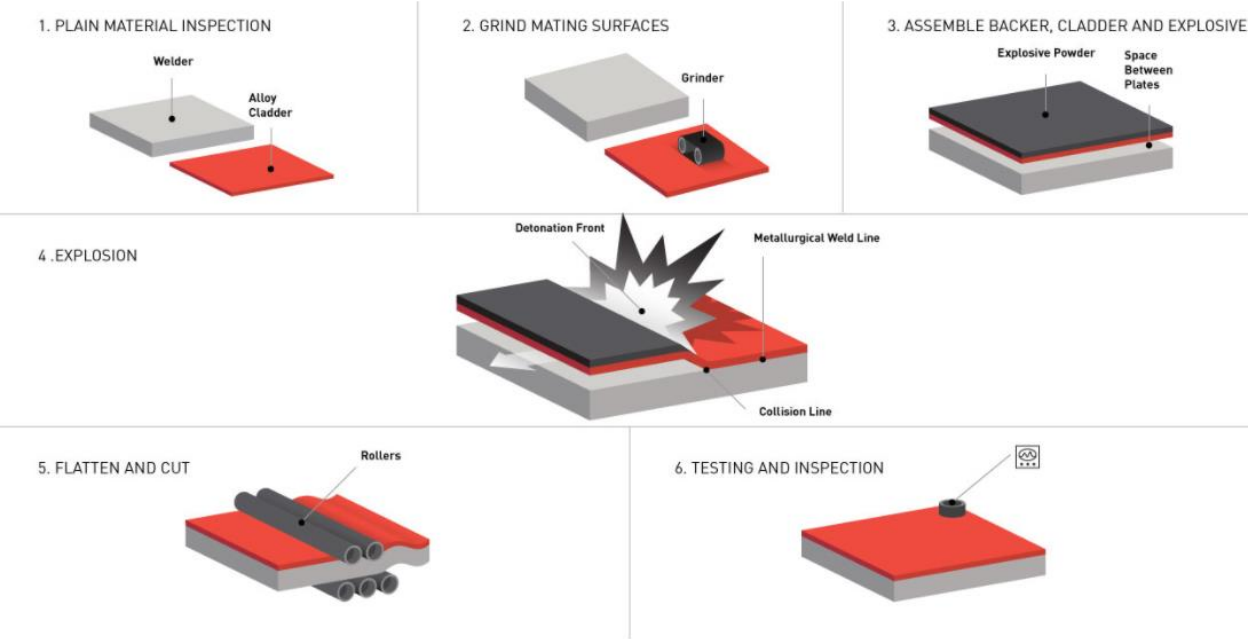
Explosion bonding[61] is accomplished by placing a sheet or plate of cladding material over a plate of backing steel and then covering the cladding plate with a layer of explosives. An explosion is initiated at one edge of the cladding material that travels across the surface, thereby forcing the two metal components together and creating a metallurgical bond between them.[62] Because there is no rolling or reduction in the thickness of the plate, the thickness and surface dimensions of the cladding and of the backing steel plate are the same as in the finished clad steel plate. In addition, because the heat generated in the explosion bonding affects only a small part of the thickness of the clad steel plate at any given moment, heat treatment of the clad steel plate is normally not required.[63] Figure I-4 illustrates the explosion bonding process.

[61] This description of explosion bonding is based upon a site visit at Dynamic Materials Corporation ("DMC") by Commission staff during the investigation phase of the fourth five-year review on August 21, 2018 in Mt. Braddock, PA.

[62] DMC, the largest U.S. producer of explosion bonded clad steel plate, detonates in an underground location located in a former limestone mine. Other producers of explosion bonded clad steel plate detonate in remote outdoor locations.

[63] The component cladding and backing plates normally have been heat-treated by their manufacturers.

Figure I-4
Clad steel plate: Explosion bonding process as used by DMC



Source: Dynamic Materials Corporation, "How it Works," http://www.nobelclad.com/process#how-it-works, retrieved September 14, 2018.

Finishing of clad steel plate, whether produced by roll bonding or by explosion bonding, consists of flattening, cleaning of surfaces by grit blasting or other means, polishing of the cladding surface by belt grinding, cutting to final surface dimensions, inspecting, and testing.

While roll bonding and explosion bonding are distinctly different processes, clad steel plate products produced by these two methods are largely considered interchangeable. Roll bonding is more commonly used for thinner plates, whereas explosion bonding is more common for thicker plates.[64]

DOMESTIC LIKE PRODUCT ISSUES

In its original determination, the Commission defined the domestic like product as clad steel plate coextensive with Commerce's scope.[65] In the first, second, and third five-year reviews, the Commission likewise defined the domestic like product as clad steel plate

[64] Posthearing Brief of NobelClad, Kelley Drye & Warren LLP, Exhibit 1, p. 5.

[65] *Clad Steel Plate from Japan*, *Inv. No. 731-TA-739 (Final)*, USITC Publication 2972, June 1996, pp. 4–5.

coextensive with Commerce's scope of the orders.[66] In its notice of institution in this current five-year review, the Commission solicited comments from interested parties regarding the appropriate domestic like product and domestic industry.[67] In its response to the Commission's notice of institution, the domestic interested party agreed with the Commission's definition of the domestic like product and domestic industry as stated in the original investigation and all prior five-year reviews, but reserved the right to comment on the appropriate definition during the course of this proceeding.[68] Respondent interested parties did not submit a response to the notice of institution. In addition, no party requested that the Commission collect data concerning other possible domestic like products in comments on the Commission's draft questionnaires.

U.S. MARKET PARTICIPANTS

U.S. producers

During the original investigation, three firms – Lukens, DuPont, and Ametek – supplied the Commission with information on their U.S. operations with respect to clad steel plate. These firms accounted for *** percent of U.S. production of clad steel plate in 1995.[69] Since the original investigation, DuPont's clad steel plate production was purchased by DMC in 1996.[70] DMC produces clad steel plate in the U.S. through its subsidiary NobelClad, headquartered in Boulder, Colorado with production facilities in Mt. Braddock, Pennsylvania. ArcelorMittal, the successor in interest to Lukens, the original petitioner, following acquisitions by Bethlehem Steel in 1997, International Steel Group in 2003, Mittal Steel in 2005, and a merger with Arcelor in 2006.[71] U.S. operations for ArcelorMittal, the world's largest steel manufacturer, are headquartered in Chicago, Illinois with clad steel plate production in Coatesville, Pennsylvania.[72] Since the third review, ArcelorMittal discontinued clad steel plate production in 2014 due to a drop in U.S. demand. Regal Technology also ended production on clad steel plate at the end of 2017.

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[66] *Clad Steel Plate from Japan*, *Inv. No. 731-TA-739 (Review)*, USITC Publication 3459 (October 2001); *Clad Steel Plate from Japan*, *Inv. No. 731-TA-739 (Second Review)*, USITC Publication 3907 (March 2007); *Clad Steel Plate from Japan, Inv. No. 731-TA-739 (Third Review)*, USITC Publication 4370 (January 2013).

[67] *Clad Steel from Japan; Institution of a Five-year Review*, 83 FR 148, January 2, 2018.

[68] *Domestic Interested Party's Response to the Notice of Institution,* January 31, 2018, p. 18.

[69] *Investigation No. 731-TA-739: Clad Steel Plate from Japan (Final)—Staff Report*, INV-T-044, June 3, 1996, p. III-1. The three U.S. producers that supplied the Commission with usable questionnaire information during the original investigations were: Lukens, DuPont, and Ametek. *Clad Steel Plate from Japan, Inv. No. 731-TA-739 (Final)*, USITC Publication 2972, June 1996, p. III-1.

[70] Source: http://www.nobelclad.com/about#history. Retrieved November 2, 2018.

[71] *Clad Steel Plate from Japan, Inv. No. 731-TA-739 (Third Review),* USITC Publication 4370, January 2013, p. I-18.

[72] Source: http://www.usa.arcelormittal.com/who-we-are/our-history. Retrieved November 2, 2018.

In the current proceeding, the Commission issued U.S. producers' questionnaires to six firms, four of which provided the Commission with information on their production operations. These firms are believed to account for the vast majority of U.S. production of clad steel plate in 2017. Presented in Table I-4 is a list of current domestic producers of clad steel plate and each company's position on continuation of the order, production locations, and share of reported production of clad steel plate in 2017.

Table I-4
Clad steel plate: U.S. producers, positions on orders, U.S. production locations, and shares of 2017 reported U.S. production

* * * * * * *

As indicated in table I-5, two U.S. producers are related to nonsubject foreign producers of clad steel plate and one is related to U.S. importers of nonsubject clad steel plate. In addition, as discussed in greater detail in Part III, one U.S. producer directly imports nonsubject merchandise.

Table I-5
Clad steel plate: U.S. producers' ownership, related and/or affiliated firms, since January 2012

* * * * * * *

U.S. importers

In the original investigation, four U.S. importing firms supplied the Commission with usable information on their operations involving the importation of clad steel plate from Japan, accounting for *** percent of subject U.S. imports in 1995.[73]

In the current proceedings, the Commission issued U.S. importers' questionnaires to 29 firms that appeared as an importer of record in proprietary Customs data for HTS statistical reporting number 7210.90.1000 during 2012-17, as well as to firms that responded in the prior third review and to all U.S. producers of clad steel plate. Usable questionnaire responses were received from three firms,[74] representing approximately *** percent of total imports during 2012-17.[75] There were no subject imports of clad steel plate from Japan from 2012 to 2017. Table I-6 lists all responding U.S. importers of clad steel plate from Japan and other sources, their locations, and their shares of U.S. imports in 2017.

[73] *Investigation No. 731-TA-739: Clad Steel Plate from Japan (Final)—Staff Report*, INV-T-044, June 3, 1996, p. IV-1. The responding U.S. importers that supplied the Commission with usable questionnaire information during the original investigation were: ***.

[74] A fourth firm, ***.

[75] For more information regarding import data coverage, see Part IV.

Table I-6
Clad steel plate: U.S. importers, source of imports, U.S. headquarters, and shares of imports in 2017

* * * * * * *

U.S. purchasers

The Commission received eight usable questionnaire responses from firms that bought clad steel plate during 2017.[76] Seven of the eight responding purchasers identified their firms as fabricators, with the remaining purchaser reporting that it is a "design build" firm that designs the process, builds part of the equipment, and provides installation services. The responding purchasers were located in the Midwest and Northeast (3 firms each); Southeast and Central Southwest (2 firms each); and Mountains, Pacific Coast, Other, and all regions except other (1 firm each). The purchasers reported that their primary customers are oil refineries, chemical and petro-chemical plants, engineering companies, and other types of refineries. The largest purchasers of clad steel plate in 2017 were ***. These firms accounted for *** of all reported purchases in 2017.

APPARENT U.S. CONSUMPTION

Data concerning apparent U.S. consumption of clad steel plate are shown in table I-7 and figure I-5. Apparent U.S. consumption of clad steel plate decreased by *** percent between 2015 and 2016 before increasing *** in 2017 on a quantity basis. By value, apparent U.S. consumption decreased by *** percent between 2015 and 2016 before declining by an additional *** percent between 2016 and 2017.

Table I-7
Clad steel plate: U.S. shipments of domestic product, U.S. shipments of imports, and apparent U.S. consumption, 2015-17, January to June 2017, and January to June 2018

* * * * * * *

Figure I-5
Clad steel plate: U.S. shipments of domestic product, U.S. imports, and apparent U.S. consumption, 2015-17, January to June 2017, and January to June 2018

* * * * * * *

[76] Of the *** responding purchasers that reported purchasing clad steel plate in 2017, *** purchased the domestic clad steel plate, and *** purchased product ***. No firm purchased imports of the subject merchandise from Japan during 2017.

U.S. MARKET SHARES

U.S. market share data are presented in table I-8. U.S. producers' share of apparent U.S. consumption by quantity decreased by *** percentage points between 2015 and 2017 and was *** percentage points lower in interim 2018 than interim 2017.

Table I-8
Clad steel plate: U.S. consumption and market shares, 2015-17, January to June 2017, and January to June 2018

* * * * * * *

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

U.S. MARKET CHARACTERISTICS

Clad steel plate is an intermediate product used to produce pressure vessels, heat exchangers, chemical reactors, evaporators, condensers, reservoirs, and storage containers. It is used primarily by oil and other types of refineries, chemical and petro-chemical plants, and engineering companies. Since the third review, one U.S. producer of roll-bonded clad steel plate, ArcelorMittal, ceased domestic production of the product. The vast majority of the market is supplied by domestic producers (which accounted for between *** of total U.S. shipments), though the share of the market served by nonsubject imports grew from *** percent in 2015 to *** percent in 2017, and was at *** percent during January-June 2018. No importers reported importing clad steel plate from Japan at any time since 2012.[1] Apparent U.S. consumption of clad steel plate increased from 2012 to 2013, decreased each year through 2016, then increased *** in 2017. Overall, apparent U.S. consumption was *** percent lower in 2017 compared to 2015 and *** percent lower in 2017 compared to 2012.

CHANNELS OF DISTRIBUTION

U.S. producers sold the *** majority of their clad steel plate to *** during January 2015-June 2018, while importers from nonsubject countries sold *** (table II-1).

Table II-1
Clad steel plate: U.S. producers' and importers' share of reported U.S. commercial shipments (percent), by sources and channels of distribution, 2015-17, January-June 2017, and January-June 2018

* * * * * * *

GEOGRAPHIC DISTRIBUTION

In general, U.S. producers serve the entire contiguous United States. *** reported selling clad steel plate to *** (table II-2). For U.S. producers, *** percent of sales were within 100 miles of their production facility, *** percent were between 101 and 1,000 miles, and *** percent were over 1,000 miles.

[1] Accordingly, importers' responses referenced throughout this section relate to nonsubject imports.

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

* * * * * * *

SUPPLY AND DEMAND CONSIDERATIONS

U.S. supply

Table II-3 provides a summary of the supply factors regarding clad steel plate from U.S. producers and from subject countries.

Table II-3
Clad steel plate: Supply factors that affect the ability to increase shipments to the U.S. market, by source

* * * * * * *

Domestic production

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

U.S. producers' capacity utilization decreased from *** percent in 2015 to *** percent in 2017, driven by a decrease in production of *** percent. Compared to January-June 2017, capacity utilization in January-June 2018 was nearly *** percentage points higher, at *** percent. As a share of total shipments, U.S. producers' export shipments increased from *** percent in 2015 to *** percent in 2016 before decreasing to *** percent in 2017. During January-June 2017, export shipments as a share of total shipments was at *** percent, while in January-June 2018 it was considerably higher, at *** percent. *** identified its principal export markets as ***, and *** reported its principal export market as ***. *** reported that the European Union and Canada recently introduced 25 percent counter-tariffs in response to the United States' Section 232 tariff, and that these tariffs ***.[2] [3] U.S. producers' relatively high

[2] As discussed in Part I, "Section 232 investigations," the President announced on March 8, 2018 that an additional 25 percent ad valorem rate of duty with respect to steel articles defined at the Harmonized Tariff Schedule 6−digit level as 7206.10 through 7216.50, 7216.99 through 7301.10,

(*continued*...)

level of export shipments combined with the potentially constrained ability *** to sell to certain foreign markets in the future suggests that U.S. producers have the ability to shift shipment from other export markets to the U.S. market.

***. Overall, U.S. producers' ratio of inventories to total shipments decreased from *** percent to *** during 2015-17. *** reported production of other products on the same equipment as clad steel plate, and *** reported that they are unable to switch production to other products.

Subject imports from Japan

Based on available information, producers of clad steel plate from Japan have the ability to respond to changes in demand with large changes in the quantity of shipments of clad steel plate to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity and the ability to shift shipments from alternate markets.[4] Factors mitigating responsiveness of supply include the limited availability of inventories and the limited ability to shift production to or from alternate products.

Japanese producers' reported capacity utilization decreased from *** percent in 2015 to *** percent in 2017, driven by a decrease in production of *** percent. Compared to January-June 2017, capacity utilization in January-June 2018 was *** percentage points higher, at *** percent. Japanese producers reported no export shipments to the United States during January 2015-June 2018. As a share of total shipments, Japanese producers' export shipments to non-U.S. markets decreased from *** percent in 2015 to *** percent in 2017. The responding firms' export shipments to European Union countries and other Asian countries

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(…*continued*)
7302.10, 7302.40 through 7302.90, and 7304.10 through 7306.90, would apply to imports of steel articles from all countries except Canada and Mexico. Between March and May 2018, exemptions to these tariffs were announced for Argentina, Australia, Brazil, Canada, Mexico, member countries of the European Union, and South Korea, and import quotas were agreed to by Argentina, Brazil, and South Korea. As of May 2018, exemptions have lapsed for all countries except Australia, which is the only country currently excepted from both import duties and absolute quotas of steel articles.

[3] In May 2018, the government of Canada announced the imposition of "countermeasures (surtaxes)" against $16.6 billion in imports of U.S. steel and other goods. See *Department of Finance Canada website, Countermeasures in Response to Unjustified Tariffs on Canadian Steel and Aluminum Products*, available at https://www.fin.gc.ca/access/tt-it/cacsap-cmpcaa-1-eng.asp, retrieved September 20, 2018. In June 2018, the European Union adopted a regulation to put in place tariffs on certain steel and other products. See *European Commission website, EU adopts rebalancing measures in reaction to US steel and aluminum tariffs*, available at http://trade.ec.europa.eu/doclib/press/index.cfm?id=1868, retrieved September 20, 2018.

*** stated that the Canadian and European Union-applied tariffs affect "all steel clad plates, {including} steel clad plates with base metals of carbon, alloy, stainless and other steel grades."

[4] NobelClad argues that Japanese producers have "massive idle capacity," are export-oriented, and have the ability to divert exports from third-country markets. NobelClad's prehearing brief, pp. 13-20; NobelClad's posthearing brief, p. 1.

increased, while its shipments to all other (non-U.S.) export markets decreased during 2015-17.[5] These firms' shipments to their home market increased from *** percent in 2015 to *** percent in 2017. Japanese producers reported ***, and *** reported being able to shift production to or from alternate products.

Imports from nonsubject sources

All imports of clad steel plate were from nonsubject sources during 2015-17; there were no imports from Japan during this time. As a share of apparent U.S. consumption, the share attributable to nonsubject imports increased from *** percent in 2015 to *** percent in 2017. The largest sources of nonsubject imports during 2017 were France (which accounted for 40.2 percent of all imports in 2017) and Australia (which accounted for 39.6 percent).[6]

Availability of supply

Purchasers were asked if the availability of supply from the United States, Japan, and other countries had changed since 2012, as well as whether they anticipated any changes in the availability of supply. Three of seven responding purchasers reported that the shutdown of ArcelorMittal's domestic roll-bonded clad plate production affected supply, with one firm noting that this left only one primary supplier of domestic product.[7] When asked if the clad steel plate market had experienced any supply constraints, only one U.S. producer reported constraints, with *** stating that many potential contracts are too large in size for its production capabilities. No importer reported constraints. Only one of eight responding purchasers, ***, reported that ArcelorMittal's domestic production stoppage resulted in any constraints in supply. *** also reported that it purchased from *** due to delivery issues from ***.[8] *** was the only purchaser that anticipated any changes in the availability of supply from domestic producers, stating that it was concerned that import tariffs on some specialty grades of raw steel plate would impact future availability, and that there was very limited domestic supply of specialty heat-treated alloys "due to government rated orders consuming heat treat capacity." *** reported that ***.

[5] Only one firm identified its primary export markets, listing ***.

[6] Compiled from data submitted in response to Commission questionnaires and official U.S. import statistics using HTS statistical reporting number 7210.90.1000. Accessed August 28, 2018.

[7] ArcelorMittal reported that it discontinued production of clad steel plate in the United States in 2014 ***. See also *ArcelorMittal USA Coatesville Plant and United Steelworkers International Union and Local Union 1165, USW, Opinion and Award*, pg. 6, available at http://usw1010.org/Reps/Grievance/Inland%20Arbitration%20Awards/AM%20ARBs/Case%2073.pdf, retrieved September 12, 2018.

[8] ***. ***.

New suppliers

Two of eight purchasers indicated that new suppliers entered the U.S. market since 2012; one firm listed Shockwave, located in the Netherlands, and an ArcelorMittal roll-bonded plant in Europe, and the other stated that it has "heard names but do{es} not intend to pursue at this time." No firms expect additional entrants.

U.S. demand

Based on available information, the overall demand for clad steel plate is likely to experience moderate changes in response to changes in price. Most firms reported that there are no substitutes for clad steel plate. A few firms listed substitutes, however the range of these substitutes appears to be limited and/or specific to certain market segments or applications. Clad steel plate reportedly accounts for a varying amounts of cost shares in most of its end-use products.

End uses and cost share

U.S. demand for clad steel plate depends on the demand for the intermediate products in which it is used. Reported end uses include pressure vessels, heat exchangers, chemical reactors, evaporators, and condensers. In the third review, firms reported that other end uses included cooking equipment, flue gas scrubbing equipment, liquid chillers that incorporate pressure vessels for HVAC, magnesium reservoirs, pipe, pulp and paper making, shipbuilding, and storage containers.[9]

Clad steel plate accounts for a varying share of the cost of the products in which it is used. Reported cost shares for the most widely reported application, pressure vessels, ranged from 30 to 70 percent. Other reported applications and their cost shares were as follows: chemical reactors, 70 percent; condensers, 12 percent; and heat exchangers, 15 to 30 percent.

No responding U.S. producers or importers reported changes in end uses,[10] and none anticipated any changes in end uses in the future. Among purchasers, three of six responding firms reported changes in end uses, with one stating that fewer capital investment projects have resulted in decreased demand for clad steel plate, and another stating that there are cost-effective solid material substitutes, such as deflationary 2205 stainless steel.[11] Two purchasers

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[9] *Clad Steel Plate from Japan, Inv. No. 731-TA-739 (Third Review)*, USITC Publication 4370, January 2013, pp. II-4 and II-8.

[10] *** reported that there had been changes in end uses, but explained the change as *** "***."

[11] Grade 2205 stainless steel is a mid-level grade of a duplex stainless steel. Duplex stainless steel refers to a two-phase austenitic-ferritic stainless steel made of 22 percent chromium, 3 percent molybdenum, and 5-6 percent nickel. Duplex stainless steel is characterized by high yield strength (about twice that of austenitic stainless steel), good fatigue strength, and excellent corrosion-resistance. Duplex 2205 is the most widely used duplex stainless steel.

also anticipated further changes in end uses, with one firm elaborating that it anticipates continued material substitution.

Business cycles

One U.S. producer, one importer, and two purchasers indicated that the clad steel plate market was subject to business cycles, while one U.S. producer and one purchaser indicated that the market was subject to distinct conditions of competition. Regarding business cycles, *** reported that economic conditions influenced the clad steel plate market, *** reported that the energy market cycle was an influence, and *** reported that the market can be impacted by government-mandated environmental requirements. Regarding distinct conditions of competition, *** cited politics and the uncertainty of environmental regulations, and *** cited the availability of raw materials.

Demand trends

Most responding firms reported that demand for clad steel plate since January 2012 had either decreased (*** and one purchaser) or fluctuated (*** three purchasers) (table II-4). *** reported that demand had increased, with *** stating that ***, and *** citing strong demand for clad line pipe. Most purchasers reported that demand for their end-use products that incorporate clad steel plate had either not changed or fluctuated, with one firm reporting that it had decreased.

Table II-4
Clad steel plate: Firms' responses regarding U.S. demand

Item	Increase	No change	Decrease	Fluctuate
Demand in the United States				
U.S. producers	***	***	***	***
Importers	***	***	***	***
Purchasers	---	2	1	3
Foreign producers	***	***	***	***
Anticipated future demand				
U.S. producers	***	***	***	***
Importers	***	***	***	***
Purchasers	1	1	1	3
Foreign producers	***	***	***	***
Demand for purchasers' final products since 2012				
Purchasers	---	4	1	1

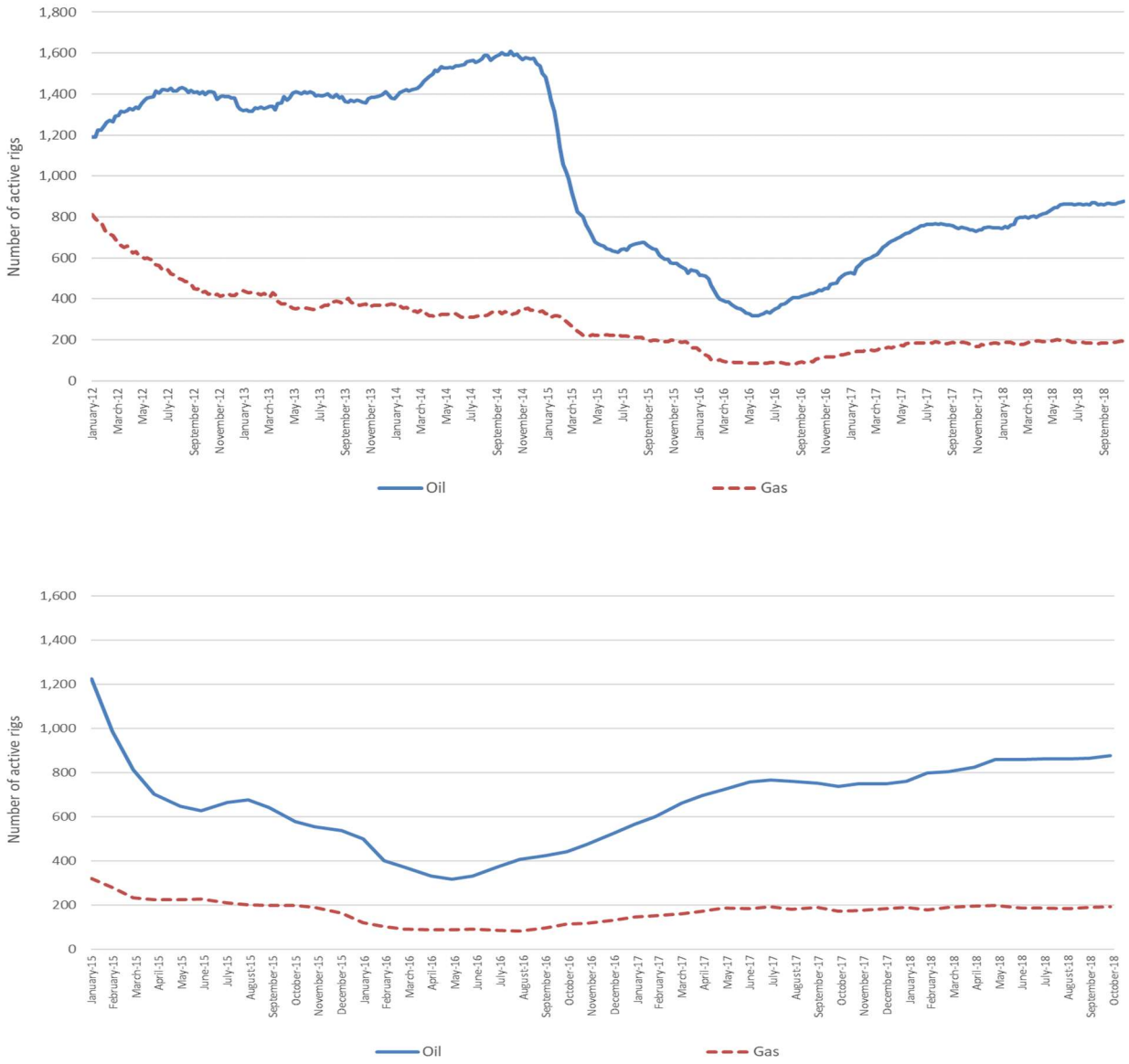
Source: Compiled from data submitted in response to Commission questionnaires.

NobelClad argues that demand since January 2012 has continued to decline, driven by reduced capital investment projects in the oil and gas industries, as well as a declining domestic customers base for clad steel plate.[12]

[12] NobelClad's prehearing brief, pp. 4-5.

As shown in figures II-1(a) and II-1(b), the number of active oil rigs in North America generally increased between the beginning of 2012 and the end of 2014, followed by a sharp decrease in the first half of 2015, a more gradual decrease until mid-2016, then a gradual increase between mid-2016 and mid-2018 and a relatively stable number since that time. The number of active gas rigs in North America generally decreased between the beginning of 2012 and the third quarter of 2016, followed by a similar, though less pronounced upward trend since then. The number of oil and gas rigs were both considerably lower in the final weeks of December 2017, June 2018, and October 2018 than in January 2012.

Figures II-1(a) and (b)
Rotary rig count: Average number of active rotary oil and gas rigs in North America, weekly, January 6, 2012-October 26, 2018 and January 2, 2015-October 26, 2018.



Source: Baker Hughes website, available at http://phx.corporate-ir.net/phoenix.zhtml?c=79687&p=irol-reportsother, retrieved October 29, 2018.

Substitute products

Most firms (two U.S. producers, one of two responding importers, and 4 of 7 responding purchasers) reported that there are no substitutes for clad steel plate. However, *** and six (of seven) purchasers identified substitutes to clad steel plate for some applications. Solid alloy plate was cited as a substitute in pressure vessels, condensers, and other various applications by *** and four purchasers. Weld overlay was also cited as a substitute in pressure vessels by two purchasers and ***, and stainless steel was cited as a substitute in chemical-resistant vessels by one purchaser. *** also stated that explosion-bonded plate was a substitute for other clad steel plate for chemical and petrochemical uses, stating that "delivery is the key issue, {since} explosion bonded plate is available domestically."

Regarding changes in substitutes since 2012, *** cited greater use of weld overlay by fabricators, and *** reported that 2205 stainless steel plate has become a substitute. Regarding anticipated changes in substitutes in the future, *** stated that higher nickel alloys or titanium will be an available substitute as the economics become more favorable.

SUBSTITUTABILITY ISSUES

The degree of substitution between domestic and imported clad steel plate depends upon such factors as relative prices, quality (e.g., grade standards, defect rates, etc.), and conditions of sale (e.g., price discounts/rebates, lead times between order and delivery dates, reliability of supply, product services, etc.). Based on available data, staff believes that there is a moderate degree of substitutability between domestically produced clad steel plate and clad steel plate imported from Japan.[13]

Lead times

Clad steel plate is primarily produced-to-order. U.S. producers reported that *** percent of their commercial shipments were produced-to-order, with lead times averaging 98 days. The remaining *** percent came from inventories, with lead times averaging 14 days.

Knowledge of country sources

All eight responding purchasers indicated they had marketing/pricing knowledge of domestic product and one of product from Europe. No purchaser reported pricing or marketing knowledge of product from Japan.

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[13] NobelClad argues that domestic and Japanese clad steel plate are highly substitutable, based upon firms' responses regarding interchangeability and the significance of differences other than price. NobelClad's prehearing brief, pp. 6-7. Staff notes that relatively few firms (*** responded to the Commission's question regarding interchangeability between sources (see table II-10), and *** responded to the Commission's question regarding the significance of differences other than price, and that *** (see table II-11). NobelClad also did not comment of staff's substitution elasticity estimate of 2-4, which is indicative of a moderate level of substitutability.

As shown in table II-5, most purchasers and their customers either "always" or "usually" make purchasing decisions based on the producer, while all but one purchaser reported that they or their customers "always" make purchasing decisions based on country of origin. In additional comments, one firm stated that it "sometimes" makes decisions based on producer because there is often only one producer that can meet its delivery schedule, while its customers sometimes state a preference. Another firm stated that it "sometimes" makes decisions based on producer because it is a small firm and doesn't have the resources to "shop world wide," and that its customers also sometimes have a preferred supplier that it must adhere to. Regarding decisions based on country of origin (COO), one firm stated that COO clauses are almost always in its customers' contracts, and another stated that it prefers to purchase from domestic sources because it is easier to manage the order and fix any potential problems.

Table II-5
Clad steel plate: Purchasing decisions based on producer and country of origin

Purchaser/Customer Decision	Always	Usually	Sometimes	Never
Purchaser makes decision based on producer	4	---	2	1
Purchaser's customers make decision based on producer	2	2	1	---
Purchaser makes decision based on country	6	---	---	1
Purchaser's customers make decision based on country	3	2	---	---

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 clad steel plate were quality (7 firms), price (6 firms), and availability/delivery (6 firms) (table II-6). Price was the most frequently cited first-most important factor (cited by 4 firms firms), followed by quality (2 firms); quality was the most frequently reported second-most important factor (cited by 3 firms); and availability/delivery was the most frequently reported third-most important factor (cited by 3 firms).

Table II-6
Clad steel plate: Ranking of factors used in purchasing decisions as reported by U.S. purchasers, by factor

Factor	First	Second	Third	Total
Quality	2	3	2	7
Price	4	1	1	6
Availability / delivery	1	2	3	6
Other[1]	1	1	1	3

[1] Other factors include lead time, extension of credit, and only being familiar with one source of supply.

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

When asked what characteristics they consider when determining the quality of clad steel plate, firms listed reasons including bond strength, delamination, dimensions, origin, raw plate mill test reports, shear values, specific chemistry requirements, surface condition, and ultrasonic testing results.

Regarding how often they purchase the lowest-priced product, purchasers' responses were mixed, though most firms reported either "always" or "usually." Two firms reported that they "always" purchase the lowest-priced clad steel plate, three reported that they "usually" do, and three reported that they "never" do.

When asked if they purchased clad steel plate from one source although a comparable product was available at a lower price from another source, half of the eight responding purchasers reported that they do. All four of these purchasers indicated a preference for U.S. product, with one specifying that most of its customers want clad steel plate from NobelClad. One purchaser added that in addition to U.S. product, it also prefers clad steel plate from Western Europe, and another stated that its standard COO demands require product from either the United States, Canada, Western Europe, or Japan.

Importance of specified purchase factors

Purchasers were asked to rate the importance of 15 factors in their purchasing decisions regarding clad steel plate (table II-7). The factors rated as very important by at least half of responding purchasers were quality meets industry standards (8 firms); availability, price, product consistency, and reliability of supply (7 firms each); delivery time, quality exceeds industry standards (6 firms each); technical support/service (5 firms); and delivery terms (4 firms).

Table II-7
Clad steel plate: Importance of purchase factors, as reported by U.S. purchasers, by factor

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

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

Supplier certification

Five of the eight responding purchasers require their suppliers to become certified or qualified to sell clad steel plate to their firm. Most of the responding purchasers (3 of 4) reported that the time to qualify a new supplier ranged from one to 30 days, with one reporting a qualification time of 150 days. The processes involved in certifying or qualifying a new firm

generally involve quality system checks, and reviews of delivery performance, the type of grades produced, a supplier's production capability, and a supplier's conformity to specifications. No purchasers reported that a domestic or foreign supplier had failed in its attempt to qualify product, or had lost its approved status since January 1, 2012.

Changes in purchasing patterns

Purchasers were asked about changes in their purchasing patterns from different sources since January 2012 (table II-8). In general, firms reported either constant or fluctuating purchases from domestic producers. One firm reported decreasing its domestic purchases, but did not specify a reason; this firm also reported increasing its purchases from nonsubject sources for trial purposes. No firm reported expressing interest or considering purchases of Japanese clad steel plate since 2012.[14]

Half of the responding purchasers reported that they had changed suppliers since January 2012, with three of the four firms specifically dropping ArcelorMittal due to the shutdown of the firm's domestic roll-bonding operations in late 2014. One firm reported adding ArcelorMittal Industeel (Belgium) as a supplier. As noted earlier, two purchasers indicated that new suppliers entered the U.S. market since 2012, listing Shockwave in the Netherlands and "an ArcelorMittal roll-bonded plant in Europe."[15]

Table II-8
Clad steel plate: Changes in purchase patterns from U.S., subject, and nonsubject countries

Source of purchases	Did not purchase	Decreased	Increased	Constant	Fluctuated
United States	---	1	---	3	4
Japan	7	---	---	---	---
All other countries	5	---	1	---	---
Sources unknown	5	---	---	---	---

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

Importance of purchasing domestic product

Three purchasers reported that at least some of their purchases had no domestic requirement, accounting for *** percent of firms' combined reported purchases in 2017. One

[14] NobelClad argues that import trends of other clad products from Japan demonstrate an "interest in and ability to export {clad steel plate products} to the United States." NobelClad's prehearing brief, pp. 20-23.

[15] NobelClad reported that there are no differences in end-use application between roll-bonded and explosion-bonded clad plate, and that there are no technical differences between the two types of production methods. It stated that the end use application only dictates the need for a particular thickness, of which a "complete range… in significant volumes" is capable of being produced either via the roll-bonded process or explosion-bonded process. NobelClad's posthearing brief, Answers to Commissions' Questions, pp. 6-7.

firm reported that at least some of its product was required to be domestic by law (for *** percent of total reported purchases in 2017); one reported that domestic product was required by its customers (for *** percent of reported 2017 purchases); and two firms reported other preferences for domestic product (for a total of *** percent of reported purchases in 2017). Among the firms reporting a preference for domestic product, one stated that it only buys from a domestic supplier, and the other cited customer preference for domestic product.

Effect of 232 steel investigation on conditions of competition[16]

U.S. producers, importers, and purchasers were asked a series of questions relating to the section 232 national security investigation on steel imports into the United States. First, firms were asked whether they were familiar with the investigation and related Presidential proclamations, and most firms (*** U.S. producers, *** importers, and five of seven purchasers) reported that they were. Next, firms were asked whether the announcement of the investigation in April 2017 and the issuance of proclamations and tariffs beginning in March 2018 impacted the conditions of competition in the U.S. market for clad steel plate. Most firms (*** U.S. producers, *** importers, and three of five purchasers) reported that the announcement in April 2017 did not impact the conditions of competition for clad steel plate, but most firms (*** responding U.S. producers, *** importers, and three of six purchasers) reported that the issuance of proclamations and tariffs has impacted the conditions of competition. *** reported that the additional tariffs on steel plates have increased the input costs for clad plates, *** reported that it had an effect on the pricing and availability of the raw materials needed to make explosion-bonded clad plate, *** reported that prices increased with raw plate cost, and *** stated that the additional tariffs led to volatility in the pricing of plate materials used in the manufacturing of clad plate. Finally, firms were asked whether they anticipated that additional developments related to the 232 investigation and imposition of tariffs would impact the conditions of competition for clad steel plate in the future; most firms (*** U.S. producers, *** importers, and three of six purchasers) reported that they did not. Among firms reporting anticipated developments, purchaser *** reported that anything that raises prices and increases lead times will be detrimental to domestic supply, particularly since NobelClad is "the only real domestic source of clad plate."[17]

Comparisons of domestic products, subject imports, and nonsubject imports

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

[16] For more on the Section 232 investigations on imports of steel products, see Part I, "Section 232 investigations," and "Supply and demand considerations" above.

[17] NobelClad argues that the United States' application of section 232 duties on imports of steel products will also not prevent injury to the domestic clad plate industry because the duties "are well below the 118 percent antidumping duty level applicable to clad plate and are of unknown duration." NobelClad's prehearing brief, pp. 7-10, 36-39, and Exh. 1; NobelClad's posthearing brief, pp. 2-3.

by-country comparison on the same 15 factors (table II-9) for which they were asked to rate the importance.

The only two responding purchasers rated U.S. product as superior to Japanese product for all 15 factors. When comparing U.S. to nonsubject product, the sole responding purchaser rated that the United States as superior for all 15 factors. When comparing Japanese product to nonsubject product, the responding purchaser rated them as comparable for most factors, but Japanese product as inferior on factors related to delivery, extension of credit, minimum quantity requirements, and transportation costs.

Table II-9
Clad steel plate: Purchasers' comparisons between U.S.-produced and imported product

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

[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 clad steel plate

In order to determine whether U.S.-produced clad steel plate can generally be used in the same applications as imports from Japan, U.S. producers, importers, and purchasers were asked whether the products can always, frequently, sometimes, or never be used interchangeably. As shown in table II-10, most firms reported that product from the United States, Japan, and nonsubject sources can always be used interchangeably.

Table II-10
Clad steel plate: Interchangeability between clad steel plate produced in the United States and in other countries, by country pair

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
U.S. vs. Japan	***	***	***	***	***	***	***	***	1	---	---	---
U.S. vs. nonsubject	***	***	***	***	***	***	***	***	1	---	---	---
Japan vs. nonsubject	***	***	***	***	***	***	***	***	1	---	---	---

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

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

As can be seen from table II-11, all eight responding purchasers reported that domestically produced product always met minimum quality specifications. No responses were received from purchasers assessing the ability of Japanese or nonsubject sources to meet minimum quality specifications.

Table II-11
Clad steel plate: Ability to meet minimum quality specifications, by source[1]

Source	Always	Usually	Sometimes	Rarely or never
United States	8	---	---	---
Japan	---	---	---	---
Nonsubject	---	---	---	---

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

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

In addition, producers, importers, and purchasers were asked to assess how often differences other than price were significant in sales of clad steel plate from the United States, subject, or nonsubject countries. As seen in table II-12, responses were mixed. *** and two of three purchasers reported that differences other than price were always significant, with *** elaborating that quality, availability, and transportation network are always significant factors in its purchases. *** and one of the three responding purchasers reported that differences other than price were never significant.

Table II-12
Clad steel plate: Significance of differences other than price between clad steel plate produced in the United States and in other countries, by country pair

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
U.S. vs. Japan	***	***	***	***	***	***	***	***	2	---	---	1
U.S. vs. nonsubject	***	***	***	***	***	***	***	***	2	---	---	1
Japan vs. nonsubject	***	***	***	***	***	***	***	***	2	---	---	1

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

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

ELASTICITY ESTIMATES[18]

U.S. supply elasticity

The domestic supply elasticity[19] for clad steel plate measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price of clad steel plate. 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 clad steel plate. Analysis of these factors above indicates that the U.S. industry has a reasonably large ability to increase or decrease shipments to the U.S. market; an estimate in the range of 5 to 10 is suggested.

U.S. demand elasticity

The U.S. demand elasticity for clad steel plate measures the sensitivity of the overall quantity demanded to a change in the U.S. market price of clad steel plate. 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 clad steel plate in the production of any downstream products. Based on the available information, the aggregate demand for clad steel plate is likely to be moderately inelastic; a range of -0.5 to -1.0 is suggested.

[18] No party commented on the numerical estimates presented in this section.

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

Substitution elasticity

The elasticity of substitution depends upon the extent of product differentiation between the domestic and imported products.[20] 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 clad steel plate and imported clad steel plate is likely to be in the range of 2 to 4.[21]

[20] 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.

[21] In the original investigation and the third review, the substitution elasticity between U.S. and Japanese product was characterized as moderately substitutable, and was estimated to be in the range of 2 to 4. In the third review, domestic interested parties argued that there is a high degree of substitutability between U.S. and Japanese product, citing differences in the production processes (roll-bonded vs. explosion-bonded product), the presence of Buy America provisions, preferences for domestic product, and differences in delivery times. In this fourth review, NobelClad again argues that domestic and Japanese clad steel plate are highly substitutable based upon firms' responses regarding interchangeability and the significance of differences other than price. See NobelClad's prehearing brief, pp. 6-7. However, NobelClad did not comment in the third or fourth review on staff's substitution elasticity estimate of 2-4, which is indicative of a moderate level of substitutability. Staff has therefore not altered its substitution elasticity estimate.

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 the vast majority of U.S. production of clad steel plate during 2017, supplied information on their operations in this review on clad steel plate.

Changes experienced by the industry

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

Table III-1
Clad steel plate: U.S. producers' reported changes in operations since 2012

* * * * * * *

Anticipated changes in operations

The Commission asked domestic producers to report anticipated changes in the character of their operations relating to the production of clad steel plate. No firm reported anticipating any changes in operations.

U.S. PRODUCTION, CAPACITY, AND CAPACITY UTILIZATION

Table III-2 presents U.S. producers' production, capacity, and capacity utilization. Capacity was stable from 2015 to 2017, and decreased in 2018 due to the suspension of clad steel plate operations by ***. ***. Total production decreased each year from 2015 to 2017, for a total decrease of *** percent. ***. Average capacity utilization decreased each year from 2015 to 2017, for a total decrease of *** percentage points. *** production of clad steel plate was higher in the interim 2018 than during the interim 2017, which resulted in slightly higher capacity utilization.

Table III-2
Clad steel plate: U.S. producers' capacity and production, 2015-17, January to June 2017, and January to June 2018

* * * * * * *

Figure III-1
Clad steel plate: U.S. producers' capacity and production, 2015-17, January to June 2017, and January to June 2018

* * * * * * *

Constraints on capacity

None of the responding U.S. producers reported constraints in the manufacturing process.

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

Table III-3 presents U.S. producers' U.S. shipments, export shipments, and total shipments. The quantity of U.S. shipments decreased by *** percent from 2015 to 2017. Export shipments increased by *** percent from 2015 to 2016, but then decreased *** percent the following year. *** accounted for *** U.S. shipments as well as *** export shipments from 2015 to 2017.

Average unit values fluctuated over the period examined. The average unit value of U.S. shipments in 2016 was *** percent higher than in 2015, but then decreased by *** percent the following year. The average value of export shipments of clad steel plate decreased by *** percent from 2015 to 2016, and then increased by *** percent from 2016 to 2017. U.S. shipments accounted for the majority of total shipments, ranging from *** percent in 2016 to *** percent in 2017. Export shipments were greater than domestic shipments in the first half of 2018, however. *** reported internal consumption or transfers of clad steel plate to related firms.

Tables III-4, III-5, and III-6 present U.S. producers' U.S. shipments by cladding material, base metal, and total plate thickness, respectively. *** is the most frequently used cladding material, accounting for *** percent of total U.S. shipments. *** is the most used base metal, accounting for *** percent of total U.S. shipments. The majority of U.S. shipments of clad steel plate are ***.

Table III-3
Clad steel plate: U.S. producers' U.S. shipments, exports shipments, and total shipments, 2015-17, January to June 2017, and January to June 2018

* * * * * * *

Table III-4
Clad steel plate: U.S. producers' U.S. shipments by cladding material, 2017

* * * * * * *

Table III-5
Clad steel plate: U.S. producers' U.S. shipments by base metals, 2017

* * * * * * *

Table III-6
Clad steel plate: U.S. producers' U.S. shipments by plate thickness, 2017

* * * * * * *

U.S. PRODUCERS' INVENTORIES

Table III-7 presents U.S. producers' end-of-period inventories and the ratio of these inventories to U.S. producers' production, U.S. shipments, and total shipments**.** *** U.S. producers held *** clad steel plate in inventory at the end of 2015. *** inventories of clad steel plate in 2016 or 2017.

Table III-7
Clad steel plate: U.S. producers' inventories, 2015-17, January to June 2017, and January to June 2018

* * * * * * *

U.S. PRODUCERS' IMPORTS AND PURCHASES

Table III-8 presents data on individual U.S. producers' U.S. production and U.S imports of clad steel plate. *** was the only U.S. producer to import steel clad plate. *** imported *** from nonsubject country *** during January to June 2018 due to ***. As a percentage of total U.S. production, *** imports amounted to *** percent of its production during January to June 2018.

Table III-8
Clad steel plate: U.S. producers' U.S. imports, 2015-17, January to June 2017, and January to June 2018

* * * * * * *

U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

Table III-9 shows U.S. producers' employment-related data.[1] The number of production and related workers decreased throughout the period examined, in line with the decrease in total production discussed earlier. The number of production and related workers decreased from a peak of *** in 2015 to a low of *** at the end of 2017. Wages paid and hourly wages for those production related workers remained relatively stable during the period examined.

Table III-9
Clad steel plate: Average number of production and related workers, hours worked, wages paid to such employees, hourly wages, productivity, and unit labor costs, 2015-17, January to June 2017, and January to June 2018

* * * * * * *

[1] *** that provided usable employment data.

FINANCIAL EXPERIENCE OF U.S. PRODUCERS

Background

Two U.S. producers provided financial data on their operations on clad steel plate.[2] All producers have a fiscal year ending on December 31. Additional questionnaires were received from two U.S. producers; however, no financial data were provided for the requested period (2015, 2016, 2017, January-June 2017, and January-June 2018).[3]

Operations on clad steel plate

Table III-10 presents the data on the U.S. producer's operations in relation to clad steel plate, while table III-11 presents the changes in average unit values.

Table III-10
Clad steel plate: Results of operations of U.S. producers, 2015-17, January to June 2017, and January to June 2018

* * * * * * *

Table III-10--Continued
Clad steel plate: Results of operations of U.S. producers, 2015-17, January to June 2017, and January to June 2018

* * * * * * *

Table III-11
Clad steel plate: Changes in average unit values, between calendar years and between partial year periods

* * * * * * *

Table III-12
Clad steel plate: Select results of operations of U.S. producers, by firm, 2015-17, January to June 2017, and January to June 2018

* * * * * * *

[2] *** provided a U.S. producers' questionnaire response after issuance of the prehearing report. The firm's financial information accounted for approximately *** percent of 2017 net sales value, and is included in this final report.

[3] *** ended operations on clad steel plate in 2014. *** ended operations on clad steel plate in 2017, but did not provide any financial data. Based on the reported trade data, *** accounted for ***, ***, and *** percent of total U.S. shipment quantity in 2015, 2016, and 2017, respectively. Thus, *** financial data would be immaterial to the overall operating results for the domestic industry.

Total net sales

U.S. producers reported only commercial sales. As shown in table III-10, the quantity and value of total net sales consistently declined from 2015 to 2017, but were higher in January-June 2018 than in January-June 2017. However, on a per-short ton basis, the net sales value consistently increased from 2015 to 2017 and was lower between the comparable interim periods. As shown in table III-11, the firm average unit sales value increased by *** (*** percent) from 2015 to 2017, but was lower by *** (also *** percent) in January-June 2018 compared to January-June 2017.

Costs and expenses

As shown in table III-10, raw material costs represent the single largest component of overall COGS, ranging from *** percent of total COGS during the period for which data were collected. As a ratio to net sales, raw materials ranged from *** percent.[4]

The two main categories of raw materials used for the production of clad steel plate are cladding material and base metal, which accounted for *** percent and *** percent of total raw material costs, respectively, in 2017.[5] The main inputs used for cladding material are *** at *** percent of U.S. producers' total raw material costs in 2017, *** at *** percent, and *** at *** percent.[6] The main inputs used for base metal are *** at *** percent of U.S. producers' total raw material costs in 2017, other base metal at *** percent, and *** at *** percent.[7]

The per-short ton value of U.S. producers' raw materials costs irregularly declined from 2015 to 2017, and was also *** in interim 2018 than in interim 2017.[8] Per-short ton raw material costs declined from $*** in 2015 to $*** for 2017. As a ratio to net sales, raw material costs accounted for *** percent, *** percent, and *** percent in 2015, 2016, and 2017, respectively.

Between the comparable interim periods, per-short ton raw material costs were lower at $*** in interim 2018 than $*** in interim 2017. As a ratio to net sales, raw material costs were *** percent in January-June 2017 and *** percent in January-June 2018.[9]

Following raw materials, the second largest cost component of COGS is other factory costs, ranging from *** percent of total COGS during the period for which data were collected. As a ratio to net sales, other factory costs ranged from *** percent in 2015 to *** percent in

[4] *** purchases *** from ***. As a share of total reported COGS in 2017, these inputs represented *** percent. ***. ***'s response to U.S. producers' questionnaire, questions III-7 and III-8.

[5] *** also reported other materials as part of its overall raw material costs, which included ***. These other raw materials accounted for *** percent of total raw material costs in 2017. ***'s response to U.S. producers' questionnaire, question III-9c.

[6] *** also reported other cladding material (***), which accounted for *** percent of total raw material costs in 2017. Ibid.

[7] *** reported *** as other base metals. Ibid. See also tables III-4 and III-5, presented earlier.

[8] *** reported that raw material prices were overall lower in full year 2017 than in 2015.

[9] *** reported that its "***". Email from ***.

January-June of 2018. The per short-ton value of U.S producers' other factory costs consistently increased from 2015 to 2017, and was also higher in interim 2018 than in interim 2017.[10]

Direct labor was the smallest component of COGS during the period for which data were requested, and moved within a relatively narrow range as a ratio to COGS and as a ratio to net sales.

Total selling, general, and administrative (SG&A) expenses irregularly increased from 2015 to 2017, and were also higher between the comparable interim periods. SG&A expenses also generally increased throughout the period on a per-unit basis and as a ratio to net sales. Although there was a decrease of *** percent from 2015 to 2016, an increase of *** percent occurred from 2016 to 2017. The drivers of the increase are related to larger *** incurred from 2016 to 2017.[11] SG&A expenses were also higher by *** percent between interim 2017 to interim 2018.

There was a large increase in other expenses from 2016 to 2017. This increase was due to *** incurring an *** in 2017. ***.

Profitability

As shown in table III-10, the U.S. producers' gross profit, operating income, and net income *** from 2015 to 2017, and were *** in January-June 2018 than in January-June 2017. The greater magnitude of decline in operating and net income reflect the effects of ***, as discussed previously.

Variance analysis

The variance analysis presented in table III-13 is based on the data in table III-10.[12] The analysis shows that the decrease in operating profitability from 2015 to 2017 is attributable to ***. The reduced operating profit in January-June 2018 compared to January-June 2017 is primarily attributable to ***.

---

[10] Although some of the increase in other factory costs was due to reduced net sales quantities, another driver affecting the increase was ***. ***'s subcontract cost increased by *** percent between 2015 and 2016, and declined by *** percent between 2016 and 2017. Between the comparable interim periods, these costs were higher by *** percent. Email from ***.

[11] *** incurred higher *** from 2016 to 2017 for a total increase of *** percent. The drivers of the higher selling expenses were increases in *** of *** percent and ***, which increased from *** in 2016 to *** in 2017. The main driver for the higher selling expenses in interim 2018 was ***, which increased from *** in interim 2017 to *** in interim 2018. Email from ***.

[12] 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 variance (in the case of the COGS and SG&A expense variance), and a volume variance. The sales or cost variance is calculated as the change in unit price or unit cost/expense times the new volume, while the volume variance is calculated as the change in volume times the old unit price or unit cost. 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.

Table III-13
Clad steel plate: Variance analysis for U.S. producers, between calendar years and between partial year periods

* * * * * * *

Capital expenditures and research and development expenses

Table III-14 presents capital expenditures and research and development ("R&D") expenses for U.S. producers. Capital expenditures increased from 2015 to 2017, and were also higher in interim 2018 than in interim 2017. According to ***, the reported capital expenditures are focused on "***."[13]

R&D expenses also increased from 2015 to 2017, and were higher between the comparable interim periods as well. *** reported that R&D expenses primarily reflect "***."[14]

Table III-14
Clad steel plate: Capital expenditures and research and development expenses for U.S. producers, 2015-17, January to June 2017, and January to June 2018

* * * * * * *

Assets and return on assets

Table III-15 presents data on the U.S. producer total assets as well as the ratio of operating income to total assets ("ROA"). The total value of net assets declined from 2015 to 2017, and the ROA decreased from *** percent in 2015 to *** percent in 2017.

Table III-15
Clad steel plate: Assets and return on assets for U.S. producers, 2015-2017

* * * * * * *

[13] ***'s response to U.S. producers' questionnaire, question III-13.

[14] Ibid.

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

U.S. IMPORTS

Overview

The Commission issued questionnaires to 29 firms that were listed as importers of record in proprietary Customs data for HTS statistical reporting number 7210.90.1000 during 2012-17,[1] as well as to firms that responded in the prior third review and to all U.S. producers of clad steel plate. Three firms provided data and information in response to the questionnaires,[2] while nine firms indicated that they had not imported product during the period for which data were collected. Based on official Commerce statistics for imports of clad steel plate, importers' questionnaire data accounted for *** percent of total U.S. imports during 2012-17.[3] There were no reported imports of clad steel plate from Japan from 2012 to 2017, nor do any subject imports appear in official Commerce statistics or proprietary Customs data. In light of the data coverage by the Commission's questionnaires, import data in this report are based on proprietary Customs data for HTS statistical reporting number 7210.90.1000 adjusted using questionnaire responses for clad steel plate.

Imports from subject and nonsubject countries

Table IV-1 and figure IV-1 present information on U.S. imports of clad steel plate in 2015 to 2017. There were no imports of clad steel plate from Japan during that time. Over that same period, nonsubject imports increased more than *** percent by quantity and more than *** percent by value.[4] Nonsubject imports were also approximately *** percent higher by quantity and almost *** percent higher by value during January to June 2018 as compared with January to June 2017. The unit value of nonsubject imports fluctuated over the period. According to proprietary Customs data, the top sources of nonsubject imports were ***. Responding U.S. importers reported importing clad steel plate from Austria, France, and Germany.

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[1] HTS statistical reporting number 7210.90.1000 is a basket category and contains out-of-scope merchandise including stainless steel products.

[2] *** was the only responding firm to report import data during 2015-17. *** reported import data prior to 2015.

[3] The import coverage figure is derived using proprietary Customs data. According to proprietary Customs data, U.S. imports during 2012-17 totaled *** short tons. After removing data for companies which certified that they did not import clad steel plate, the three responding U.S. importers accounted for *** percent of the remaining total. However, these percentages may be understated due to the presence of out-of-scope merchandise in the proprietary Customs data. Email from ***.

[4] Based on official import statistics, as adjusted, and data submitted by ***, the quantity of its nonsubject imports increased by *** percent from 2015 to 2016 before decreasing by *** percent from 2016 to 2017; the value of its nonsubject imports increased by *** from 2015 to 2016 before decreasing by *** percent from 2016 to 2017.

Table IV-1
Clad steel plate: U.S. imports by source, 2015-17, January to June 2017, January to June 2018

* * * * * * *

Figure IV-1
Clad steel plate: U.S. import volumes and average unit values by source, 2015-17, January to June 2017, January to June 2018

* * * * * * *

Table IV-2 presents information on U.S. producers' and U.S. importers' U.S. shipments of clad steel plate by cladding material.

Table IV-2
Clad steel plate: U.S. producers' and U.S. importers' U.S. shipments by cladding material, 2017

* * * * * * *

Table IV-3 presents information on U.S. producers' and U.S. importers' U.S. shipments of clad steel plate by base metal.

Table IV-3
Clad steel plate: U.S. producers' and U.S. importers' U.S. shipments by base metal, 2017

* * * * * * *

Table IV-4 presents information on U.S. producers' and U.S. importers' U.S. shipments of clad steel plate by plate thickness.

Table IV-4
Clad steel plate: U.S. producers' and U.S. importers' U.S. shipments by plate thickness, 2017

* * * * * * *

U.S. IMPORTERS' IMPORTS SUBSEQUENT TO JUNE 30, 2018

The Commission requested importers to indicate whether they had imported or arranged for the importation of clad steel plate for delivery after June 30, 2018. No importers reported arranging for the importation of clad steel plate after this date.

U.S. IMPORTERS' INVENTORIES

No importers reported any end-of-period inventories of imports of clad steel plate during 2015-17.

THE INDUSTRY IN JAPAN

Overview

The Commission issued questionnaires to five firms that were identified as producers of clad steel plate in Japan during the third review. Two producers in Japan submitted usable questionnaire responses. A third Japanese producer, ***, contacted the Commission but did not submit a questionnaire response.[5] Table IV-5 presents all responding Japanese producers of clad steel plate along with their volume and share of reported production, exports, and total shipments.

Table IV-5
Clad steel plate: Summary data for producers in Japan, 2017

* * * * * * *

Changes in operations

No producers or exporters in Japan reported any changes in operations since January 1, 2012.

Operations on clad steel plate

Table IV-6 presents information on the clad steel plate operations of the responding producers and exporters in Japan. During 2015-17, capacity remained constant while production decreased by *** percent, resulting in a decline in capacity utilization of *** percentage points. Production was *** percent higher in January to June 2018 as compared with January to June 2017, resulting in capacity utilization reaching *** percent in 2018, however during 2015-17, total shipments decreased by *** percent, but were *** percent higher in January to June 2018 as compared with January to June 2017. Home market shipments, which represented approximately *** percent of total shipments, fluctuated during 2015-17, while exports to the European Union (*** percent of total shipments) increased and exports to Asia (*** percent of total shipments) and all other markets (*** percent of total shipments) decreased over the same period. There were no reported exports to the United States.

Email from ***.

Table IV-6
Clad steel plate: Data on industry in Japan, 2015-17, January to June 2017, January to June 2018

* * * * * * *

Table IV-7 presents information on Japanese producers' total shipments of clad steel plate by cladding material. Table IV-8 presents information on Japanese producers' total shipments of clad steel plate by base metal. Table IV-9 presents information on Japanese producers' total shipments of clad steel plate by plate thickness. Similar to U.S. producers, with the exception of ***, Japanese producers ship all types of clad steel plate. However, whereas U.S. producers' shipments were ***, Japanese producers' shipments ***.

Table IV-7
Clad steel plate: Japanese producers' total shipments by cladding material, 2017

* * * * * * *

Table IV-8
Clad steel plate: Japanese producers' total shipments by base metal, 2017

* * * * * * *

Table IV-9
Clad steel plate: Japanese producers' total shipments by plate thickness, 2017

* * * * * * *

Alternative products

*** produced other products on the same equipment and machinery used to produce clad steel plate.

Exports

According to GTA, the leading export markets for cladded metal products from Japan (table IV-10) during 2017 were China (accounting for 22.1 percent), followed by Korea (13.1 percent), and Thailand (8.8 percent). Total exports from Japan increased by 17.8 percent during 2015-17.

Table IV-10
Cladded metal products: Exports from Japan by destination market, 2015-17

Destination market	Calendar year		
	2015	2016	2017
	Quantity (short tons)		
Exports from Japan to the United States	11,138	16,423	27,172
Exports from Japan to other major destination markets.--			
China	14,151	16,146	16,262
South Korea	16,521	16,136	9,695
Thailand	5,784	6,382	6,458
Singapore	587	2,313	2,954
India	382	1,843	2,276
Indonesia	1,816	1,621	1,948
Saudi Arabia	90	1,077	1,770
Hong Kong	261	1,157	1,011
All other destination markets	7,286	8,458	4,204
Total exports from Japan	58,017	71,555	73,750
	Value (1,000 dollars)		
Exports from Japan to the United States	14,430	19,168	37,034
Exports from Japan to other major destination markets.--			
China	27,014	23,982	28,934
South Korea	45,948	37,668	24,406
Thailand	10,223	8,411	8,879
Singapore	957	3,321	4,711
India	829	5,291	4,944
Indonesia	3,295	2,614	3,383
Saudi Arabia	256	2,171	3,839
Hong Kong	866	2,666	1,766
All other destination markets	16,152	19,755	7,432
Total exports from Japan	119,971	125,047	125,325

Table continued on next page.

Table IV-10—Continued
Cladded metal products: Exports from Japan by destination market, 2015-17

Destination market	Calendar year		
	2015	2016	2017
	Unit value (dollars per short ton)		
Exports from Japan to the United States	1,296	1,167	1,363
Exports from Japan to other major destination markets.--			
China	1,909	1,485	1,779
South Korea	2,781	2,334	2,517
Thailand	1,767	1,318	1,375
Singapore	1,629	1,436	1,595
India	2,169	2,871	2,172
Indonesia	1,815	1,613	1,737
Saudi Arabia	2,851	2,015	2,169
Hong Kong	3,322	2,305	1,747
All other destination markets	2,217	2,336	1,768
Total exports from Japan	2,068	1,748	1,699
	Share of quantity (percent)		
Exports from Japan to the United States	19.2	23.0	36.8
Exports from Japan to other major destination markets.--			
China	24.4	22.6	22.1
South Korea	28.5	22.6	13.1
Thailand	10.0	8.9	8.8
Singapore	1.0	3.2	4.0
India	0.7	2.6	3.1
Indonesia	3.1	2.3	2.6
Saudi Arabia	0.2	1.5	2.4
Hong Kong	0.4	1.6	1.4
All other destination markets	12.6	11.8	5.7
Total exports from Japan	100.0	100.0	100.0

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

Source: Official exports statistics under HTS subheading 7210.90 as reported by Japanese Ministry of Finance in the IHS/GTA database, accessed September 6, 2018.

ANTIDUMPING OR COUNTERVAILING DUTY ORDERS IN THIRD-COUNTRY MARKETS

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

GLOBAL MARKET[6]

Supply

Table IV-11 presents the largest global exporters of cladded metal products, a somewhat broader product definition than clad steel plate. The largest exporters by quantity in 2017 were (in descending order): China, India, Japan, Austria, Italy, and the United States. China's share of global cladded metal products was 19.7 percent. India was the second largest exporter, accounting for 16.9 percent of global exports. Total global exports decreased by 6.8 percent from 2015 to 2017.

[6] Due to the nature of clad steel plate, worldwide information regarding production capacity, consumption, and prices is unavailable.

Table IV-11
Cladded metal products: Global exports by destination market, 2015-17

Exporter	Calendar year		
	2015	2016	2017
	Quantity (short tons)		
United States	33,851	34,439	30,266
Japan	58,017	71,555	73,750
All other major exporters.-- China	112,606	102,061	116,146
India	87,469	80,008	99,790
Austria	50,151	28,689	47,677
Italy	30,955	31,502	31,798
Germany	25,685	27,848	27,097
South Korea	29,983	27,463	21,664
Spain	22,429	18,784	19,885
Belgium	46,269	42,810	14,751
All other destination markets	134,778	129,017	106,271
Total global exports	632,193	594,175	589,094
	Value (1,000 dollars)		
United States	87,282	87,890	82,658
Japan	119,971	125,047	125,325
All other major exporters.-- China	101,091	90,152	110,897
India	65,864	54,434	80,171
Austria	325,766	105,265	166,541
Italy	41,977	39,772	44,313
Germany	53,907	57,273	61,782
South Korea	26,980	22,923	24,948
Spain	27,246	26,655	30,198
Belgium	50,315	42,570	33,015
All other destination markets	294,510	218,980	175,934
Total global exports	1,194,909	870,961	935,783

Table continued on next page.

Table IV-11—Continued
Cladded metal products: Global exports by destination market, 2015-17

Exporter	Calendar year		
	2015	2016	2017
	Unit value (dollars per short ton)		
United States	2,578	2,552	2,731
Japan	2,068	1,748	1,699
All other major exporters.-- China	898	883	955
India	753	680	803
Austria	6,496	3,669	3,493
Italy	1,356	1,263	1,394
Germany	2,099	2,057	2,280
South Korea	900	835	1,152
Spain	1,215	1,419	1,519
Belgium	1,087	994	2,238
All other destination markets	2,185	1,697	1,656
Total global exports	1,890	1,466	1,589
	Share of quantity (percent)		
United States	5.4	5.8	5.1
Japan	9.2	12.0	12.5
All other major exporters.-- China	17.8	17.2	19.7
India	13.8	13.5	16.9
Austria	7.9	4.8	8.1
Italy	4.9	5.3	5.4
Germany	4.1	4.7	4.6
South Korea	4.7	4.6	3.7
Spain	3.5	3.2	3.4
Belgium	7.3	7.2	2.5
All other destination markets	21.3	21.7	18.0
Total global exports	100.0	100.0	100.0

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

Source: Official global exports statistics under HTS subheading 7210.90, as reported by various national statistical authorities in the IHS/GTA database, accessed September 6, 2018.

PART V: PRICING DATA

FACTORS AFFECTING PRICES

Raw material costs

The two main inputs in the production of clad steel plate are the steel backer plate and the cladding material. The backer plate is typically made of cut-to-length ("CTL") steel plate, while the cladding material is typically made of stainless steel. Raw materials make up the majority of the total cost of clad steel plate. Overall, U.S. producers' raw materials costs as a share of the cost of goods sold (COGS) decreased from *** percent in 2015 to *** percent in 2017, and was roughly 3 percentage points lower in January-June 2018 compared with the same period in 2017.

As shown in figure V-1, the prices of these raw material inputs showed similar trends during 2015-17, with the price of CTL plate showing greater fluctuation (particularly during 2016) than types 304 and 316 of stainless steel bar, which tended to follow one another more closely. In general, the prices of CTL plate, 304 stainless steel bar, and 316 stainless steel bar all decreased throughout 2015, then increased *** during 2016 and 2017. Compared with January 2015, the prices of all three inputs were lower in December 2017. Between December 2017 and June 2018, the cost of CTL plate increased more sharply than that of 304 and 316 stainless steel bar, such that the prices of 304 and 316 stainless steel bar were still below January 2015 levels (by ***, respectively), but the price of CTL plate was *** higher.

Figure V-1
Raw materials: Indexed prices for CTL steel plate (carbon grade), stainless steel 304 bar, and stainless steel 316 bar, f.o.b., by month, January 2015-June 2018

* * * * * * *

As shown in table V-1, firms' responses regarding raw material cost trends since 2012 were mixed, though a plurality of responding firms (***) reported that they fluctuated. *** firms (*** and two purchasers) reported that raw material prices had increased, *** reported that they had decreased, and one purchaser reported that they had not changed.

Table V-1
Clad steel plate: Firm's responses regarding changes in raw material prices since 2012, and anticipated changes

	Increased	No change	Decreased	Fluctuated
Changes since 2012				
U.S. producers	***	***	***	***
Importers	***	***	***	***
Purchasers	2	1	---	2
Foreign producers	***	***	***	***
Anticipated changes				
U.S. producers	***	***	***	***
Importers	***	***	***	***
Purchasers	1	1	---	2
Foreign producers	***	***	***	***

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

In explaining these trends, *** stated that its selling prices for clad steel plate are roughly proportional to the prices of its raw materials. *** reported that "tariff issues" increased raw material prices beginning in 2018. One purchaser also stated that raw material prices rise at the rate of inflation, and the other stated that the Section 232 steel tariffs have increased the price "greatly."[1]

U.S. inland transportation costs

*** responding U.S. producers reported that they typically arrange transportation to their customers, with U.S. inland transportation costs ranging from 5 to 7 percent.[2]

PRICING PRACTICES

Pricing methods

As shown in table V-2, *** responding U.S. producers and all three responding importers of nonsubject product reported using transaction-by-transaction negotiations to set prices. ***.

[1] For more on the Section 232 investigations on imports of steel products tariffs, please refer to Part I, "Section 232 investigations," and Part II, "U.S. Supply" (p. II-4) and "Factors effecting purchasing decisions" (p. II-18).

[2] ***.

Table V-2
Clad steel plate: U.S. producers' and importers' reported price setting methods, by number of responding firms

Method	U.S. producers	Nonsubject importers
Transaction-by-transaction	***	3
Contract	***	---
Set price list	***	---
Other	***	---
Responding firms	3	3

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

As shown in table V-3, U.S. producers reported selling *** in the spot market in 2017. *** reported selling *** product ***, while *** reported *** product ***.[3]

Table V-3
Clad steel plate: U.S. producers' and importers' shares of U.S. commercial shipments by type of sale, 2017

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

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

Two purchasers reported that they purchase product monthly, one purchases quarterly, and four reported purchasing as needed based on contracts/projects. One firm reported that it "rarely" purchased clad steel plate. All eight responding purchasers reported that they did not expect their purchasing patterns to change in the next two years. Most (six of eight) purchasers reported contacting only one supplier before making a purchase, with the others contacting up to two suppliers.

Seven of the eight responding purchasers indicated that their purchases usually involve negotiations between them and their supplier, with most of the responding firms (five of these seven) reporting that they negotiate both price and delivery. In addition to price and delivery, one firm also reported discussing quality, and another reported discussing specifications. No firm reported whether competing prices are discussed during these negotiations.

Pricing structure

Purchasers were asked whether their purchase prices for clad steel plate were indexed to raw material prices, including base steel, cladding material, and/or other raw materials.

[3] ***.

Three of four responding firms indicated that their contract purchases from domestic producers were indexed to raw material prices, and five of six reported that their spot purchases from domestic producers were indexed to raw material prices.[4] One firm stated that the raw material prices are provided by the cladding supplier, and another firm elaborated that titanium, zirconium, and tantalum per ASTM B898-11 are the specific raw materials to which its clad steel plate prices are indexed. One firm also stated that the purchase prices in effect at the time of shipment usually apply to base metals, and another stated that pricing is provided based on current raw material pricing at the time of an order.

Purchasers were also asked whether their purchase prices include the use of surcharges for particular raw materials or other inputs. Three of four responding firms indicated that their contract purchases from domestic producers included surcharges, and three of four also reported that their spot purchases from domestic producers included surcharges. One firm stated that surcharges for stainless steel "aren't ignored" by those quoting a price, while another stated that surcharges are sometimes passed through by the raw material supplier(s) and another stated that it typically sees a surcharge for nickel, which is determined by the market price at the time of purchase.

Sales terms and discounts

*** responding U.S. producers reported typically quoting prices on a delivered basis, while *** reported quoting prices on an f.o.b. basis. *** reported any specific discount policy. *** responding importers reported no specific discount policy for their sales of nonsubject product. *** responding U.S. producers reporting sales terms of net 30 days.

Price leadership

All four of the responding purchasers named NobelClad as the industry price leader for clad steel plate.

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 clad steel plate products shipped to unrelated U.S. customers during January 2015-June 2018.

[4] NobelClad reported that ***. NobelClad's posthearing brief, Answers to Commissioners' Questions, pp. 8-9.

Product 1.--Clad plate, 0.50" through 1" in thickness and 48" through 120" in width, with ASTM A516 grade 70 backer and 304L cladding 0.115" through 0.135" thick.

Product 2.--Clad plate, over 1" through 2" in thickness and 48" through 120" in width, with ASTM A516 grade 70 backer and 304L cladding 0.115" through 0.135" thick.

Product 3.--Clad plate, over 2" through 3" in thickness and 48" through 120" in width, with ASTM A516 grade 70 backer and 304L cladding 0.115" through 0.135" thick.

Product 4.--Clad plate, 0.50" through 1" in thickness and 48" through 120" in width, with ASTM A516 grade 70 backer and Type 317L cladding 0.115" through 0.135" thick.

Product 5.--Clad plate, 0.50" through 1" in thickness and 48" through 120" in width, with ASTM A516 grade 70 backer and UNS N10276 cladding 0.115" through 0.135" thick.

*** provided usable pricing data for sales of the requested products, although *** did not report pricing for all products for all quarters.[5] [6] The pricing data reported *** accounted for approximately *** percent of U.S. producers' reported shipments of clad steel plate in 2017.

Price data for products 1-5 *** are presented in table V-4 and figure V-2.

Table V-4
Clad steel plate: Weighted-average f.o.b. prices and quantities of domestic products 1-5,[1] by quarter, January 2015-June 2018

* * * * * * *

Figure V-2
Clad steel plate: Weighted-average f.o.b. prices and quantities of domestic products 1-5, by quarter, January 2015-June 2018

* * * * * * *

[5] Per-unit pricing data are calculated from total quantity and total value data provided by ***. The precision and variation of these figures may be affected by rounding, limited quantities, and firm estimates.

[6] No firm reported any imports of clad steel plate from Japan during January 2015-June 2018, so no importer price data was available.

Price trends

In general, domestic prices during January 2015-June 2018 increased for *** and decreased for ***. Table V-5 summarizes the price trends by product. As shown in the table, *** price increases ranged from *** percent, while *** price decreases ranged from *** percent.

Table V-5
Clad steel plate: Summary of weighted-average f.o.b. prices for products 1-5 from the United States

* * * * * * *

Price comparisons

Since no subject price data was reported during January 2015-June 2018, no comparisons between Japanese and U.S. product is available for this time period. In the original investigation, the Commission collected bid data, and therefore no information on the level of over/underselling was presented.[7] In the first and second reviews, the investigations were expedited, so no price data were collected. In the third review, price data were collected, but there were no direct price comparisons between U.S. and Japanese product. In the single instance where U.S. prices and the import purchase costs for Japanese product were available in the same quarter, the import purchase costs for the Japanese product were *** percent below U.S. prices.

Purchasers' perceptions of relative price trends

Purchasers were asked how the prices of clad steel plate from the United States had changed relative to the prices of product from Japan since January 2012. Only one firm responded, indicating that U.S. and Japanese prices had changed by the same amount, but that U.S.-produced product was typically higher-priced than Japanese product.

[7] In the original investigation, purchasers provided 51 instances of bid data, 13 of which had bids for both U.S. and Japanese product. In seven of these instances, the Japanese bids were lower than the U.S. bids by between *** percent, and the importer offering Japanese product won all but two of the bids. In the remaining six instances, the bids by importers of Japanese product were between *** and *** percent higher than the U.S. bids, and the U.S. firms won all six of these bids. *Investigation No. 731-TA-739 (Final): Clad Steel Plate from Japan—Staff Report*, INV-T-044, June 3, 1996, p. V-11.

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
83 FR 148 January 2, 2018	*Clad Steel Plate From Japan; Institution of a Five-Year Review*	https://www.federalregister.gov/d/2017-28237
83 FR 17446 April 19, 2018	*Clad Steel Plate From Japan; Notice of Commission Determination To Conduct a Full Five-Year Review*	https://www.federalregister.gov/d/2018-08160
83 FR 22008 May 11, 2018	*Clad Steel Plate From Japan: Final Results of the Expedited Fourth Sunset Review of the Antidumpting Duty Order*	https://www.federalregister.gov/d/2018-10069/
83 FR 33250 July 17, 2018	*Clad Steel Plate From Japan; Scheduling of a Full Five-Year Review*	https://www.federalregister.gov/d/2018-15221
83 FR 53295 October 22, 2018	*Clad Steel Plate From Japan; Cancellation of Hearing for Full Five-Year Review*	https://www.federalregister.gov/d/2018-22921/

APPENDIX B

INFORMATION REGARDING THE COMMISSION'S PROPOSED HEARING

The hearing scheduled for Clad Steel Plate from Japan on October 18, 2018 was canceled.[1] The domestic interested party submitted the sole prehearing brief, and a request to appear at the Commission hearing. No other party entered an appearance in this review. Subsequently, noting their sole request to appear at the hearing, counsel for the domestic interested party filed a request to cancel the hearing. In lieu of a hearing, the domestic interested party responded to written questions submitted by the Commission, as part of its post-hearing brief submission.

[1] *Clad Steel Plate from Japan; Cancellation of Hearing for Full Five-Year Review*, 83 FR 53295, October 22, 2018.

APPENDIX C

SUMMARY DATA

Table C-1
Clad Steel Plate: Summary data concerning the U.S. market, 2015-17, January to June 2017, and January to June 2018

(Quantity=short tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short ton; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	Calendar year			January to June		Comparison years			Jan-Jun
	2015	2016	2017	2017	2018	2015-17	2015-16	2016-17	2017-18
U.S. consumption quantity:									
Amount	***	***	***	***	***	***	***	***	***
Producers' share (fn1)	***	***	***	***	***	***	***	***	***
Importers' share (fn1):									
Japan	***	***	***	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***	***	***	***
All import sources	***	***	***	***	***	***	***	***	***
U.S. consumption value:									
Amount	***	***	***	***	***	***	***	***	***
Producers' share (fn1)	***	***	***	***	***	***	***	***	***
Importers' share (fn1):									
Japan	***	***	***	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***	***	***	***
All import sources	***	***	***	***	***	***	***	***	***
U.S. importers' U.S. imports from:									
Japan:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Nonsubject sources:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
All import sources:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
U.S. producers':									
Average capacity quantity	***	***	***	***	***	***	***	***	***
Production quantity	***	***	***	***	***	***	***	***	***
Capacity utilization (fn1)	***	***	***	***	***	***	***	***	***
U.S. shipments:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Export shipments:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Inventories/total shipments (fn1)	***	***	***	***	***	***	***	***	***
Production workers	***	***	***	***	***	***	***	***	***
Hours worked (1,000s)	***	***	***	***	***	***	***	***	***
Wages paid ($1,000)	***	***	***	***	***	***	***	***	***
Hourly wages	***	***	***	***	***	***	***	***	***
Productivity (short tons per 1,000 hours) (fn2)	***	***	***	***	***	***	***	***	***
Unit labor costs (dollars per short ton) (fn2)	***	***	***	***	***	***	***	***	***
Net sales:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Cost of goods sold (COGS)	***	***	***	***	***	***	***	***	***
Gross profit of (loss)	***	***	***	***	***	***	***	***	***
SG&A expenses	***	***	***	***	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***	***	***	***	***
Net income or (loss)	***	***	***	***	***	***	***	***	***
Capital expenditures	***	***	***	***	***	***	***	***	***
Unit COGS	***	***	***	***	***	***	***	***	***
Unit SG&A expenses	***	***	***	***	***	***	***	***	***
Unit operating income or (loss)	***	***	***	***	***	***	***	***	***
Unit net income or (loss)	***	***	***	***	***	***	***	***	***
COGS/sales (fn1)	***	***	***	***	***	***	***	***	***
Operating income or (loss)/sales (fn1)	***	***	***	***	***	***	***	***	***
Net income or (loss)/sales (fn1)	***	***	***	***	***	***	***	***	***

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

fn1.--Reported data are in percent and period changes are in percentage points.
fn2.--Productivity and unit labor cost data are based on the production quantities reported by ***, as it was the only firm to provide usable employment data.

Source: Compiled from data submitted in response to Commission questionnaires, and proprietary customs records using HTS statistical reporting number 7210.90.1000, accessed August 28, 2018.

APPENDIX D

COMMENTS ON THE EFFECTS OF THE ORDERS AND THE LIKELY EFFECTS OF REVOCATION

Table D-1
Clad steel plate: U.S. producers', U.S. importers', and foreign producers' narrative responses to the impact of the order and the likely effect of revocation

* * * * * * *

Table D-1—Continued
Clad steel plate: U.S. producers', U.S. importers', and foreign producers' narrative responses to the impact of the order and the likely effect of revocation

* * * * * * *

APPENDIX E

ADJUSTED OFFICIAL U.S. IMPORT STATISTICS

Table E-1
Clad steel plate: U.S. imports, by source, 2012-17, January to June 2017, and January to June 2018

Item	Calendar year						January to June	
	2012	2013	2014	2015	2016	2017	2017	2018
	Quantity (short tons)							
U.S. imports from.--								
Japan (subject)	---	---	---	---	---	---	---	---
France	7	17	49	38	---	175	---	---
Australia	---	---	---	---	21	172	88	339
Canada	30	21	56	17	19	37	5	18
China	---	---	45	14	4	25	---	---
Taiwan	73	31	---	---	35	21	21	---
Netherlands	---	---	---	---	1	3	---	1
Germany	1	---	---	---	---	2	0	75
All other nonsubject sources	335	143	50	2	20	---	---	74
Nonsubject sources	447	212	199	70	100	435	114	507
All import sources	447	212	199	70	100	435	114	507
	Value (1,000 dollars)							
U.S. imports from.--								
Japan (subject)	---	---	---	---	---	---	---	---
France	41	90	232	187	---	897	---	---
Australia	---	---	---	---	91	690	346	1,376
Canada	133	156	235	73	139	182	32	81
China	---	---	151	43	12	194	---	---
Taiwan	255	102	---	---	105	62	62	---
Netherlands	---	---	---	---	15	14	---	21
Germany	7	---	---	---	---	8	2	361
All other nonsubject sources	1,257	385	172	9	106	---	---	90
Nonsubject sources	1,693	733	789	312	468	2,047	443	1,930
All import sources	1,693	733	789	312	468	2,047	443	1,930

Table continued on next page.

Table E-1–Continued
Clad steel plate: U.S. imports, by source, 2012-17, January to June 2017, and January to June 2018

Item	Calendar year						January to June	
	2012	2013	2014	2015	2016	2017	2017	2018
	Unit value (dollars per short ton)							
U.S. imports from.--								
Japan (subject)	---	---	---	---	---	---	---	---
France	5,721	5,268	4,771	4,936	---	5,127	---	---
Australia	---	---	---	---	4,350	4,002	3,958	4,063
Canada	4,391	7,586	4,240	4,340	7,454	4,909	6,233	4,608
China	---	---	3,339	3,144	3,236	7,807	---	---
Taiwan	3,474	3,251	---	---	2,989	2,960	2,960	---
Netherlands	---	---	---	---	12,148	4,894	---	20,807
Germany	5,735	---	---	---	---	4,019	5,183	4,796
All other nonsubject sources	3,754	2,698	3,470	5,522	5,237	---	---	1,210
Nonsubject sources	3,788	3,461	3,973	4,454	4,686	4,705	3,881	3,806
All import sources	3,788	3,461	3,973	4,454	4,686	4,705	3,881	3,806
	Share of quantity (percent)							
U.S. imports from.--								
Japan (subject)	---	---	---	---	---	---	---	---
France	1.6	8.1	24.4	54.0	---	40.2	---	---
Australia	---	---	---	---	20.9	39.6	76.8	66.8
Canada	6.8	9.7	27.9	24.0	18.6	8.5	4.5	3.5
China	---	---	22.7	19.6	3.8	5.7	---	---
Taiwan	16.4	14.8	---	---	35.2	4.8	18.4	---
Netherlands	---	---	---	---	1.3	0.6	---	0.2
Germany	0.3	---	---	---	---	0.4	0.4	14.9
All other nonsubject sources	74.9	67.5	24.9	2.4	20.3	---	---	14.7
Nonsubject sources	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
All import sources	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table continued on next page.

Table E-1–Continued
Clad steel plate: U.S. imports, by source, 2012-17, January to June 2017, and January to June 2018

Item	Calendar year						January to June	
	2012	2013	2014	2015	2016	2017	2017	2018
	Share of value (percent)							
U.S. imports from.--								
Japan (subject)	---	---	---	---	---	---	---	---
France	2.4	12.3	29.3	59.8	---	43.8	---	---
Australia	---	---	---	---	19.4	33.7	78.3	71.3
Canada	7.8	21.2	29.8	23.4	29.6	8.9	7.2	4.2
China	---	---	19.1	13.9	2.6	9.5	---	---
Taiwan	15.1	13.9	---	---	22.4	3.0	14.0	---
Netherlands	---	---	---	---	3.3	0.7	---	1.1
Germany	0.4	---	---	---	---	0.4	0.5	18.7
All other nonsubject sources	74.3	52.6	21.8	2.9	22.7	---	---	4.7
Nonsubject sources	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
All import sources	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

Source: Official U.S. import statistics using HTS statistical reporting number 7210.90.1000, accessed August 28, 2018. Figures were adjusted based on responses to U.S. importers' questionnaires.