Corrosion-Resistant Carbon Steel Flat Products from Germany and Korea

Investigation Nos. 701-TA-350 and 731-TA-616 and 618 (Third Review)

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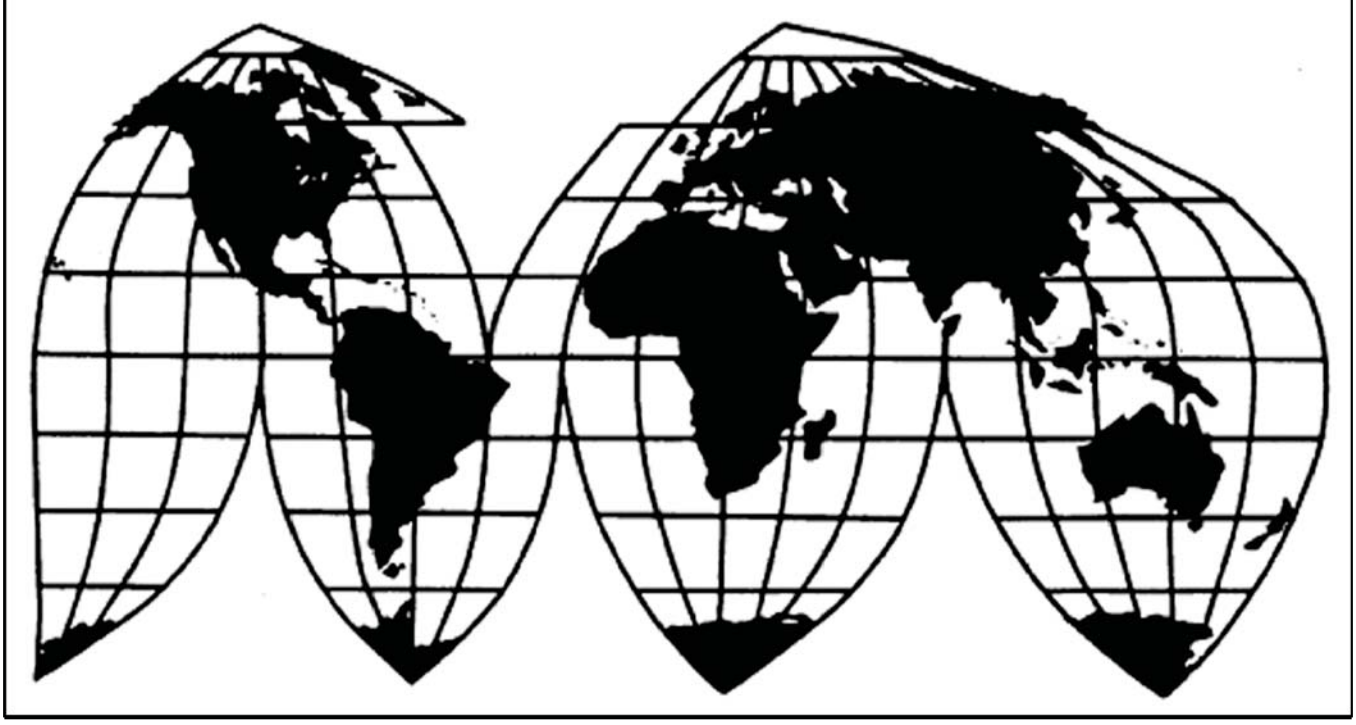
U.S. International Trade Commission



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UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 701-TA-350 and 731-TA-616 and 618 (Third Review)

CORROSION-RESISTANT CARBON STEEL FLAT PRODUCTS FROM GERMANY AND KOREA

DETERMINATIONS

On the basis of the record[1] developed in the subject five-year reviews, the United States International Trade Commission (Commission) determines, pursuant to section 751(c) of the Tariff Act of 1930 (19 U.S.C. § 1675(c)), that revocation of the countervailing duty order on corrosion-resistant carbon steel flat products from Korea and the antidumping duty orders on corrosion-resistant carbon steel flat products from Germany and Korea would not be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

BACKGROUND

The Commission instituted these reviews on January 3, 2012 (77 FR 301, January 4, 2012) and determined on April 9, 2012 that it would conduct full reviews (77 FR 24221, April 23, 2012). Notice of the scheduling of the Commission's reviews 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 May 30, 2012 (77 FR 31877) (schedule revised effective November 2, 2012 (77 FR 67395, November 9, 2012)). The hearing was held in Washington, DC, on January 9, 2013, and all persons who requested the opportunity were permitted to appear in person or by counsel.

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

VIEWS OF THE COMMISSION

Based on the record in these five-year reviews, we determine under section 751(c) of the Tariff Act of 1930, as amended ("the Act"), that revocation of the antidumping duty orders on subject imports of corrosion-resistant carbon steel flat products ("corrosion-resistant steel") from Germany and Korea and the countervailing duty order on subject imports of corrosion-resistant steel from Korea would not be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

I. BACKGROUND

In August 1993, the Commission found that an industry in the United States was materially injured by reason of subsidized imports of corrosion-resistant steel from France, Germany, and Korea and that an industry in the United States was injured or threatened with material injury by reason of imports of corrosion-resistant steel products from Australia, Canada, France, Germany, Japan, and Korea that were sold at less than fair value ("LTFV").[1] The majority of Commissioners cumulated subject imports from all six countries based on a reasonable overlap of competition.[2] The Commission reached negative determinations with respect to corrosion-resistant steel from Brazil, Mexico, New Zealand, and Sweden.[3] Commerce published the countervailing duty orders on August 17, 1993[4] and the antidumping duty orders on August 19, 1993.[5]

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[1] Certain Flat-Rolled Carbon Steel Products from Argentina, Australia, 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-319-332, 334, 336-342, 344, and 347-353, 731-TA-573-579, 581-592, 594-597, 599-609, and 612-619 (Final), USITC Pub. 2664 at 2-5 (Aug. 1993) ("Original Determination"). The original investigations that gave rise to the countervailing duty and antidumping duty orders at issue in these reviews covered four general categories of carbon steel flat-rolled products: hot-rolled steel, cut-to-length steel plate ("CTL plate"), corrosion-resistant steel, and cold-rolled steel. In the original investigations, the Commission made negative determinations regarding imports of hot-rolled steel as well as corrosion-resistant steel from Brazil, Mexico, New Zealand, and Sweden and CTL plate from France, Italy, and Korea. Original Determination at 2-5. Commerce revoked the countervailing duty order on corrosion-resistant steel from Germany in 2004. Confidential Report ("CR")/Public Report ("PR") at Table I-4. In the first reviews, the Commission made negative determinations with respect to all of the cold-rolled steel orders under review and the order on CTL plate from Canada. Certain Carbon Steel Products from Australia, Belgium, Brazil, Canada, Finland, France, Germany, Japan, Korea, Mexico, Netherlands, Poland, Romania, Spain, Sweden, Taiwan, and the United Kingdom, Inv. Nos. AA 1921-197, 701-TA-231, 319-320, 325-328, 348, and 350, and 731-TA-573, 574, 576, 578, 582-587, 612, and 614-618, USITC Pub. 3364, at 4-5 (Review) (Nov. 2000) ("First Reviews"). In the second reviews, the Commission made negative determinations with regard to the rest of the CTL plate orders under review as well as the orders on corrosion-resistant steel from Australia, Canada, France, and Japan. Certain Carbon Steel Products from Australia, Belgium, Brazil, Canada, Finland, France, Germany, Japan, Korea, Mexico, Poland, Romania, Spain, Sweden, Taiwan, and the United Kingdom, Inv. Nos. AA 1921-197, 701-TA-231, 319-320, 325-327, 348, and 350, and 731-TA-573, 574, 576, 578, 582-587, 612, and 614-618 (Second Review), USITC Pub. 3364 at 3 (Jan. 2007) ("Second Reviews").

[2] Original Determination, USITC Pub. 2664, at 172-187.

[3] Original Determination, USITC Pub. 2664, at 2.

[4] 58 Fed. Reg. 43752, 43759 (Aug. 17, 1993).

[5] 58 Fed. Reg. 44159, 44161, 44162, 44163, 44169, 44170 (Aug. 19, 1993). The U.S. Court of International Trade ("CIT") affirmed the Commission's affirmative material injury determinations with respect to corrosion-resistant steel from Australia, Canada, France, Germany, Japan, and Korea and its negative determinations with respect to corrosion-resistant steel from Brazil, Mexico, New Zealand, and Sweden. Nippon Steel Corp. v. United States, 19 CIT 450 (1995). The CIT remanded one Commissioner's separate determination with respect to

In November 2000, the Commission completed its first five-year reviews of the orders on corrosion-resistant steel.[6] It found that revocation of the countervailing duty and/or antidumping duty orders on corrosion-resistant steel from the six subject countries would be likely to lead to continuation or recurrence of material injury to a U.S. industry within a reasonably foreseeable time. The Commission exercised its discretion to cumulate the subject imports from all six countries.[7]

In January 2007, the Commission conducted its second five-year reviews of the corrosion-resistant steel orders and found that revocation of the countervailing duty and/or antidumping duty orders on corrosion-resistant steel from Germany and Korea would be likely to lead to continuation or recurrence of material injury to a U.S. industry within a reasonably foreseeable time.[8] The Commission also found that revocation of the countervailing duty and/or antidumping duty orders on corrosion-resistant steel from Australia, Canada, France, and Japan would not be likely to lead to continuation or recurrence of material injury to a U.S. industry within a reasonably foreseeable time.[9]

The Commission instituted these third five-year reviews of the orders on corrosion-resistant steel from Germany and Korea on January 3, 2012.[10] The Commission found the domestic interested party group response to the notice of institution to be adequate and also found the respondent interested party group responses to be adequate with respect to each of the subject countries. Accordingly, on April 9, 2012, the Commission determined to conduct full reviews of the orders.[11]

Five domestic interested parties appeared in support of continuation of the orders: AK Steel Corp. ("AK Steel"), ArcelorMittal USA ("AMUSA"), Nucor Corp. ("Nucor"), Steel Dynamics, Inc. ("SDI"), and United States Steel Corp. ("U.S. Steel") (collectively "Domestic Producers"). Domestic Producers participated in the hearing and filed separate prehearing and posthearing briefs. In terms of respondent interested parties, Salzgitter Flachstahl GmbH ("Salzgitter"); ThyssenKrupp Steel Europe AG ("ThyssenKrupp"), ThyssenKrupp Steel North America, Inc. ("TKSNA"), and ThyssenKrupp Steel USA,

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application of the negligibility exception to imports from Mexico. Upon remand, the court sustained the Commissioner's clarified views. Nippon Steel Corp. v. United States, 19 CIT 827 (1995).

[6] First Reviews, USITC Pub. 3364, at 4-5.

[7] Id. at 47. The Commission's affirmative determinations in the first reviews with respect to subject imports from France and Germany were appealed, but were ultimately upheld by the CIT following remand. Usinor v. United States, 342 F.Supp. 2d 1267 (Ct. Int'l Trade 2004); Corrosion-Resistant Carbon Flat Products from Canada, Inv. No. 731-TA-614 (Review)(Remand), USITC Pub. 3753 (Dec. 2004). In May 2005, a NAFTA binational panel affirmed the Commission's affirmative determination in the first reviews with respect to corrosion-resistant steel from Canada. Corrosion-Resistant Carbon Steel Flat Products from Canada, USA-CDA-2000-1904-11.

[8] Second Reviews, USITC Pub. 3899, at 3.

[9] Second Reviews, USITC Pub. 3899, at 3 (Jan. 2007). The Commission's affirmative determination in the second reviews with respect to subject imports from Germany was appealed to the CIT, which affirmed the Commission. Nucor Corp. v. United States, 594 F. Supp.2d 1320 (Ct. Int'l. Trade 2008). The Court upheld the Commission's exercise of its discretion to cumulate the subject imports into the following separate groups: (1) Germany and Korea; (2) Australia, France, and Japan; and (3) Canada. Id. at 1356. The Commission's negative determinations with respect to subject imports from Australia, Canada, France, and Japan were also appealed to and affirmed by the CIT. Id. at 1320. The domestic industry then appealed to the U.S. Court of Appeals for the Federal Circuit the CIT's judgment affirming the Commission's negative determinations with respect to subject imports from Australia, France, and Japan. The Federal Circuit affirmed. Nucor Corp. v. United States, 601 F.3d 1291 (Fed. Cir. 2010). The Federal Circuit found that the Commission's consideration, in deciding whether to cumulate subject imports from different sources, of the fact that such imports would likely compete under different conditions of competition, was a reasonable exercise of the Commission's discretion under 19 U.S.C. § 1675a(a)(7). Id. at 1297.

[10] 77 Fed. Reg. 301 (Jan. 4, 2012).

[11] 77 Fed. Reg. 24221 (Apr. 23, 2012). The Commission's Statement on Adequacy can be found at EDIS Doc. 478369.

LLC ("TKSUSA") (collectively "German Respondents") appeared in support of revocation of the order on subject imports from Germany. German Respondents participated in the hearing and filed joint prehearing and posthearing briefs. Five producers of corrosion-resistant steel in Korea appeared in support of revocation of the orders on subject imports from Korea: Dongbu Steel Co., Ltd., ("Dongbu"), Union Steel Co., Ltd. ("Union"), Hyundai HYSCO Co. ("Hyundai HYSCO"), Pohang Iron and Steel Co. Ltd. ("POSCO"),[12] and POSCO Coated & Color Steel Co., Ltd. ("POSCO C&C") (collectively "Korean Respondents"). Representatives from POSCO and Hyundai HYSCO participated in the hearing, and Korean Respondents filed joint prehearing and posthearing briefs. Ford Motor Co. ("Ford"), a U.S. purchaser of corrosion-resistant steel, filed a prehearing brief in support of revocation of the orders on subject imports from Germany and Korea.

In these reviews, U.S. industry data are based on the questionnaire responses of 18 U.S. producers of corrosion-resistant steel that are believed to have accounted for more than 90 percent of domestic capacity to produce corrosion-resistant steel in 2011.[13] U.S. import data are based on Commerce's official import statistics and the questionnaire responses of 29 U.S. importers of corrosion-resistant steel that are believed to have accounted for virtually all subject imports from Germany and Korea and for more than 60 percent of total U.S. imports of corrosion-resistant steel from other sources during 2011.[14] Foreign industry data are based on the questionnaire responses of three German producers of subject merchandise, which accounted for all capacity to produce corrosion-resistant steel in Germany in 2011, and five Korean producers of subject merchandise, which accounted for *** percent of capacity to produce corrosion-resistant steel in Korea in 2011.[15]

II. DOMESTIC LIKE PRODUCT AND INDUSTRY

A. Domestic Like Product

In making its determination under section 751(c) of the Act, the Commission defines the "domestic like product" and the "industry."[16] The 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."[17] The Commission's practice in five-year reviews is to examine the domestic like product definition from the original determinations and any completed reviews and consider whether the record indicates any reason to revisit the prior findings.[18]

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[12] On March 12, 2012, Commerce published notice of its final administrative review results in which it revoked the antidumping duty order with respect to Korean producer POSCO, effective August 1, 2010. 77 Fed. Reg. 14501 (March 12, 2012). POSCO remains subject to the countervailing duty order.

[13] CR at I-18, PR at I-18.

[14] CR at I-18, PR at I-18.

[15] CR at I-18-I-19, PR at I-18 (data derived from industry monitoring source ***).

[16] 19 U.S.C. § 1677(4)(A).

[17] 19 U.S.C. § 1677(10); see, e.g., Cleo Inc. v. United States, 501 F.3d 1291, 1299 (Fed. Cir. 2007); NEC Corp. v. Department of Commerce, 36 F. Supp.2d 380, 383 (Ct. Int'l Trade 1998); Nippon Steel Corp. v. United States, 19 CIT 450, 455 (1995); Timken Co. v. United States, 913 F. Supp. 580, 584 (Ct. Int'l Trade 1996); Torrington Co. v. United States, 747 F. Supp. 744, 748-49 (Ct. Int'l Trade 1990), aff'd, 938 F.2d 1278 (Fed. Cir. 1991); see also S. Rep. No. 249, 96th Cong., 1st Sess. 90-91 (1979).

[18] 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 (Jul. 2003); Steel Concrete Reinforcing Bar From Turkey, Inv. No. 731-TA-745 (Review), USITC Pub. 3577 at 4 (Feb. 2003).

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

> The merchandise covered by the order includes flat-rolled carbon steel products, of rectangular shape, either clad, plated, or coated with corrosion-resistant metals such as zinc, aluminum, or zinc-, aluminum-, nickel- or iron-based alloys, whether or not corrugated or painted, varnished or coated with plastics or other nonmetallic substances in addition to the metallic coating, in coils (whether or not in successively superimposed layers) and of a width of 0.5 inch or greater, or in straight lengths which, if of a thickness less than 4.75 millimeters, are of a width of 0.5 inch or greater and which measures at least 10 times the thickness or if of a thickness of 4.75 millimeters or more are of a width which exceeds 150 millimeters and measures at least twice the thickness, . . . Included in the order are flat-rolled products of non-rectangular cross-section where such cross-section is achieved subsequent to the rolling process (i.e., products which have been "worked after rolling")—for example, products which have been beveled or rounded at the edges. Excluded from the order are flat-rolled steel products either plated or coated with tin, lead, chromium, chromium oxides, both tin and lead ("terne plate"), or both chromium and chromium oxides ("tin-free steel"), whether or not painted, varnished or coated with plastics or other nonmetallic substances in addition to the metallic coating. Excluded from the order are clad products in straight lengths of 0.1875 inch or more in composite thickness and of a width which exceeds 150 millimeters and measures at least twice the thickness. Also excluded from the order are certain clad stainless flat-rolled products, which are three-layered corrosion-resistant carbon steel flat-rolled products less than 4.75 millimeters in composite thickness that consist of a carbon steel flat-rolled product clad on both sides with stainless steel in a 20%–60%–20% ratio.[19]

As a result of three changed circumstances determinations with respect to the antidumping duty order on U.S. imports from Germany, Commerce partially revoked the order with respect to several corrosion-resistant steel products. The applicable scope language concerning these partial revocations from that antidumping duty order is as follows:

> The Department partially revoked the order with respect to deep-drawing carbon steel strip, roll-clad on both sides with aluminum (AlSi) foils in accordance with St3 LG as to EN 10139/ 10140. The Department also partially revoked the order with respect to certain wear plate products. In addition, the Department partially revoked the order with respect to the following products: Certain corrosion-resistant carbon steel from Germany, meeting the following description: electrolytically zinc coated flat steel products, with a coating mass between 35 and 72 grams per meter squared on each side; with a thickness range of 0.67 mm or more but not more than 2.95 mm and width 817 mm or more but not over 1830 mm; having the following chemical composition (percent by weight): carbon not over 0.08, silicon not over 0.25, manganese not over 0.9, phosphorous not over 0.025, sulfur not over 0.012, chromium not

[19] 77 Fed. Reg. 27438 (May 10, 2012).

> over 0.1, titanium not over 0.005 and niobium not over 0.05; with a minimum yield strength of 310 Mpa and a minimum tensile strength of 390 Mpa; additionally coated on one or both sides with an organic coating containing not less than 30 percent and not more than 60 percent zinc and free of hexavalent chrome.[20]

Corrosion-resistant steel is steel sheet that has been coated or plated with a corrosion-resistant or heat-resistant metal coating to prevent corrosion and thereby extend the service life of products produced from the steel. It is used in the manufacture of automobiles and trucks, appliances, and industrial and agricultural equipment, and in many construction applications. The two widely used processes for manufacturing corrosion-resistant steel are the hot-dip process and the electrolytic process.[21]

In its original determinations, the Commission found two separate like products: (1) corrosion-resistant steel and (2) clad steel plate, a specialized corrosion-resistant steel product engineered to achieve specific performance requirements. The Commission, however, made negative determinations with respect to clad steel plate.[22]

In its first five-year reviews, in response to a party argument, the Commission declined to expand the domestic like product to include micro-alloy corrosion-resistant steel.[23] In the second five-year reviews, the Commission again declined to expand the like product to include micro-alloy corrosion-resistant steel.[24]

In these third five-year reviews, there is no information in the record that would compel a re-examination of the Commission's original domestic like product definition. All of the parties agree with the Commission's prior like product definition.[25] Accordingly, we again define the domestic like product to be all corrosion-resistant steel.

B. Domestic Industry and Related Parties

Section 771(4)(A) of the Act defines the relevant industry as the domestic "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."[26] 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. Section 771(4)(B) of the Act allows the Commission, if appropriate circumstances exist, to exclude from the domestic industry producers that are related to an exporter or importer of subject merchandise, or which are themselves importers.[27]

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[20] 77 Fed. Reg. 72827 (Dec. 6, 2012).

[21] CR at I-33-I-38, PR at I-29-I-32.

[22] Original Determination, USITC Pub. 2664, at 1-5.

[23] First Reviews, USITC Pub. 3364, at 6-7.

[24] Second Reviews, USITC Pub. 3899, at 101-102.

[25] Domestic Producers' Response to Notice of Institution (Feb. 2, 2012) at 23; German Respondents' Response to Notice of Institution (Feb. 2, 2012) at 22; Korean Respondents' Response to Notice of Institution (Feb. 2, 2012) at 7.

[26] 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.

[27] The statute defines related parties in terms of direct or indirect control, including whether "a third party directly or indirectly controls the producer and the exporter or importer...." 19 U.S.C. § 1677(4)(B)(ii)(III). Direct or indirect control exists when "the party is legally or operationally in a position to exercise restraint or direction over the other party." Id. The primary factors the Commission has examined in deciding whether appropriate circumstances exist

1. Prior Investigations and Reviews

In the original investigations of corrosion-resistant steel, the Commission did not exclude any U.S. producer of corrosion-resistant steel under the related parties provision.[28] In the first and second reviews, no party argued for the exclusion of any related parties from the domestic industry, and the Commission found that appropriate circumstances did not exist to exclude them.[29]

2. The Current Reviews

In these reviews, AMUSA,[30] TKSUSA,[31] Tata Steel Plating USA ("Tata USA"),[32] and USS-POSCO[33] are affiliated with a subject foreign exporter or U.S. importer. None of these firms themselves imported subject merchandise.[34] Consequently, under the statute they would be related parties only if there were a "control" relationship between the U.S. producer, on the one hand, and the importer, or exporter of subject merchandise, on the other.[35] This criterion appears to be met for AMUSA and TKSUSA, which each have a common parent with importers and/or exporters of subject merchandise. The record, however, does not reflect whether control relationships exist between ***.[36]

Even assuming that all of the affiliated U.S. producers are related parties, we do not believe that appropriate circumstances exist to warrant their exclusion from the domestic industry. First, during the period of review, these domestic producers were focused mainly on production of corrosion-resistant steel in the United States and did not import any subject merchandise.[37] Second, all of these companies have

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to exclude a related party include the following:

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

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

(3) the position of the related producer vis-a-vis the rest of the industry, i.e., whether inclusion or exclusion of the related party will skew the data for the rest of the industry.

See, e.g., Torrington Co. v. United States, 790 F. Supp. 1161 (Ct. Int'l Trade 1992), aff'd without opinion, 991 F.2d 809 (Fed. Cir. 1993).

[28] Original Determination, USITC Pub. 2664, at 97-99.

[29] First Reviews, USITC Pub. 3364, at 14; Second Reviews, USITC Pub. 3899, at 103-104. In both reviews, the Commission emphasized the related parties' investments in U.S. facilities since the orders were imposed, the significant share of U.S. production they represented, and the absence of any indication that their domestic operations were shielded from the effects of subject imports.

[30] ***. CR/PR at Table I-9 n.1.

[31] ***. CR/PR at Table I-9 n.7.

[32] ***. CR/PR at Table I-9 n.6.

[33] ***. CR/PR at Table I-9 n.8.

[34] See generally CR at III-15, PR at III-10.

[35] 19 U.S.C. § 1677(7)(4)(B)(i). U.S. producer *** purchased a small amount of subject imports from Korea from ***. CR/PR at Table III-7. A purchaser of subject merchandise is a related party only if it controls large volumes of subject imports. The Commission has found such control to exist when the domestic producer was responsible for a predominant proportion of the importer's purchases and those purchases were substantial. See, e.g., Foundry Coke from China, Inv. No. 731-TA-891 (Final), USITC Pub. 3449 at 8-9 (Sept. 2001). ***. CR/PR at Table III-7. Because the record indicates that *** did not control large volumes of subject imports, we find that *** is not a related party.

[36] The parties have not submitted arguments on this issue.

[37] CR at III-15, PR at III-10. ***.

made significant investments in their U.S. corrosion-resistant steel operations during the period, including significant capital expenditures.[38] Third, the only related party that *** continuation of the orders is *** with respect to ***, and ***.[39] Moreover, the financial condition of *** suggests that it has not benefitted financially through its affiliation with ***.[40] [41] [42] Finally, no party has argued that any of these producers should be excluded from the domestic industry as related parties.

Thus, we find that appropriate circumstances do not exist to exclude any of the producers who may be related parties from the domestic industry and therefore define the domestic industry to include all U.S. producers of corrosion-resistant steel.

III. CUMULATION

A. The Original Investigations and Prior Reviews

In the original investigations, the majority of the Commission cumulated imports from the six countries for which the Commission made affirmative determinations (Australia, Canada, France, Germany, Japan, and Korea).[43]

In the first five-year reviews, the majority of the Commission found that subject imports from all six countries would be likely to have a discernible adverse impact on the domestic industry if the orders were revoked. The Commission also found that a reasonable overlap of competition between the subject imports and the domestic like product would be likely if the orders were revoked. The Commission did not find any significant differences in the conditions of competition among the subject countries and therefore exercised its discretion to cumulate imports from all six countries.[44]

In the second five-year reviews, the Commission found that subject imports from Australia, France, Germany, Japan, and Korea each would likely have a discernible adverse impact on the domestic industry if the order(s) on subject imports from that country were revoked.[45] The Commission also found that there would be a reasonable overlap of competition among imports from all of the six subject countries and the domestic like product, and among imports from the six subject countries, if the orders were revoked.[46] The Commission determined that certain factors indicated that subject imports from

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[38] CR/PR at Table III-12.

[39] Tr. at 211 (Dohr).

[40] CR/PR at Table III-10 (showing ***). ***. Id. ***. Id.

[41] Consistent with her practice in past investigations and reviews, Commissioner Aranoff does not rely on individual-company operating income margins, which reflect a domestic producer's financial operations related to production of the domestic like product, in assessing whether a related party has benefitted from importation of subject merchandise. Rather, she determines whether to exclude a related party based principally on its ratio of subject imports to domestic production and whether its primary interests lie in domestic production or importation.

[42] Commissioner Pinkert does not rely upon the financial performance of *** as a factor in determining whether there are appropriate circumstances to exclude it from the domestic industry in these five-year reviews. The record is not sufficient to infer from its profitability on U.S. operations whether it has derived a specific benefit from its affiliation. See Allied Mineral Products v. United States, 28 CIT 1861, 1865-67 (2004).

[43] Original Determination, USITC Pub. 2664, at 188 n.223.

[44] First Reviews, USITC Pub. 3364, at 47.

[45] Second Reviews, USITC Pub. 3899, at 106-110. The Commission made no such finding with regard to subject imports from Canada because it declined to cumulate subject imports from Canada with imports from the other subject countries on the basis of its finding that the likely conditions of competition faced by subject imports from Canada differed from those likely faced by the other five countries. Id. at 106.

[46] Second Reviews, USITC Pub. 3899, at 117.

Canada would likely compete under significantly different conditions of competition than would imports from any of the other subject countries, and therefore did not exercise its discretion to cumulate subject imports from Canada with imports from any other subject country. The Commission determined that many of the likely conditions of competition faced by subject imports from Australia, France, and Japan were similar, and it therefore exercised its discretion to cumulate subject imports from those countries. The Commission further found that many of the likely conditions faced by subject imports from Germany and Korea were similar, and it therefore exercised its discretion to cumulate subject imports from those countries.[47]

B. Legal Standard

With respect to five-year reviews, section 752(a) of the Act provides as follows:

> the Commission may cumulatively assess the volume and effect of imports of the subject merchandise from all countries with respect to which reviews under section 1675(b) or (c) of this title were initiated on the same day, if such imports would be likely to compete with each other and with domestic like products in the United States market. The Commission shall not cumulatively assess the volume and effects of imports of the subject merchandise in a case in which it determines that such imports are likely to have no discernible adverse impact on the domestic industry.[48]

Cumulation therefore is discretionary in five-year reviews, unlike original investigations, which are governed by section 771(7)(G) of the Act.[49] The Commission may exercise its discretion to cumulate, however, only if the reviews are initiated on the same day, the Commission determines that the subject imports are likely to compete with each other and the domestic like product in the U.S. market, and imports from each such subject country are not likely to have no discernible adverse impact on the domestic industry in the event of revocation. Our focus in five-year reviews is not only on present conditions of competition, but also on likely conditions of competition in the reasonably foreseeable future.

The statutory threshold for cumulation is satisfied in these reviews, because all reviews were initiated effective the same day: January 3, 2012.[50] We consider the following issues in deciding whether to exercise our discretion to cumulate the subject imports: (1) whether imports from any of the subject countries are precluded from cumulation because they are likely to have no discernible adverse impact on the domestic industry; (2) whether there is a likelihood of a reasonable overlap of competition among imports from the subject countries and the domestic like product; and (3) whether there are similarities

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[47] Second Reviews, USITC Pub. 3899, at 111-112. The Commission found that the likely conditions of competition faced by subject imports from Germany and Korea would differ from the likely conditions faced by subject imports from Australia, France, and Japan. Id. at 112.

[48] 19 U.S.C. § 1675a(a)(7).

[49] 19 U.S.C. § 1677(7)(G)(i); see, e.g., Nucor Corp. v. United States, 601 F.3d 1291, 1293 (Fed. Cir. 2010) (Commission may reasonably consider likely differing conditions of competition in deciding whether to cumulate subject imports in five-year reviews); Allegheny Ludlum Corp. v. United States, 475 F. Supp. 2d 1370, 1378 (Ct. Int'l Trade 2006) (recognizing the wide latitude the Commission has in selecting the types of factors it considers relevant in deciding whether to exercise discretion to cumulate subject imports in five-year reviews).

[50] 77 Fed. Reg. 301 (Jan. 4, 2012).

and differences in the likely conditions of competition under which subject imports are likely to compete in the U.S. market.[51]

Domestic Producers argue that the Commission should cumulate imports from the subject countries. German Respondents argue that the Commission should not cumulate subject imports from Germany with subject imports from Korea because subject imports from Germany would have no likely discernible adverse impact on the U.S. industry, there is no likely reasonable overlap of competition between subject imports from Korea and Germany, and subject imports from Germany would likely compete in the U.S. market under different conditions of competition than subject imports from Korea. Korean Respondents do not take a position on cumulation.

C. Likelihood of No Discernible Adverse Impact

The statute precludes cumulation if the Commission finds that subject imports from a country are likely to have no discernible adverse impact on the domestic industry.[52] Neither the statute nor the Uruguay Round Agreements Act ("URAA") Statement of Administrative Action ("SAA") provides specific guidance on what factors the Commission is to consider in determining that imports "are likely to have no discernible adverse impact" on the domestic industry.[53] With respect to this provision, the Commission generally considers the likely volume of subject imports and the likely impact of those imports on the domestic industry within a reasonably foreseeable time if the orders are revoked.

The industries in both countries have maintained a presence in the U.S. market under the orders, have available capacity, and are experienced global exporters. Therefore, based on the record, we do not find that imports from Germany or Korea are likely to have no discernible adverse impact on the domestic industry in the event of revocation of the orders.[54]

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[51] Commissioner Pearson notes that, while he considers the same issues discussed in this section in determining whether to exercise his discretion to cumulate the subject imports, his analytical framework begins with whether imports from the subject countries are likely to face similar conditions of competition. For those subject imports that are likely to compete under similar conditions of competition, he next proceeds to consider whether there is a likelihood of a reasonable overlap of competition whereby those imports are likely to compete with each other and with the domestic like product. Finally, if based on that analysis he intends to exercise his discretion to cumulate one or more subject countries, he analyzes whether he is precluded from cumulating such imports because the imports from one or more subject countries, assessed individually, are likely to have no discernible adverse impact on the domestic industry. See Steel Concrete Reinforcing Bar From Belarus, China, Indonesia, Korea, Latvia, Moldova, Poland, and Ukraine, Invs. Nos. 731-TA-873 to 875, 877 to 880, and 882 (Review), USITC Pub. 3933 (Jul. 2007) (Separate and Dissenting Views of Chairman Daniel R. Pearson and Commissioner Deanna Tanner Okun Regarding Cumulation). Accord Nucor Corp. v. United States, 605 F. Supp.2d 1361, 1372 (Ct. Int'l Trade 2009); Nucor Corp. v. United States, 594 F. Supp.2d 1320, 1345-47 (Ct. Int'l Trade 2008), aff'd, 601 F.3d 1291 (Fed Cir. 2010)

[52] 19 U.S.C. § 1675a(a)(7).

[53] SAA, H.R. Rep. No. 103-316, vol. I at 887 (1994).

[54] Subject imports from Germany increased irregularly from *** short tons in 2006 to *** short tons in 2011 and were *** short tons in January-June ("interim") 2011 and *** short tons in January-June ("interim") 2012. CR/PR at Table I-11. The share of U.S. consumption of corrosion-resistant steel held by subject imports from Germany was *** percent in 2011. CR/PR at Table IV-1. To calculate subject imports from Germany, Commission staff adjusted official Commerce statistics to exclude merchandise that Commerce excluded from the scope of the order on subject merchandise from Germany. CR/PR at Table I-11 n.1. Reported production capacity in Germany decreased from 7.5 million short tons in 2006 to 6.6 million short tons in 2011 and was higher in interim 2011 (3.4 million short tons) than in interim 2012 (3.2 million short tons). CR/PR at Table IV-11. Capacity utilization remained relatively high throughout the period of review, ranging between 82.7 and 99.0 percent; capacity utilization was 96.2 percent in interim 2011 and 94.8 percent in interim 2012. CR/PR at Table IV-11. Exports from producers in Germany

D. Likelihood of a Reasonable Overlap of Competition

The Commission generally has considered four factors intended to provide a framework for determining whether subject imports compete with each other and with the domestic like product.[55] Only a "reasonable overlap" of competition is required.[56] In five-year reviews, the relevant inquiry is whether there likely would be competition even if none currently exists because the subject imports are absent from the U.S. market.[57]

Fungibility: We find a high degree of substitutability between domestically produced corrosion-resistant steel and subject imports from Germany and Korea.[58] Two-thirds or more of responding U.S. producers, importers and purchasers reported that corrosion-resistant steel produced in the United States and imported from Germany and Korea are "always" or "frequently" used interchangeably.[59] The large majority of all purchasers further found imports of corrosion-resistant steel from Germany and Korea to be comparable with each other and with the domestic like product with respect to most non-price product characteristics.[60] In addition, the types of corrosion-resistant product that the subject producers either exported to the United States or produced during the review period reveal a sufficient degree of fungibility, both among the subject imports and between the subject imports and the domestic product.[61] Producers in Germany, Korea, and the United States manufacture corrosion-resistant steel for automotive

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decreased irregularly from *** percent of shipments in 2006 to *** percent in 2011. CR/PR at Table IV-11.

Based on official Commerce statistics, subject imports from Korea decreased irregularly during the current period of review from 541,056 short tons in 2006 to 225,518 short tons in 2011; they were 105,854 short tons in interim 2011 and 160,186 short tons in interim 2012. CR/PR at Tables I-11 & IV-1. The share of U.S. consumption of corrosion-resistant steel held by subject imports from Korea was 1.2 percent in 2011. CR/PR at Table IV-1. Reported production capacity in Korea increased irregularly from 9.8 million short tons in 2006 to 11.8 million short tons in 2011, and was 5.9 million short tons in interim 2011 and 6.1 million short tons in interim 2012. CR/PR at Table IV-16. Capacity utilization remained high throughout the period of review, ranging between 81.1 and 97.0 percent; it was 94.5 percent in interim 2011 and 95.7 percent in interim 2012. CR/PR at Table IV-16. Exports from producers in Korea increased irregularly from 36.0 percent of shipments in 2006 to 42.4 percent in 2011. CR/PR at Table IV-16.

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

[56] See Mukand Ltd. v. United States, 937 F. Supp. 910, 916 (Ct. Int'l Trade 1996); Wieland Werke, 718 F. Supp. at 52 ("Completely overlapping markets are not required."); United States Steel Group v. United States, 873 F. Supp. 673, 685 (Ct. Int'l Trade 1994), aff'd, 96 F.3d 1352 (Fed. Cir. 1996). We note, however, that there have been investigations where the Commission has found an insufficient overlap in competition and has declined to cumulate subject imports. See, e.g., Live Cattle From Canada and Mexico, Invs. Nos. 701-TA-386 and 731-TA-812 to 813 (Prelim.), USITC Pub. 3155 at 15 (Feb. 1999), aff'd sub nom, Ranchers-Cattlemen Action Legal Foundation v. United States, 74 F. Supp. 2d 1353 (Ct. Int'l Trade 1999); Static Random Access Memory Semiconductors from the Republic of Korea and Taiwan, Invs. Nos. 731-TA-761 to 762 (Final), USITC Pub. 3098 at 13-15 (Apr. 1998).

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

[58] CR at II-23, PR at II-15.

[59] CR/PR at Table II-10.

[60] CR/PR at Table II-8.

[61] CR at II-1-II-2, PR at II-1-II-2.

applications, and there is substantial overlap between the other types of corrosion-resistant steel that subject producers make, as well as export to the United States, and the domestically produced product.[62]

Channels of Distribution. During the period of review, the *** majority of both domestic producers' U.S. shipments of corrosion-resistant steel and subject imports from Germany and Korea was sold directly to end users.[63] U.S. producers and importers from both subject countries ship corrosion-resistant steel to automotive and other end users, as well as to distributors and service centers, although in different proportions.[64] For example, U.S. producers and importers of Korean product ship corrosion-resistant steel to end users in the construction sector,[65] while importers of German product have not shipped to these customers since 2006.[66]

Geographic Overlap. Corrosion-resistant steel production occurs throughout the United States, and domestic production is shipped nationwide.[67] Subject imports from Korea are also sold throughout the continental United States, whereas subject imports from Germany are sold primarily in the Midwest and Southeast.[68]

Simultaneous Presence in Market. Imports of corrosion-resistant steel from Germany and Korea were present in the U.S. market in every month during the period of review from January 2006 to June 2012.[69]

Conclusion. The information in the record supports a finding that imports from each subject country are fungible with the domestic like product and each other, that imports from each of the subject countries and the domestic like product would likely be sold in similar channels of distribution, and in overlapping geographic markets, and that subject imports would be simultaneously present in the U.S. market. Any subject imports from Germany and Korea that would enter the United States upon revocation would likely be predominantly sold to end users and be available in multiple U.S. regions, as they were prior to imposition of the orders. In light of the foregoing, we find that there would likely be a reasonable overlap of competition between the domestic like product and imports from each subject country and between imports from each subject country upon revocation.

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[62] CR at II-1-II-2, PR at II-1-II-2. We note that the statute requires a likely reasonable overlap of competition with respect to the *subject imports* from the various sources, not merchandise produced generally by the subject producers. See 19 USC § 1677(7)(G)(i). Consequently, there is no basis for the Commission to compare nonsubject production from one country with subject production from another, as German Respondents suggest.

[63] CR/PR at Table II-1. In 2011, 71 percent of U.S. producers' U.S. shipments, *** percent of subject imports from Germany, and *** percent of subject imports from Korea went to end users.

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

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

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

[67] CR at IV-11, PR at IV-9.

[68] CR at II-4-II-5, PR at II-3-II-4.

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

E. Likely Conditions of Competition[70]

In determining whether to exercise our discretion to cumulate the subject imports, we assess whether the subject imports from Germany and Korea would be likely to compete under similar or different conditions in the U.S. market if the orders were revoked.[71] In these third reviews, we do not find that subject imports from Germany and Korea would be likely to compete with one another under such different conditions in the event of revocation as to warrant declining to exercise our discretion to cumulate these imports.

F. Conclusion

For the reasons discussed above, in these reviews we determine to cumulate subject imports from Germany and Korea.

IV. WHETHER REVOCATION OF THE ANTIDUMPING DUTY AND COUNTERVAILING DUTY ORDERS WOULD LIKELY LEAD TO CONTINUATION OR RECURRENCE OF MATERIAL INJURY WITHIN A REASONABLY FORESEEABLE TIME

A. Legal Standards

In a five-year review conducted under section 751(c) of the 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."[72] The SAA states that "under the likelihood standard, the Commission will engage in a counterfactual analysis; it must decide the likely impact in the reasonably foreseeable future of an important change in the status quo – the revocation or termination of a proceeding and the elimination of its restraining effects on volumes and prices of imports."[73] Thus, the

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[70] Commissioner Pinkert does not join this section. Where, in a five-year review, he does not find that imports of the subject merchandise would be likely to have no discernible adverse impact on the domestic industry in the event of revocation and finds that such imports would be likely to compete with each other and with the domestic like product in the U.S. market, he cumulates them unless there is a condition or propensity – not merely a trend – that is likely to persist for a reasonably foreseeable time and that significantly limits competition such that cumulation is not warranted. Commissioner Pinkert finds no evidence of such a condition or propensity with respect to imports of the subject merchandise from Germany and Korea. There is a high degree of substitutability between imports from the two countries and no basis for discounting the inference that they would thus have an additive impact on the domestic industry in the event of revocation.

[71] See Nucor Corp. v. United States, 601 F.3d 1291, 1296 (Fed. Cir. 2010); see also Allegheny Ludlum Corp., 475 F. Supp. 2d at 1378 (recognizing the wide latitude the Commission has in selecting the type of factors it considers relevant in deciding whether to exercise discretion to cumulate subject imports in five-year reviews); Nucor v. United States, 569 F. Supp. 2d at 1337-38; United States Steel, Slip Op. 08-82.

[72] 19 U.S.C. § 1675a(a).

[73] 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.

likelihood standard is prospective in nature.[74] The U.S. Court of International Trade has found that "likely," as used in the five-year review provisions of the Act, means "probable," and the Commission applies that standard in five-year reviews.[75]

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."[76] 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."[77]

Although the standard in a five-year review is not the same as the standard applied in an original antidumping duty 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."[78] 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 the orders are revoked or the suspension agreement is terminated, and any findings by Commerce regarding duty absorption pursuant to 19 U.S.C. § 1675(a)(4).[79] 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.[80]

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

[75] 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, Slip Op. 02-105 at 20 (Ct. Int'l Trade Sept. 4, 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'").

[76] 19 U.S.C. § 1675a(a)(5).

[77] 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.

[78] 19 U.S.C. § 1675a(a)(1).

[79] 19 U.S.C. § 1675a(a)(1). In the first reviews, the Commission stated that, in analyzing likely price effects, it had weighed all the pertinent evidence and taken into account Commerce's duty absorption findings, but noted that a CIT decision (SKF USA Inc., et al. v. United States, 94 F. Supp. 2d 1351 (Ct. Int'l Trade 2000)), called into question the validity of Commerce's duty absorption findings with respect to transition orders. USITC Pub. 3364 at 54-55, n.374. Since the first reviews, the Federal Circuit has affirmed the CIT decision, FAG Italia S.p.A. v. United States, 291 F.3d 806 (Fed. Cir. 2002). The duty absorption findings made by Commerce in this case were prior to the Federal Circuit decision and were not made or notified to the Commission in the context of these five-year reviews, as specified in the statute. 19 U.S.C. § 1675(a)(4). Moreover, no party has raised any arguments regarding duty absorption.

[80] 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 the orders under review are revoked and/or the 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.[81] 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.[82]

In evaluating the likely price effects of subject imports if the orders under review are revoked and/or the 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.[83]

In evaluating the likely impact of imports of subject merchandise if the orders under review are revoked and/or the 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.[84] 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.[85]

B. Findings in the Original Investigations and Prior Reviews

Conditions of Competition. In the original investigations, the Commission found that corrosion-resistant steel was used primarily in the automotive and construction sectors. The Commission stated that demand for corrosion-resistant steel had increased during the period of investigation, that the domestic industry had invested heavily in additional and upgraded facilities, and that it had brought on line, or planned to bring on line, additional capacity to meet the growing demand for corrosion-resistant steel.[86]

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[81] 19 U.S.C. § 1675a(a)(2).

[82] 19 U.S.C. § 1675a(a)(2)(A-D).

[83] 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.

[84] 19 U.S.C. § 1675a(a)(4).

[85] 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.

[86] Original Determination, USITC Pub. 2664, at 168-169.

In the first five-year reviews, the Commission found that supply and demand conditions, as well as the business cycle for corrosion-resistant steel, had not changed significantly since the original investigations. The Commission observed that demand depended on the level of demand in the principal end use markets (automotive and construction) and that there were two processes for making corrosion-resistant steel, hot-dipping and electrolytic galvanizing. It described demand for hot-dipped corrosion-resistant steel as having grown significantly faster since the original investigations than demand for electrogalvanized product. It also found that apparent U.S. consumption had increased since the original investigations.[87] The Commission found subject imports and the domestic product to be broadly interchangeable such that price was an important factor in purchasing decisions. As in the original investigations, domestic producers dominated the U.S. market for corrosion-resistant steel and had made significant investments since 1992 to add capacity and improve existing capacity.[88]

In the second five-year reviews, the Commission found that demand for corrosion-resistant steel depended on demand in its end-use sectors, primarily automotive manufacturing and construction. The Commission found that demand for corrosion-resistant steel had increased both in the U.S. market and globally and that demand was expected to continue to grow in the reasonably foreseeable future.[89]

The Commission further stated that the period examined in the second reviews was a time of significant consolidation and restructuring by U.S. producers. During the process of consolidation and restructuring, domestic producers renegotiated labor costs, shed more than $7.5 billion in legacy costs, reduced their fixed costs, and increased their productivity. Thus, the Commission found that while corrosion-resistant steel production remained capital intensive, the domestic industry, as a result of consolidation and restructuring, had lowered its fixed costs and was better able to control output and production and maintain price levels in response to changing business cycles. The Commission noted that the domestic industry's capacity remained relatively stable during the period. The Commission further found that the vast majority of corrosion-resistant steel was made to order and that consolidations and mergers among corrosion-resistant steel producers worldwide as well as in the United States enabled producers such as Arcelor and Mittal (which were at that time not yet affiliated) to supply their customers from nearby production facilities, although significant quantities of corrosion-resistant steel continued to be traded internationally.[90]

Subject Import Volume. In the original investigations, the Commission found that the cumulated subject imports decreased slightly from 1990 to 1991 and then increased sharply to 1.9 million short tons in 1992, along with gaining significant market share during the three-year period.[91]

In the first reviews, the Commission noted that the volume of cumulated subject imports fell substantially after the orders were issued and remained at levels significantly below pre-order levels during the review period. It found that the volume of cumulated subject imports would likely be significant upon revocation based on several considerations, including (1) total production capacity in the subject countries that exceeded apparent U.S. consumption in 1999; (2) capacity in the subject countries used to produce nonsubject merchandise that could be shifted to produce the subject product; (3) substantial excess capacity in the subject countries and an incentive to maximize and sustain the utilization of available capacity given subject producers' high fixed costs; and (4) subject producers' reliance on export markets.[92]

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[87] First Reviews, USITC Pub. 3364, at 49-51.

[88] First Reviews, USITC Pub. 3364, at 49-51.

[89] Second Reviews, USITC Pub. 3899, at 119-121.

[90] Second Reviews, USITC Pub. 3899, at 112-124.

[91] Original Determination, USITC Pub. 2664, at 51-52.

[92] First Reviews, USITC Pub. 3446, at 52-53.

In the second reviews, the Commission observed that Korean and German producers would have a significant volume of subject product available for shipment to the United States if the orders were revoked, based on their substantial capacity and production of corrosion-resistant steel, excess capacity, general export orientation, the substantial and increasing level of their exports to the United States during the review period, and their well-established relationships or distribution channels that would facilitate increased supply to the U.S. market.[93] The Commission stated that the availability of generally higher prices in the United States than in Asian markets would give Korean producers the incentive to increase shipments to the U.S. market and German producers the incentive to redirect volumes currently exported to Asia to the U.S. market. Accordingly, the Commission found that the volume of subject imports from Korea and Germany would likely increase and be significant absent the orders.[94]

Price Effects. In the original investigations, the Commission found that price was an important factor for purchasers. It also found price suppression and depression based on subject import prices that were falling at a greater rate than domestic prices, together with increased subject import volumes and confirmed lost sales and lost revenue allegations.[95]

In the first reviews, the Commission found that the likely increased sales of cumulated subject imports would likely be achieved by aggressive pricing, which would result in significant effects on domestic prices. It noted that while contracts provided some measure of insulation from spot market price fluctuations, prices in the spot market could affect prices in the domestic industry's contract business.[96]

In the second reviews, the Commission determined that the substantially larger volume of subject imports from Korea and Germany that were likely to enter the U.S. market upon revocation of the orders would either be priced aggressively to gain market share or be used by purchasers as leverage to obtain more favorable domestic prices and thus would likely depress or suppress domestic prices to a significant degree. Consequently, the Commission concluded that revocation of the orders on subject imports from Germany and Korea would likely result in significant adverse price effects.[97]

Impact. In the original investigations, the Commission found that the increased volume of lower-priced subject imports and their significant market share depressed prices and caused the U.S. industry to suffer lost market share and reduced the industry's capacity utilization, and that the presence of such imports contributed to growing industry financial losses despite increasing apparent consumption. The industry's capital expenditures and research and development expenses also declined, especially during the latter part of the period of investigation.[98]

In the first reviews, the Commission found that the orders had a positive effect on the domestic industry's performance. The industry's operating margin was higher at the beginning of the review period than during the original investigation, and its capital expenditures and research and development expenses had increased. Nevertheless, the Commission found the industry to be vulnerable given declines in its operating income, operating margins, capacity utilization levels, and unit sales values. It found that the likely significant volumes of subject imports upon revocation would likely undersell the domestic product and suppress or depress U.S. prices, cause the domestic industry to lose market share, and have a significant adverse impact on the domestic industry.[99]

In the second reviews, the Commission stated that in light of the domestic industry's many positive financial and performance indicators, the major restructuring that occurred during the review

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[93] Second Reviews, USITC Pub.3899, at 144.

[94] Second Reviews, USITC Pub. 3899, at 144.

[95] Original Determination, USITC Pub. 2664, at 190.

[96] First Reviews, USITC Pub. 3364, at 54.

[97] Second Reviews, USITC Pub. 3899, at 145.

[98] Original Determination, USITC Pub. 2664, at 191.

[99] First Reviews, USITC Pub. 3364, at 55-57.

period, and the ability of the domestic industry to make significant investments in new facilities, it did not find that the domestic industry was in a weakened state.[100] Nevertheless, it did find that if the orders on subject imports from Germany and Korea were revoked, the likely significant increase in the volume of subject imports from these countries, coupled with their likely adverse price effects, would likely have a significant negative impact on the domestic industry. The Commission stated that while the domestic industry was stronger and better able to handle the vicissitudes of the corrosion-resistant steel market, it was not impervious to the effects of significant quantities of aggressively priced imports.[101]

C. 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."[102] The following conditions of competition inform our determinations.

1. Demand Conditions

Corrosion-resistant steel is used primarily in automotive and construction applications, although other end uses include HVAC systems and appliance manufacturing, which are linked to residential construction.[103] Thus, demand for corrosion-resistant steel is mainly driven by demand in the automotive and construction sectors, which tends to follow general economic trends.[104] This is confirmed by trends in apparent U.S. consumption of corrosion-resistant steel during the period of review, which roughly followed trends in real U.S. GDP growth – fluctuating from 2006 to 2008, declining steeply in 2009 consistent with the severe economic recession, and then recovering during the rest of the period of review.[105] Specifically, apparent U.S. consumption of corrosion-resistant steel declined from 23.5 million short tons in 2006 to a period low of 13.5 million short tons in 2009, before increasing to 18.4 million short tons in 2011.[106] Apparent U.S. consumption of corrosion-resistant steel was 9.2 million short tons in interim 2011 and 10.4 million short tons in interim 2012.[107] The three largest purchasers of corrosion-resistant steel, ***, ***, and ***, accounted for *** percent of U.S. corrosion-resistant steel consumption in 2011.[108]

When asked how overall demand for corrosion-resistant steel has changed in the United States since 2006, a majority of domestic producers, U.S. importers, and purchasers reported that demand had decreased or fluctuated.[109] Most market participants attributed the decrease or fluctuations in demand to the overall condition of the economy, citing the decline in the construction industry over the past three to four years.[110] Total construction spending in the United States (residential and nonresidential) declined

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[100] Second Reviews, USITC Pub. 3899, at 134-135.

[101] Second Reviews, USITC Pub. 3899, at 145-146.

[102] 19 U.S.C. § 1675a(a)(4).

[103] CR at II-16; PR at II-10.

[104] CR at II-17, PR at II-11.

[105] CR/PR at Figure II-1.

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

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

[108] CR at I-50, PR at I-39.

[109] CR/PR at Table II-3.

[110] CR at II-20, PR at II-13.

from 2006 to early 2011 before slowly increasing through 2012.[111] Total automobile and light truck sales in the United States declined from 2006 to early 2009, spiked in mid-2009, then steadily increased during 2010 through 2012.[112]

When asked about anticipated changes in corrosion-resistant steel demand in the United States, a majority of domestic producers, U.S. importers, and purchasers indicated that they believed demand would increase or fluctuate through 2014.[113] These market participants reported anticipated growth in the housing and construction industries as well as in the automotive industry, which would increase demand for corrosion-resistant steel.[114] The American Institute of Architects (AIA) has reported "a much more positive outlook in terms of demand for design services" and has predicted that conditions would improve at a slow and steady rate.[115] According to ***, ***.[116] Industry sources have projected that U.S. passenger vehicle sales will increase to between 14.9 and 15.4 million vehicles in 2013 and between 15.2 and 16.3 million vehicles in 2014.[117]

According to data compiled by ***, global consumption of galvanized steel sheet increased from *** short tons in 2009 to *** short tons in 2012, or by *** percent.[118] Global consumption of galvanized steel sheet is forecasted by *** to *** in the coming years, although *** rate than during 2009-12.[119]

2. Supply Conditions

During the period of review, the domestic industry satisfied the bulk of U.S. demand for corrosion-resistant steel. On an annual basis, the domestic industry supplied between 82.2 and 90.8 percent of the U.S. market during the period of review.[120] The domestic industry has continued to consolidate and restructure since the second reviews, as Novolipetsk Steel acquired Duferco Group's interest in Sharon Coating (formerly Winner Steel), Tata Steel completed its takeover of Corus Group Plc, and AMUSA was formed from the U.S. operations of Mittal Steel and Arcelor. In addition, Severstal acquired several mills during the period of review, then in 2011 it sold three U.S. mills to RG Steel,

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[111] CR/PR at Figure II-2.

[112] CR at II-17, PR at II-11.

[113] CR/PR at Table II-3.

[114] CR at II-20, PR at II-13.

[115] CR at II-19, PR at II-13.

[116] CR at II-20, PR at II-13. Blue Chip Economic Indicators forecasts housing starts of *** and *** in 2013 and 2014, respectively, and auto and light truck sales of *** and *** in 2013 and 2014, respectively. Id. citing Blue Chip Economic Indicators, Vol. 38, No. 1, January 10, 2013.

[117] CR at II-20, PR at II-13, citing Binder, Alan K., Ed. Ward's Automotive Yearbooks, 2008-12; Automotive News, "U.S. Light Vehicle Sales by Nameplate," Dec. & 12 Months 2012, January 7, 2013; Polk & Co., "U.S. Light Vehicle Sales Forecast," January 10, 2013; McAlinden, Sean and Yen Chen, "After the Bailout: Future Prospects for the U.S. Auto Industry," December 2012, at 20.

[118] CR/PR at Table IV-23. *** estimated 2012 consumption data. We note that the data compiled by *** are for galvanized steel sheet, which constitutes the great majority of corrosion-resistant steel products but does not include other products within the scope of these reviews, such as steel coated with aluminum, nickel, and copper. Consequently, *** data understate production of corrosion-resistant steel. The *** data do not include tinplated steel, which is excluded from the scope of these reviews. CR at IV-41 n.29; PR at IV-31 n.29.

[119] CR/PR at Table IV-24. Consumption of galvanized steel sheet is projected to increase from *** short tons in 2013 to *** short tons in 2016.

[120] CR/PR at Tables I-14-15. The domestic industry's share of the U.S. market for corrosion-resistant steel was 90.2 percent in interim 2011 and 87.9 percent in interim 2012.

which later declared bankruptcy and sold its mills.[121] Moreover, one new producer, TKSUSA, began domestic operations in 2011.[122] In 2011, the top five domestic mills, AK Steel, AMUSA, Nucor, SDI, and U.S. Steel, accounted for *** percent of U.S. corrosion-resistant steel production.[123] The domestic industry's capacity was 2.4 percent higher in 2011 than it was in 2006.[124]

U.S. producers reported that corrosion-resistant steel is sold mainly to automotive end users and to steel service centers and distributors, with some shipments going to construction sector purchasers and other end users. They reported that 31 to 38 percent of shipments of U.S.-produced corrosion-resistant steel were sold directly to automotive end users during 2006-11 and that 28 to 32 percent of shipments were sold to steel service centers and distributors.[125] Shipments of U.S.-produced corrosion-resistant steel to construction end users declined irregularly as a share of total shipments from 23.0 percent in 2006 to 19.6 percent in 2011.[126] Automotive purchasers reported that 96.4 percent of their 2011 purchases of corrosion-resistant steel, by quantity, were from the United States, 1.4 percent were from nonsubject sources, 1.9 percent was from Korea, and 0.3 percent was from Germany.[127]

Nonsubject imports declined from *** percent of total apparent U.S. consumption in 2006 to *** percent in 2009, before increasing to *** percent in 2011; nonsubject imports' share of apparent U.S. consumption was *** percent in interim 2011 and *** percent in interim 2012.[128] In 2011, the largest sources of nonsubject imports were Canada, Taiwan, China, Mexico, and India.[129]

Imports from subject sources were a small presence in the U.S. market during the period of review. Subject imports from Germany and Korea combined accounted for between *** and *** percent of apparent U.S. consumption during the period of review.[130] Nearly all of this was attributable to subject imports from Korea, as subject imports from Germany never exceeded *** percent of apparent U.S. consumption during any single year.[131]

3. Other Likely Conditions of Competition

The record indicates that there is a high degree of substitutability between domestically produced corrosion-resistant steel and corrosion-resistant steel imported from Germany and Korea.[132] Most market participants found imports from subject sources to be at least frequently interchangeable with each other and with the domestic like product.[133] The majority of responding purchasers rated the U.S. and subject products as comparable on 18 out of 22 factors reported; however, they found the U.S. product to be

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

[122] CR/PR at Table III-1. TKSUSA has reported that the capacity at its Alabama mill will increase from its current 1.1 million short tons to approximately 2.2 million short tons by 2014. CR at III-8, PR at III-5.

[123] CR/PR at Table I-9.

[124] CR/PR at Table III-3; CR at III-9, PR at III-6. Data for 2006 are slightly understated, as they do not include the corrosion-resistant steel operations of ***. In addition, the data for the period do not include the now-closed Ohio mills formerly owned by RG Steel. CR at III-9 n.5, PR at III-6 n.5.

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

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

[127] Purchaser questionnaire responses, section II-1 for ***.

[128] Calculated from CR/PR at Table I-11.

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

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

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

[132] CR at II-23, PR at II-15.

[133] CR/PR at Table II-10.

superior with respect to "delivery time," "local service availability," "proximity of supplier," and "reliability of supply."[134]

The record also indicates that price is an important factor in purchasing decisions in the U.S. corrosion-resistant steel market. When asked to rank the factors used in purchasing decisions, responding purchasers ranked quality and price most frequently as either the first or second most important factors.[135] Although the majority of U.S. producers, importers, and non-automotive purchasers reported that differences other than price between corrosion-resistant steel produced in the United States and corrosion-resistant steel imported from Germany, Korea, and nonsubject sources were "sometimes" or "never" a significant factor in their sales or purchases.[136] The majority of automotive purchasers, however, reported that differences other than price were "always" a factor in their purchases.[137] More than half of the responding purchasers reported that they "usually" purchase the lowest-priced corrosion-resistant steel.[138] When asked to rate the importance of 22 specific factors when making corrosion-resistant steel purchasing decisions, 33 of 35 responding purchasers rated "price" as "very important," with only two factors ("quality meeting industry standards" and "product consistency") rated more frequently as "very important."[139] While 29 of 35 responding purchasers reported that the corrosion-resistant steel that they purchase must be certified or prequalified, only three purchasers reported that a supplier had failed to obtain certification during the review period.[140]

The raw materials used to produce corrosion-resistant steel include coal, iron ore, steel scrap, and coating materials. Prices for these raw materials fluctuated from 2006 to 2012, and several U.S. producers, importers and foreign producers reported that they expect this trend to continue.[141] Prices for the primary raw materials for corrosion-resistant steel – iron ore, coal, and iron and steel scrap – rose by approximately 42 percent, 72 percent, and 79 percent, respectively, from 2006 to 2012.[142] Domestic producers Nucor, U.S. Steel, AK Steel, and AMUSA have become vertically integrated after acquiring suppliers of certain raw materials used in corrosion-resistant steel production.[143] Four U.S. producers reported that they have included surcharges in their sales contracts to cover changes in the prices of raw materials.[144] U.S. producers' vertical integration and use of surcharges limit their exposure to raw material cost volatility.

The vast majority of corrosion-resistant steel sold by U.S. producers, importers, and foreign producers is made to order. Eleven of fifteen responding U.S. producers, nine of 12 responding U.S. importers, and all six responding foreign producers reported that 100 percent of their sales to U.S. customers were produced to order, with lead times of four to 12 weeks, 120 to 180 days, and 60 to 150

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[134] CR/PR at Table II-8. Two of the factors for which the U.S. product was considered superior – "delivery time" and "reliability of supply" – were considered "very important" by the great majority of purchasers. CR/PR at Table II-7.

[135] CR/PR at Table II-5. Virtually all responding purchasers reported that both the domestic product and subject imports "always" or "usually" met their minimum quality standards. CR/PR at Table II-9.

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

[137] Purchaser questionnaire responses, section IV-3 for ***.

[138] CR at II-24, PR at II-16.

[139] CR/PR at Table II-7.

[140] CR at II-25-II-27, PR at II-17-II-18. Generally, automotive purchasers reported certifying a supplier on a product level.

[141] CR/PR at V-1.

[142] CR/PR at Figure V-1.

[143] Tr. at 71-72, 74-75 (Blume), 72-73 (Barlow), 73-74 (Sherrbaum), 75 (Mull).

[144] CR at V-8, PR at V-6.

days, respectively.[145] Eleven of 15 responding U.S. producers and 14 of 27 responding importers reported offering just-in-time delivery or similar inventory services for corrosion-resistant steel customers in the United States, most often to automotive customers.[146]

Finally, the majority of U.S. producers sold corrosion-resistant steel on a short-term contract basis to automotive end users and on a spot sales basis to construction end users and other end users.[147] U.S. importers sold corrosion-resistant steel primarily on a short-term contract basis to all three end user groups.[148]

D. Revocation of the Antidumping Duty Orders on Subject Imports from Germany and Korea and the Countervailing Duty Order on Subject Imports from Korea Is Not Likely to Lead to Continuation or Recurrence of Material Injury to the Domestic Industry Within a Reasonably Foreseeable Time

1. Likely Volume of Subject Imports

Subject imports from Germany and Korea maintained a small and declining presence in the U.S. market during the period of review. The quantity of cumulated subject imports from Germany and Korea was at a period high of *** short tons in 2006, then fell to *** short tons in 2007, *** short tons in 2008, *** short tons in 2009, and *** short tons in 2010, before increasing to *** short tons in 2011.[149] Cumulated subject imports' share of apparent U.S. consumption fell irregularly from *** percent in 2006 to *** percent in 2011.[150] Notably, cumulated subject imports from Germany and Korea were relatively small even prior to the imposition of the orders, accounting for only 2.8 percent of apparent U.S. consumption in 1992, and have maintained a small presence in the U.S. market since that time.[151]

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[145] CR at II-28, PR at II-18.

[146] CR at II-28, PR at II-18. One foreign producer, ***, reported offering just-in-time delivery or similar inventory services to U.S. customers. CR at II-29, PR at II-18.

[147] CR/PR at Table V-1. The majority of responding U.S. producers reported that their short term contracts were 365 days in length and fixed price or quantity (but not both). CR at V-7, PR at V-5-V-6.

[148] CR/PR at Table V-1. The majority of responding importers reported that their short term contracts were 90 to 180 days in length and fixed both price and quantity. The majority of foreign producers reported selling corrosion-resistant steel mainly on a short term contract basis for at least 86 percent of their sales to automotive end users and 100 percent of their sales to construction end users and that their short term contracts were 90 to 180 days in length and fixed price. CR at V-7, PR at V-6.

[149] CR/PR at Table I-11 & n.1 (excluding nonsubject imports from the official Commerce statistics). Cumulated subject imports were *** short tons in interim 2011 and *** short tons in interim 2012.

[150] CR/PR at Table I-11 & n.1. Cumulated subject imports' share of apparent U.S. consumption was *** percent in interim 2011 and *** percent in interim 2012. The large majority of the cumulated subject imports during the review period were from Korea. Although the volumes of subject imports from Korea fluctuated during the review period, the fluctuations involved relatively small absolute volumes, with the greatest year to year fluctuations accounting for 0.5 percentage points of apparent U.S. consumption. CR/PR at Table I-11.

[151] CR/PR at Tables I-1, I-2, and I-3 n.2. The Commission cumulated subject imports from Germany and Korea with subject imports from Australia, Canada, France, and Japan in the original investigations and the first reviews. The cumulated market share of imports from Germany and Korea was 1.8 percent in 1999 and 2005. CR/PR at Tables I-1 & I-2.

Producers in Germany and Korea have increased their capacity and production of corrosion-resistant steel since the original investigations.[152] However, subject producers operated at high capacity utilization rates during the review period except for in 2009, which was an anomalous year because of the severity of the global recession. Capacity utilization for the industries in the cumulated countries was 93 percent in 2011 and 95.4 percent in interim 2012.[153] High capacity utilization rates limit the subject producers' ability to increase exports through greater production.[154] We nevertheless recognize that producers in Germany and Korea had combined excess capacity in 2011 of approximately 1.3 million short tons.[155] As discussed below, however, we find that likely market conditions in the reasonably foreseeable future would keep the German or Korean industries from utilizing available capacity to significantly increase exports of corrosion-resistant steel to the United States.

Although producers in Germany and Korea exported corrosion-resistant steel to various markets during the review period, their focus has been predominantly on supplying their home and regional markets.[156] Only *** percent of 2011 shipments of corrosion-resistant steel from Germany were exported outside of the European Union ("EU"), and a large portion of these exports to "other" markets were to European countries that are not EU members.[157] By contrast, in that same year German producers of corrosion-resistant steel shipped *** percent of their production to the home market, exported *** percent to the EU, and internally consumed *** percent.[158] In 2011, Korean producers of corrosion-resistant steel shipped *** percent of their production to the home market, exported *** percent within Asia, and internally consumed *** percent.[159] Only *** percent of Korean shipments of corrosion-resistant steel were exported outside of Asia.[160] We find that German and Korean producers are likely to continue their strong focus on their home and regional markets in the reasonably foreseeable future given projected consumption growth in both Europe and Asia, where consumption of galvanized steel sheet is forecasted to be stronger than in North America.[161]

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[152] CR/PR at Tables IV-9 & IV-16. The cumulated capacity of subject producers increased irregularly from 17.4 million short tons in 2006 to 18.4 million short tons in 2011, while cumulated production increased irregularly from 16.8 million short tons to 17.1 million short tons. CR/PR at Table IV-20.

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

[154] Hyundai HYSCO is in the process of building a new plant with corrosion-resistant steel capacity of 550,000 tons. Tr. at 230 (Pi). Korean Respondents assert that the reason for this addition, as well as Hyundai HYSCO's capacity expansions in 2011 and 2012, is that Hyundai and Kia are each adding one more automobile facility in China and Hyundai HYSCO has been tasked by those affiliated purchasers to supply corrosion-resistant steel to those facilities. Tr. at 228 and 230 (Pi).

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

[156] Although shipments of cumulated German and Korean corrosion-resistant steel to Mexico and Canada were 46,167 short tons higher in 2011 than in 2006, we do not find that this demonstrates a strong interest in the North American market by subject producers. By contrast, cumulated subject producers increased exports to Asian markets by *** short tons, with the large majority of this increase accounted for by Korean producers. CR at IV-16 n.10 and IV-25 n.21, PR at IV-14 n.10 and IV-20 n.21 and CR/PR at Tables IV-6 and IV-20.

[157] CR/PR at Table IV-11; CR at IV-23, PR at IV-20; AMUSA's Posthearing Brief at Exh. 18.

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

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

[160] CR/PR at Table IV-18. Certain Korean producers included exports to India and Iran among their shipments to "other markets." CR at IV-33, PR at IV-27. Exports to India and Iran accounted for 6.8 percent of total exports from Korea in 2011. CR/PR at Table IV-13.

[161] CR/PR at Table IV-24. Although the parties characterize the global market for corrosion-resistant steel as oversupplied, due in large part to the 2009 global recession, the majority of market participants anticipate that demand will either increase or fluctuate as the global economy continues to recover. CR/PR at Table IV-25. Market participants stated that they expect an increase in demand for corrosion-resistant steel in China, India, Brazil,

In addition, there are several other reasons why we find that a significant increase in the volume of subject imports from Germany and Korea to the U.S. market would not be likely upon revocation.[162] While Korean shipments to residual markets (markets other than those identified in the Commission's questionnaire), did increase on both a relative and an absolute basis during the period of review, those increases have been gradual, and the record does not reflect sudden shifts by the Korean industry into individual "other" markets. The record indicates that the largest annual increase in Korean exports to any individual "other" market was to Mexico from 2009 to 2010, when exports increased by 143,608 short tons following a sharp decline during the 2009 global recession.[163] This figure is equivalent to only 0.8 percent of 2011 apparent U.S. consumption.[164] Thus, to the extent that Korean producers do increase exports to the United States, notwithstanding their likely continued focus on their home market and Asian export markets, any such increase is unlikely to be significant.[165]

We also do not find that the presence of automobile production facilities in the United States owned by German and Korean companies would cause cumulated volumes of subject imports to increase significantly. The large majority of U.S. importers' shipments of corrosion-resistant steel from Germany and a large and growing percentage of shipments from Korea were to automotive end users.[166]

Mexico, Korea, and Russia, as well as in other developing countries where they project increasing demand in both the automotive and construction industries. CR at IV-64, PR at IV-37. Data compiled by *** on current and forecasted global consumption of galvanized steel sheet, which constitutes the great majority of corrosion-resistant steel products, yield a similar conclusion. *** estimates that global consumption of galvanized steel sheet will *** percent, or by *** short tons, between 2012 and 2014, with *** percent of that growth coming from Asia. CR/PR at Table IV-23. In contrast, *** estimates that global galvanizing capacity will increase during the same period by ***, or *** short tons. CR/PR at Table IV-28. Therefore, *** estimates indicate that growth in consumption will outpace growth in capacity globally. We conclude that global demand for corrosion-resistant steel will increase in the imminent future, driven by consumption in Asian markets and emerging markets elsewhere.

[162] ThyssenKrupp, the largest producer of corrosion-resistant steel in Germany, and the company responsible for the *** of exports of corrosion-resistant steel from Germany to the United States during the review period, has argued that its domestic affiliate TKSUSA was recently given veto power to block any imports of corrosion-resistant steel from ThyssenKrupp's non-U.S. operations. German Respondents' Prehearing Brief at 39-43. Given the record evidence regarding ThyssenKrupp's intention to sell TKSUSA by September 2013, we do not rely on any current veto power by TKSUSA as a basis for our determination concerning the likely volume of subject imports. Tr. at 211 (Dohr).

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

[164] Compare CR/PR at Table IV-13 with CR/PR at Table C-1.

[165] In the second reviews, the Commission noted that the largest Korean producer of corrosion-resistant steel, POSCO, was in the process of building a production facility in Mexico, but that the facility would not be completed until 2009. Second Reviews, USITC Pub. 3899, at 115. In June 2009, POSCO-Mexico began commercial operations and now operates a continuous galvanizing line with production capacity of 400,000 tons, capable of supplying the U.S. market with automotive grade corrosion-resistant steel from Mexico. Korean Respondents' Prehearing Brief at 13. We find that this facility provides POSCO, the largest Korean producer of corrosion-resistant steel, with a more geographically convenient North American base from which to supply its customers in the United States.

[166] CR/PR at Table II-1. Domestic and respondent interested parties both reported that corrosion-resistant steel sold to automotive end users is of a higher quality than corrosion-resistant steel sold to construction end users. Tr. at 160-161 (Anderson); German Respondents' Posthearing Brief, Exh. 1, at 3. Respondents also added that, while corrosion-resistant steel that is used in automotive applications could be used in construction applications, the higher cost of such steel would not make it feasible to do so. German Respondents' Posthearing Brief, Exh. 1, at 3. See also Korean Respondents' Posthearing Brief at 6. No corrosion-resistant steel from Germany has been shipped to construction end users in the U.S. market since a *** volume was shipped in 2006. CR/PR at Table II-1. Only *** percent of U.S. importers' U.S. shipments of corrosion-resistant steel from Korea went to construction end users in 2011, down from *** percent in 2006. CR/PR at Table II-1. We find that any increase in volume of corrosion-

Nevertheless, during the period of review, the subject imports accounted for only a tiny portion of purchases by U.S. auto manufacturers. As discussed above, U.S. auto producers reported that 96.4 percent of their 2011 purchases of corrosion-resistant steel were from the United States, 1.4 percent from nonsubject sources, 1.9 percent from Korea, and 0.3 percent from Germany.[167] Several major U.S. auto producers explained that they have a preference for local sourcing of corrosion-resistant steel.[168] Moreover, over the review period, the U.S. production facilities of ***. For example, in 2006 *** purchased *** percent of its corrosion-resistant steel from Korean suppliers and *** percent from U.S. suppliers, whereas in 2011 it purchased *** percent from U.S. suppliers and *** percent from Korean suppliers.[169] ***, purchased *** percent of its corrosion-resistant steel from Korea and *** percent from U.S. suppliers in that year; in 2011 it purchased *** percent from U.S. suppliers and *** percent from

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resistant steel from Korea into the construction end user segment of the U.S. market is likely to be modest given the relatively small volumes of subject imports from Korea prior to the orders, Korean producers' focus on their home and regional markets in these reviews, the fact that most of the growth in consumption for corrosion-resistant steel is forecasted to occur in Asia, and, as discussed in more detail below, the lack of a strong price incentive for Korean producers to divert shipments of corrosion-resistant steel to the U.S. market. See CR/PR at Tables I-1, IV-24 & IV-25. Nor, despite an increase in the share of Korean shipments to "other end users" during the period, does the record show that shipments to this channel would rise to any level that would render cumulated subject import volumes significant in the reasonably foreseeable future, particularly given declines in German shipments to this channel and the overall declines in subject import volumes during the period. See, e.g., CR/PR at Table II-1.

[167] Purchaser questionnaire responses, section II-1 for ***. In 2011, U.S. mills accounted for *** of corrosion-resistant steel shipments to German automotive transplants in the United States. German Respondents' Final Comments at 7 n.41.

[168] Ford, a major U.S. purchaser of corrosion-resistant steel, explained why it preferred locally-produced corrosion-resistant steel for its North American operations. It reported that a steel producer's geographical proximity is very important to it because U.S. producers offer shorter lead times, local technical support, the ability to meet just-in-time requirements, and reliability of supply. Ford explained that this is the primary reason why it purchased *** percent of its corrosion-resistant steel for North American operations during the period of review from producers in the United States and Canada and purchased *** subject merchandise from Germany and Korea for its U.S. operations. Ford's Prehearing Brief at 1-2. Ford stated that a preference for local supply is a major reason why removal of the orders on subject imports from Germany and Korea would not result in Ford or similar end users purchasing greatly increased volumes of subject merchandise from Germany and Korea. Id. at 3. *** reported that it required that *** percent of its purchases be from domestic sources due to proximity to its *** stamping facilities and shorter lead times to deliver the steel. *** purchaser questionnaire response, section III-12. *** reported that it required *** percent of its purchases to be from domestic sources due to shorter lead times, lower costs of logistics, and availability of local mill technical support among other factors. *** purchaser questionnaire response, section III-12. *** reported that it requires *** percent of its purchases to be from domestic sources due to the ability of U.S. suppliers to meet cost, delivery, and quality requirements. *** purchaser questionnaire response, section III-12. *** reported that ordering material from a country such as Germany or Korea can carry a higher cost, and the lead time on the product does not meet the aggressive timelines required to manufacture autos in the United States. Therefore, *** stated that due to cost and timing, sourcing corrosion-resistant steel domestically is more advantageous. *** purchaser questionnaire response, section IV-5. We observe that these major U.S. purchasers' statements are consistent with the responses of the majority of purchasers of corrosion-resistant steel, who rated U.S.-produced corrosion-resistant steel superior to subject merchandise from Germany in terms of delivery time and proximity of supplier and superior to subject imports from Korea in terms of delivery time, proximity of supplier, local service availability, and reliability of supply. CR/PR at Table II-8. More generally, 21 of 35 purchasers reported that they had changed suppliers since 2006, with a number of responding firms indicating that transportation costs were a factor in switching suppliers, and several of them noted switching to a supplier that was closer to their facilities to reduce costs. CR at II-29, PR at II-19.

[169] *** purchaser questionnaire response, section II-1.

Korean suppliers.[170] These data support the fact that *** auto producers located in the United States have a *** U.S.-supplied corrosion-resistant steel, and there is no evidence to suggest that this trend will not continue in the reasonably foreseeable future.[171]

Finally, we do not find that there is a substantial price incentive for Korean and German producers to divert significant quantities of corrosion-resistant steel to the United States. With respect to Korean producers of corrosion-resistant steel, recent MEPS data do not show that U.S. prices are higher than those in Korea, Korean producers' largest market for corrosion-resistant steel, or in Japan, their third largest market for corrosion-resistant steel.[172] Although U.S. prices were consistently higher than prices in China, Korean producers' second largest market for corrosion-resistant steel, Korean producers are unlikely to shift exports from China to the U.S. market because many of these exports are to Korean producers' affiliated automobile facilities in China.[173] The size, projected growth, and proximity to Korea of the Chinese market provides a strong incentive for Korean producers to continue to direct their shipments, as well as any unused capacity, to that market rather than the smaller and less quickly growing U.S. market.

Domestic Producers argue that U.S. prices are higher than prices in other markets and would therefore provide a substantial incentive for the German producers to divert a large portion of their exports from the lower-priced EU market to the higher-priced U.S. market.[174] German Respondents disagree, stating that U.S. prices have not been consistently higher than those in Germany and that even if U.S. prices were higher, simply comparing ex-mill prices does not take into account many other

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[170] *** purchaser questionnaire response, section II-1.

[171] We also observe that, consistent with this preference for locally supplied corrosion-resistant steel, corrosion-resistant steel imports from Japan did not increase significantly once the antidumping duty order on Japan was revoked pursuant to the second reviews, despite the fact that Japanese auto producers have operations in the United States. In fact, Japan was not one of the top five sources of nonsubject imports of corrosion-resistant steel to the United States during the current review period despite being a major source of imports during the original period of investigation. CR/PR at Table IV-1.

[172] We do not find comparisons of average unit value ("AUV") data to be particularly probative given the significant differences in product mix for corrosion-resistant steel. MEPS data show that over the period of January 2006 to December 2012, U.S. market prices were generally higher than Korean home market prices until after June 2011, when Korean prices were predominantly higher. CR/PR at Tables IV-25 & IV-26. The data show a mixture of higher Japanese home-market prices and higher U.S. market prices until after May 2010, when Japanese prices were generally higher. CR/PR at Tables IV-25 & IV-26.

[173] Tr. at 228-230 (Pi); Korean Respondents' Posthearing Brief at Q-11 and Exhs. 2 & 3. Although exports of corrosion-resistant steel from China to Korea were approximately 622,000 short tons higher in 2012 than in 2006, exports of corrosion-resistant steel from Korea to China were approximately 387,000 tons higher in 2012 than in 2006. CR/PR at Tables IV-13 & IV-14. Consequently, increased exports from China to Korea have not precluded the growth of, much less displaced, Korean exports to China or to Asia as a whole, which increased in 2010 and 2011 and were higher in interim 2012 than in interim 2011. CR/PR at Table IV-18. The record also does not indicate that the increases in exports from Korea to China that occurred during the latter portions of the period of review would be likely to reduce significantly Korean producers' focus on their home market in the reasonably foreseeable future. We observe that Korean producers' home market shipments declined from 2010 to 2011 as exports from China to Korea increased. CR/PR at Table IV-14 & IV-18. This pattern did not continue in 2012, when exports from China to Korea declined. CR/PR at Table IV-14. Moreover, while Korean producers' home market shipments were lower in interim 2012 than in interim 2011, their internal consumption of corrosion-resistant steel in Korea increased almost commensurately. CR/PR at Table IV-18.

[174] AMUSA's Prehearing Brief at 57-58; Nucor's Prehearing Brief at 48-49; U.S. Steel's Prehearing Brief at 34-38. Domestic Producers argue that the sustained higher prices make the U.S. market attractive to subject producers even when the cost of transportation for subject producers is taken into account. AMUSA's Posthearing Brief at 9-10 & Exh. 1 at 38-41; Nucor's Posthearing Brief at 11-12; U.S. Steel's Posthearing Brief, Exh. 1 at 27-29.

significant factors that affect acquisition costs and purchasing decisions, most notably transportation and logistics costs, lead times, and currency risks.[175] We agree that comparing ex-mill prices likely overstates the price differential between trading partners, particularly for countries that are geographically distant. Although the MEPS data show that U.S. ex-mill prices for corrosion-resistant steel have been generally higher than EU prices between 2009 and 2012, EU prices were nearly even with U.S. prices in several months and exceeded U.S. prices during the last half of 2010 and several months in 2011.[176] We find that any price differential is unlikely to cause producers of corrosion-resistant steel in Germany to modify their strong home market and regional orientation.[177] As discussed earlier, exports from Germany to the U.S. market have been overwhelmingly focused on the automotive sector, where purchasers have indicated a strong preference for domestic supply, as evidenced by the fact that 96.4 percent of their corrosion-resistant steel requirements have been supplied by the domestic industry. Moreover, as discussed above, although corrosion-resistant steel prices in Korea and Japan have recently been higher than U.S. market prices, producers in Germany have shipped only minimal volumes of corrosion-resistant steel to those markets.[178] This consideration provides further support for our conclusion that, to the extent that German producers were to increase exports to the United States after revocation, notwithstanding their likely continued focus on home and EU export markets, any such increase is unlikely to be significant.

Finally, assuming the U.S. market were indeed a "price magnet" for corrosion-resistant steel, we would have expected to see additional nonsubject imports in the U.S. market during the period given the absence of trade remedies on imports of corrosion-resistant steel from other countries and Domestic Producers' argument that economic conditions in most of the rest of the world were relatively weaker. Instead, nonsubject imports to the United States declined over the period at a much more significant rate than apparent U.S. consumption and lost *** percentage points of U.S. market share over the review period as the domestic industry gained 7.8 percentage points.[179] Accordingly, we do not find that price levels in the U.S. market provide a sufficient incentive for subject producers in Germany and Korea to begin shipping significant volumes of corrosion-resistant steel to the U.S. market in the event of revocation.

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[175] German Respondents' Prehearing Brief at 54.

[176] CR/PR at Table IV-25.

[177] In this regard, we observe that ThyssenKrupp wholly owns ThyssenKrupp Galmed S.A. ("Galmed"), a corrosion-resistant steel mill in Spain, which has not been subject to a U.S. antidumping duty order. According to ThyssenKrupp, Galmed has a production capacity of *** short tons, produces the full range of hot-dipped corrosion-resistant steel products, services the EU's automotive, construction, and service center sectors, has access to ThyssenKrupp's distribution networks in the United States, is qualified by and sells corrosion-resistant steel to major auto companies, and, as a fellow EU producer, is subject to the same demand conditions and pricing dynamics as ThyssenKrupp. German Respondents' Final Comments (Feb. 8, 2013) at 5-8. Although we recognize that Galmed's capacity is much smaller than ThyssenKrupp's, and that conditions of competition in Spain may be somewhat different than those in Germany, the fact that Galmed does not ship any corrosion-resistant products to the United States further supports the conclusion that there is not likely to be a significant increase in imports of corrosion-resistant steel from Germany upon revocation of the order.

[178] CR/PR at Table IV-6 (showing that Korea and Japan were not among the top 15 export markets for corrosion-resistant steel from Germany). Exports of corrosion-resistant steel from Germany to Korea were 126 short tons in 2006, 151 short tons in 2007, 452 short tons in 2008, 811 short tons in 2009, 1,689 short tons in 2010, and 1,666 short tons in 2011. Exports of corrosion-resistant steel from Germany to Japan were 1,349 short tons in 2006, 828 short tons in 2007, 731 short tons in 2008, 1,894 short tons in 2009, 1,140 short tons in 2010, and 765 short tons in 2011. EDIS Doc. 503945.

[179] CR/PR at Table C-1. Of the four countries with respect to which orders were revoked after the second five-year reviews, only Canada was a top-five source of U.S. imports of corrosion-resistant steel; however, imports from Canada relative to U.S. production declined throughout the current period of review. CR/PR at Table IV-1.

For all of the foregoing reasons, we do not find that the volume of cumulated subject imports from Germany and Korea likely would be significant if the orders are revoked.[180]

2. Likely Price Effects

In considering the likely price effects of subject imports from Germany and Korea if the orders were revoked, we observe, as discussed above, that corrosion-resistant steel whether derived from subject sources or U.S. producers is generally interchangeable. We again find, as we did in the original investigations and the first and second five-year reviews, that price is an important factor in purchasing decisions, although the majority of purchasers reported that domestically produced corrosion-resistant steel was superior to subject imports with respect to delivery time, local service availability, proximity of supplier, and reliability of supply.[181]

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[180] In our examination of likely subject import volume, we have also considered several other factors. First, with regard to inventories of the subject merchandise, from 2006 to 2011 the quantity of end-of-period inventories of cumulated subject merchandise in the United States declined irregularly from 68,709 short tons to 27,408 short tons; it was 43,445 short tons in interim 2011 and 26,336 short tons in interim 2012. CR/PR at Table IV-3. From 2006 to 2011, inventories of cumulated subject merchandise in Germany and Korea declined irregularly from 1.5 million short tons to 1.3 million short tons; they were 1.2 million short tons in both interim 2011 and interim 2012. CR/PR at Table IV-20. Relative to total shipments, inventories fell irregularly from 9.2 percent in 2006 to 7.8 percent in 2011; they were 6.9 percent in interim 2011 and 6.5 percent in interim 2012. CR/PR at Table IV-20. Despite the existence of these inventories held by the subject producers, the record indicates that most corrosion-resistant steel, including that held in inventory, is made to order, CR at II-28-II-29, PR at II-18-II-19, and therefore already committed to specific customers. Accordingly, the available information on inventories supports our conclusion that significant subject import volumes are not likely upon revocation.

Second, with regard to the potential for product shifting, Korean producer *** reported production of nonsubject corrosion-resistant steel totaling *** short tons in 2011. CR/PR at Table IV-19; CR at IV-34, PR at IV-27. All five responding Korean producers indicated that they are not able to switch production between corrosion-resistant steel and other products in response to a relative change in the price of corrosion-resistant steel. CR at II-12, PR at II-8. German producers reported production of nonsubject corrosion-resistant steel totaling *** short tons in 2011. CR/PR at Table IV-12. Two of the three German producers, ***, stated, however, that they could not switch production in response to a relative price change, whereas *** reported that one of its galvanizing lines can switch to the production of pickled and oiled product, but indicated that this switch is done only in the case of prolonged stoppages of the production line normally used for pickled product and is not caused by price changes. CR at II-10, PR at II-7. The German nonsubject products in question are principally higher-valued microalloy products, and the record contains no information suggesting why corrosion-resistant steel producers in Germany would have an economic incentive to shift production from higher-valued nonsubject products to the subject merchandise. German Respondents' Prehearing Brief at 34-36

Finally, with regard to the presence of barriers to subject country exports to third country markets, we recognize that Korean producer Dongbu reported that corrosion-resistant steel produced in Korea is currently subject to normal customs duties of 4-8 percent in China, 5-10 percent in Indonesia, 4 percent in the Philippines, and 5 percent in Thailand. Additonally, effective January 10, 2013, Thailand imposed antidumping duties on imports of pre-painted galvanized and zinc-aluminum coated steel, as well as unpainted zinc aluminum coated steel, from Korea for a five-year period. CR at IV-36-IV-37, PR at IV-29-IV-30. We do not find that these impediments to Korean producers' exports suggest likely significant shipments of corrosion-resistant steel to the U.S. market, as Korean producers have reported that it would be difficult for them to switch sales between alternative markets and the United States because of differing product specifications and standards and different sales terms among various countries. CR at II-12, PR at II-8. German producers of corrosion-resistant steel indicated in their responses that they are not aware of tariff or non-tariff barriers to trade concerning their exports of corrosion-resistant steel to countries other than the United States. CR at IV-37, PR at IV-30.

[181] CR/PR at Tables II-7 & II-8.

In these reviews, the Commission collected information on four pricing products.[182] Data were requested separately for contract and non-contract sales. Eight U.S. producers and five importers provided usable pricing data for contract sales, and 12 U.S. producers and one importer provided pricing data for non-contract sales, although not all firms reported pricing for all products for all quarters.[183] The Commission received data accounting for approximately 6.3 percent of reported U.S. producers' commercial shipments of corrosion-resistant steel, 1.3 percent of reported U.S. shipments of subject imports from Germany, and 3.1 percent of reported U.S. shipments of subject imports from Korea.

Prices for the domestic like product were higher at the conclusion of the review period than at its inception. Contract and non-contract prices for products 1-3 from all sources fluctuated throughout the period of review, reaching a peak in late 2008 and early 2009, falling in mid-2009, and recovering by 2012 to levels higher than at the start of the period. Contract prices for domestically produced product 4 steadily increased from January 2006-June 2012. Non-contract prices for domestically produced product 4 fluctuated, peaking in 2008 before falling sharply in 2009 and then recovering to levels higher than at the start of the period by 2012.[184]

There is no history of pervasive underselling by cumulated subject imports from Germany and Korea. To the contrary, cumulated subject imports from Germany and Korea have predominantly oversold the domestic like product in every period the Commission has examined, including prior to the orders being put in place. In the original investigations, cumulated subject imports from Germany and Korea oversold the domestic like product in 39 of 51 observations.[185] In the first reviews, cumulated subject imports from Germany and Korea oversold the domestic like product in 77 of 124 observations, and in the second reviews cumulated subject imports oversold the domestic like product in 70 of 91 observations.[186] During the current reviews, cumulated subject imports from Germany and Korea

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[182] CR at V-11, PR at V-8. The products were (1) hot-dipped galvanized carbon steel sheet, in coils, ASTM A-653, DQSK, minimum spangle, G-40 to G-60 coating weight (Z120 to Z180 in metric coating weight), 40" to 70" in width, 0.018" to under 0.020" in thickness; (2) hot-dipped galvanized carbon steel sheet, in coils, ASTM A-653, Structural Quality, Grade 80, <G60, regular or minimum spangle, not annealed, 40" to 70" in width, 0.018" to under 0.020" in thickness; (3) electrolytically zinc coated carbon steel sheet, in coils, ASTM A-879, 50-90 grams/square meter per side coating, without organic coating, forming steel, 40" to under 60" in width, 0.022" to under 0.044" in thickness; and (4) hot-dipped galvanized carbon steel sheet, in coils, bake hardenable, 43" to 73" in width, 0.0232" to 0.0591" in thickness, coating weight 50G to 70G (Z100 to Z140 in metric coating weight). See CR at V-10-V-11, PR at V-8.

[183] CR at V-11, PR at V-8.

[184] CR at V-11, PR at V-8. In terms of weighted-average f.o.b. selling prices, domestically produced product 1 contract and non-contract prices increased irregularly on a per-short ton basis from $*** and $*** in the first quarter of 2006 to $*** and $***, respectively, in the second quarter of 2012. For product 2, contract and non-contract prices increased irregularly on a per-short ton basis from $*** and $*** in the first quarter of 2006 to $*** and $***, respectively, in the second quarter of 2012. For product 3, contract and non-contract prices increased irregularly on a per-short ton basis from $705 and $*** in the first quarter of 2006 to $*** and $***, respectively, in the second quarter of 2012. For product 4, contract and non-contract prices increased irregularly on a per-short ton basis from $663 and $*** in the first quarter of 2006 to $947 and $***, respectively, in the second quarter of 2012. CR/PR at Tables V-3-V-10.

[185] CR/PR at Table V-13 n.1.

[186] CR/PR at Table V-13 n.1.

oversold the domestic like product in 43 of 73 observations.[187] In light of these data, we find that predominant overselling by the subject imports is likely to continue upon revocation.[188]

Domestic Producers argue that because German and Korean producers would be likely to attempt to increase sales to the U.S. automotive sector, domestic auto producers would likely use prices for the subject imports to drive down domestic prices, causing price suppression.[189] We have already found that producers in Germany and Korea do not have the incentive to ship significant quantities of subject merchandise to the United States in the event of revocation. Lacking an incentive to move significant volumes into the U.S. market, producers in Germany and Korea would not be likely to price aggressively for any limited additional sales they may offer to make after revocation. We also observe that there is nothing on the record to indicate that domestic auto producers used the availability of nonsubject imports during the period of review as leverage to drive down pricing even after the second five-year reviews resulted in the revocation of the orders on corrosion-resistant steel from Japan, Canada, Australia, and France.[190] As noted above, U.S. prices for corrosion-resistant steel increased from January 2006 to June 2012.[191] Additionally, automotive purchasers indicated a preference for U.S.-produced corrosion-resistant steel and reported that 96.4 percent of their 2011 purchases of corrosion-resistant steel were from the United States, indicating that nonsubject imports have not made significant inroads into this market.[192]

In light of our finding that the cumulated subject import volume likely would not be significant, and given the historic pattern of pricing of cumulated subject imports, which even during the original period of investigation were more likely to oversell than undersell the domestic like product, we find that significant underselling by cumulated subject imports is unlikely if the orders are revoked. Because of the lack of either likely significant volumes or likely significant underselling, we further find that upon

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[187] CR/PR at Table V-13.

[188] We do not rely on MEPS pricing data in evaluating domestic producers' argument regarding significant price undercutting in third country markets by cumulated subject imports. See, e.g. AMUSA's Prehearing Brief at 63. We have no information regarding the conditions of competition in those markets. The Commission has previously given little or no weight to similar arguments concerning "aggressive pricing" by the subject imports in third country markets absent a showing that the third country markets were characterized by conditions of competition analogous to those in the U.S. market. See Hot-Rolled Flat-Rolled Carbon-Quality Steel Products from Brazil, Japan, and Russia, Inv. Nos. 701-TA-384 and 731-TA-806-808 (Second Review), USITC Pub. 4237 (June 2011), at 44 n.279, aff'd, U.S. Steel Corp. v. United States, 856 F. Supp.2d 1318, 1326-27 (Ct. Int'l Trade 2012), appeal pending. See also Committee for Fair Beam Imports v. United States, 477 F. Supp.2d 1313, 1328 (Ct. Int'l Trade 2007), aff'd mem., 260 F. App'x 302 (Fed. Cir. 2008).

[189] AMUSA's Prehearing Brief at 64; U.S. Steel's Posthearing Brief at 11-12; AK Steel's Prehearing Brief at 10-11. Domestic Producers cite questionnaire responses from ***, as well as various importers, indicating that revocation of the orders would likely cause ***. AMUSA's Prehearing Brief at 67-68; U.S. Steel's Posthearing Brief at 12.

[190] In the second reviews, Commissioner Aranoff and Commissioner Pearson credited testimony by domestic auto producers that, if the orders on corrosion-resistant steel from Germany and Korea were revoked, they would use the availability of such imports to obtain more favorable pricing from domestic corrosion-resistant steel suppliers. Second Reviews, USITC Pub. 3899, at 147-148. During the current period of review, however, domestic auto producers have continued to purchase very minor volumes of imported corrosion-resistant steel even after the second reviews resulted in the revocation of the four orders. Consequently, based on the current record, they find that domestic auto producers are not likely to bargain successfully for favorable pricing from domestic corrosion-resistant steel suppliers based on the availability of subject imports from Germany and Korea, which have shown an overall decreasing trend during the period of review, if the orders are revoked.

[191] We note that the domestic industry's ratio of cost of goods sold to net sales declined irregularly from 94.2 percent in 2006 to 93.6 percent in 2011. CR/PR at Table C-1.

[192] Purchaser questionnaire responses, section II-1 for ***.

revocation cumulated subject imports from Germany and Korea are not likely to have significant price depressing or suppressing effects.

3. Likely Impact[193]

As previously discussed, during the period of review the domestic industry experienced some consolidation, some sales of existing mills, a bankruptcy, and one new entrant. Capacity showed fairly minor fluctuations, increasing from 23.5 million short tons in 2006 to 24.5 million short tons in 2008, declining to 23.6 million short tons in 2009, and then increasing over the next two years to 24.0 million short tons in 2011.[194] Production of corrosion-resistant steel fell from 20.5 million short tons in 2006 to 12.9 million short tons in 2009, before increasing over the next two years to 18.3 million short tons in 2011.[195] Capacity utilization followed a similar trend, decreasing from 87.3 percent in 2006 to 54.8 percent in 2009, before increasing to 76.3 percent in 2011.[196] Total U.S. shipments peaked in 2006, declined the next two years, fell sharply in 2009, and increased in 2010 and 2011 to a level below that observed in any year between 2006 and 2008.[197] End-of-period inventories fluctuated on both an absolute and a relative basis during the period of review. Inventories increased from 1.6 million short tons in 2006 to 2.2 million short tons in 2011 and were 8.0 percent of production in 2006 and 11.9 percent of production in 2011.[198]

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[193] Section 752(a)(6) of the Act states that "the Commission may consider the magnitude of the margin of dumping or the magnitude of the net countervailable subsidy" in making its determination in a five-year review. 19 U.S.C. § 1675a(a)(6). The statute defines the "magnitude of the margin of dumping" to be used by the Commission in five-year reviews as "the dumping margin or margins determined by the administering authority under section 1675a(c)(3) of this title." 19 U.S.C. § 1677(35)(C)(iv).

Commerce conducted a full five-year review with respect to the antidumping duty order on subject imports from Germany. It found likely dumping margins of 9.35 percent for ThyssenKrupp and 9.35 percent for all other producers/exporters. CR/PR at Table I-8. Commerce conducted a full five-year review with respect to the antidumping duty order on subject imports from Korea. CR/PR at Table I-7. It found likely dumping margins for all subject manufacturers/producers/exporters of 12.85 percent. Effective August 1, 2010, Commerce revoked the antidumping duty order with respect to POSCO. CR/PR at Table I-8 & n.3.

Commerce conducted an expedited five-year review with respect to the countervailing duty order on subject imports from Korea (Union Steel was excluded from the original countervailing duty order on the basis of a *de minimis* net subsidy rate). It found likely subsidy margins of 0.75 percent for Dongbu, 0.57 percent for POSCO, and 1.26 percent for all other subject producers/exporters. CR/PR at Table I-8 & n.3. In its final determination in the review of the countervailing duty order, Commerce identified 20 programs which provided countervailable subsidies to Korean subject producers, five of which were found to be export subsidies as described in Article 3 of the Subsidies Agreement. CR at I-27-I-28, PR at I-24; "Issues and Decision Memorandum for the Expedited Sunset Review of the Countervailing Duty Order on Corrosion-Resistant Steel Flat Products from Korea: Final Results,": International Trade Administration, U.S. Department of Commerce, May 2, 2012.

[194] CR/PR at Table III-3. The domestic industry's capacity was 11.9 million short tons in interim 2011 and 12.7 million short tons in interim 2012.

[195] CR/PR at Table III-3. The domestic industry's production was 9.2 million short tons in interim 2011 and 9.7 million short tons in interim 2012.

[196] CR/PR at Table III-3. The domestic industry's capacity utilization was 77.7 percent in interim 2011 and 76.4 percent in interim 2012.

[197] CR/PR at Table III-7. Total U.S. shipments were 8.3 million short tons in interim 2011 and 9.1 million short tons in interim 2012.

[198] CR/PR at Table III-6. End-of-period inventories were 1.9 million short tons (10.5 percent of production) in interim 2011 and 2.2 million short tons (11.3 percent of production) in interim 2012.

Employment fluctuated during the period of review. Production and related workers (PRWs) increased from 12,170 in 2006 to 12,575 in 2007, fell slightly to 12,330 in 2008, then fell to a period low of 9,980 in 2009. Employment levels then increased to 11,112 PRWs in 2010 and to 11,866 PRWs in 2011.[199] Total hours worked, wages paid, and productivity (measured in short tons per thousand hours) followed the same general trend as employment levels, falling from 2006 to 2009 and increasing during the remaining period examined.[200] Hourly wages paid to PRWs increased irregularly from $34.63 in 2006 to $36.55 in 2011.[201]

The financial performance of the domestic industry fluctuated somewhat during the period of review. The domestic industry was profitable from 2006 to 2008, with operating income ratios increasing from 2.8 percent in 2006 to 3.6 percent in 2007 and 4.2 percent in 2008.[202] Although raw material costs and the cost of goods sold increased to their highest levels of the period in 2008, the industry's sales volume and corresponding revenue increased even more rapidly, and the domestic industry achieved its highest operating margin of the period. By contrast, in the wake of the economic downturn, the industry's operating income margin was negative 5.8 percent in 2009, and ten of 16 producers reported operating losses. Although per unit costs fell, revenues declined far more sharply, which is generally consistent with the recessionary conditions experienced by the domestic industry in 2009. In 2010 and 2011, however, when demand and production recovered, albeit not to the levels experienced prior to the economic downturn, the industry's financial performance improved and its operating income margins were again positive, at 3.0 percent and 4.1 percent, respectively.[203] The industry's capital expenditures increased irregularly during the period of review, reaching a peak in 2010 that largely reflected expenditures by ***.[204] Research and development expenses, which were much lower than capital expenses, increased irregularly to a full year period high in 2011.[205]

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[199] CR/PR at Table III-8. There were 11,644 PRWs in interim 2011 and 11,582 PRWs in interim 2012.

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

[201] CR/PR at Table III-8. Hourly wages were $36.72 in interim 2011 and $38.43 in interim 2012.

[202] CR/PR at Table III-10.

[203] CR/PR at Table III-10. The domestic industry's operating income ratio was 6.6 percent in interim 2011 and 6.1 percent in interim 2012.

[204] CR/PR at Table III-12; CR at III-36, PR at III-20. The domestic industry's capital expenditures increased irregularly from $442 million in 2006 to $451 million in 2011; they were $183 million in interim 2011 and $275 million in interim 2012. Domestic producers argue that the average operating income margin for the domestic industry of 2.3 percent over the review period was insufficient to cover their cost of capital and reflects too low a rate of return to justify the investments needed for the industry to remain competitive. See, e.g., Tr. at 12 (Cannon), 28 (Scherrbaum), 131 (Dorn). We note that this averaged figure for the period includes the large operating losses incurred by the domestic industry in 2009 which offset the upward trend in the domestic industry's operating profits later in the period. CR/PR at Table III-10. Moreover, as discussed above, the domestic industry's capital expenditures amounted to over $4 billion from 2006 to 2011, as well as $275 million in interim 2012, and research and development expenditures were at their highest level in 2011. Finally, we note that Domestic Producers' argument is premised on the assumption that the domestic industry's operating income margin should equal or exceed the industry's cost of capital, expressed as a percentage of the outstanding principal of long term debt. Domestic Producers provided no evidence to support this assumption, and the different bases on which the two statistics are calculated suggests that they are not directly comparable.

[205] CR/PR at Table III-12. The domestic industry's research and development expenses increased irregularly from $14 million in 2006 to $16.1 million in 2011, and were $7.3 million in interim 2011 as compared to $7.2 million in interim 2012.

We conclude that the domestic industry is not currently in a vulnerable condition.[206] The performance of the domestic industry during the period of review largely reflected demand conditions, with the domestic industry showing positive financial performance in 2005 through 2008, when demand was generally strong,[207] and poor financial performance in 2009, when demand plummeted due to a severe economic downturn. The domestic industry returned to profitability in 2010, and increased its profitability in 2011, when demand recovered to some extent but was still below the levels reached before the downturn.[208] Domestic Producers asserted that the domestic industry's average operating performance was worse in this review period than during any other period examined by the Commission. This argument, however, does not take into account the domestic industry's significant reorganization and consolidation that took place during the period examined in the second reviews and has continued since 2006.[209] Moreover, in the original investigations and the first reviews, the domestic industry experienced downward trends in operating margins, whereas in these reviews the domestic industry's operating margins rose during the two most recent calendar years.[210] In the second reviews, in which the Commission did not find the industry to be vulnerable, the domestic industry experienced multiple years of negative operating margins, contrasted with this period in which the domestic industry experienced one year of negative operating margins but returned to profitability in the following year.[211] In fact, the domestic industry's operating margin in 2011 was higher than the operating margin achieved by the domestic industry in 10 out of the last 17 years for which full-year financial results were reported to the

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[206] Chairman Williamson and Commissioner Pinkert do not join this paragraph or the following paragraph. With respect to the issue of domestic industry vulnerability, they find that the record evidence shows the industry's condition to be mixed. Its financial performance during the period of review largely reflected demand conditions, with positive performance from 2005 to 2008, when demand was generally strong, and poor performance in 2009, when demand plummeted due to a severe economic downturn. The industry returned to profitability in 2010 and 2011, when demand recovered to some extent, but operating income margins nevertheless failed to return to robust, pre-downturn levels. Despite increases in the industry's production, capacity utilization, shipments, and employment since 2009, those indicators have also not returned to pre-downturn levels.

[207] We do not find that the maintenance of the orders over the current period of review is significantly responsible for the industry's improved performance after 2009. We instead find that the improved performance of the domestic industry achieved during this period is a function of improved demand conditions unrelated to the orders under review and the continued effects of the industry's restructuring, many of the key elements of which occurred prior to the current review period.

[208] We continue to recognize that, while corrosion-resistant steel production remains capital intensive, the domestic industry appears to be better positioned to control output and production and maintain price levels in response to changing business cycles than it was during the original investigations and first reviews because of the consolidations and restructuring that took place in the second review period and has continued in the third review period. As discussed above, domestic producers have taken steps to vertically integrate their sourcing of raw materials, thus limiting their exposure to raw material cost volatility.

[209] CR/PR at Tables III-1 & III-2. In May 2012, domestic producer RG Steel declared bankruptcy, and in September 2012 RG Steel sold two of its mills while a third remains idle. CR/PR at Table III-1. RG Steel is currently in litigation with Severstal in which it is seeking to recover over $100 million in losses or damages due to alleged breaches in contractual representations, warranties and covenants which resulted in RG Steel substantially overpaying for these steel mills. German Respondents' Prehearing Brief at 12.

[210] CR/PR at Table I-1. This upward trend in operating margins during the latter portion of the period of review would have been even more pronounced if not for TKSUSA. CR at III-34 n.31, PR at III-24-III-25 n.31. As an entirely new entrant to the U.S. industry, TKSUSA, ***. August 24, 2012 email with attachments from TKSUSA to USITC auditor. ***. Id.

[211] CR/PR at Table I-1. All but one *** of the five major domestic producers of corrosion-resistant steel, was profitable in full-year 2011, and two *** earned *** operating profits. CR/PR at Table III-10.

Commission.[212] Although we would not characterize the industry's 2011 operating performance as robust, neither do we consider it unduly poor in light of that year's level of apparent consumption, which was below levels in 2006 to 2008, and in every year of the second review period.[213] Given that the domestic industry's financial performance has historically tracked demand, and because industry sources, ***, and the majority of market participants all agree that overall improvement in demand for corrosion-resistant steel is likely,[214] the domestic industry's condition is likely to improve in the reasonably foreseeable future.[215]

Moreover, there has not been a significant increase in nonsubject imports of corrosion-resistant steel during this review period that might have weakened the domestic industry. Rather, nonsubject imports have declined from 3.6 million short tons in 2006 to 1.6 million short tons in 2011, or by 56 percent, which exceeds the decline in apparent U.S. consumption during this period.[216] Moreover, from 2006 to 2011, the market share held by nonsubject imports has fallen by *** percentage points to *** percent of the U.S. market, whereas domestic producers have increased their already predominant market share by 7.8 percentage points, to 90.0 percent of the U.S. market.[217]

In light of our findings regarding the likely volume and price effects of cumulated subject imports, we conclude that cumulated subject imports would not be likely to have a significant adverse impact on the domestic industry's output, sales, market share, profits, or return on investments if the orders are revoked. Given projected demand growth for corrosion-resistant steel in the United States, the relatively small additional volumes of cumulated subject imports likely upon revocation would be insufficient to take any significant market share from the domestic industry. Moreover, because these cumulated imports are unlikely to undersell significantly the domestic like product or have other significant price effects, they are unlikely to cause any significant deterioration in the domestic industry's revenues or financial performance. Accordingly, we determine that revocation of the antidumping duty orders on subject imports from Germany and Korea and the countervailing duty order on subject imports from Korea would not be likely to lead to the continuation or recurrence of material injury to the domestic industry within a reasonably foreseeable time.

CONCLUSION

For the foregoing reasons, we determine that revocation of the antidumping duty orders on subject imports of corrosion-resistant steel from Germany and Korea, and the countervailing duty order on subject imports of corrosion-resistant steel from Korea, would not be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

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[212] CR/PR at Tables I-1, I-2, and I-3. In all of the periods examined by the Commission, the highest operating margin achieved by the domestic industry was 10.8 percent in 2004.

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

[214] CR/PR at Tables IV-23-IV-24; CR at II-20, PR at II-13.

[215] The majority of producers, importers, and purchasers of corrosion-resistant steel reported either likely increasing or fluctuating demand. CR/PR at Table II-3.

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

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

PART I: INTRODUCTION AND OVERVIEW

BACKGROUND

Effective January 3, 2012, the U.S. International Trade Commission ("Commission" or "USITC"), pursuant to section 751(c) of the Tariff Act of 1930, as amended ("the Act"),[1] instituted reviews to determine whether revocation of the countervailing duty order on corrosion-resistant carbon steel flat products ("corrosion-resistant steel" or "CORE") from Korea and the antidumping duty orders on corrosion-resistant steel from Germany and Korea would likely lead to the continuation or recurrence of material injury to a domestic industry.[2] [3] On April 9, 2012, the Commission determined that it would conduct full reviews pursuant to section 751(c)(5) of the Act.[4] The following tabulation presents information relating to the schedule of this proceeding:[5]

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

[2] *Corrosion-Resistant Carbon Steel Flat Products From Germany and Korea: Institution of Five-Year Reviews Concerning the Countervailing Duty Order on Corrosion-Resistant Carbon Steel Flat Products From Korea and the Antidumping Duty Orders on Corrosion-Resistant Carbon Steel Flat Products From Germany and Korea*, 77 FR 301, January 4, 2012. 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") initiated five-year reviews of the subject antidumping and countervailing duty orders. *Initiation of Five-Year ("Sunset") Review*, 77 FR 85, January 3, 2012.

[4] *Corrosion-Resistant Carbon Steel Flat Products From Germany and Korea; Notice of Commission Determinations To Conduct Full Five-Year Reviews*, 77 FR 24221, April 23, 2012. The Commission received individually adequate responses, containing company-specific information, from (1) Apollo Metals Ltd. ("Apollo Metals"), Thomas Steel Strip Corp. ("Thomas Steel"), AK Steel Corp. ("AK Steel"); ArcelorMittal USA, LLC ("ArcelorMittal USA"); Nucor Corp. ("Nucor"); Steel Dynamics Inc. ("SDI"); United States Steel Corp. ("U.S. Steel"), and ThyssenKrupp Steel USA, LLC ("TKSUSA"), domestic producers of corrosion-resistant steel; (2) Salzgitter Flachstahl GmbH ("Salzgitter") and ThyssenKrupp Steel Europe AG ("TKSE"), German producers of corrosion-resistant steel; (3) ThyssenKrupp Steel USA, LLC ("TKSUSA"); a U.S. importer of corrosion-resistant steel from Germany; and (4) POSCO, Dongbu Steel Co., Ltd, ("Dongbu"), Union Steel Co., Ltd. ("Union"), and Hyundai HYSCO Co. ("HYSCO"), Korean producers of corrosion-resistant steel. The Commission found that both the domestic and respondent interested party group responses to its notice of institution were adequate and determined to conduct full reviews in this proceeding.

[5] The Commission's statement on adequacy, as well as full citations for referenced *Federal Register* notices, are referenced in appendix A and may also be found at the Commission's web site (internet address *www.usitc.gov*). Commissioners' votes on whether to conduct expedited or full reviews may also be found at the web site. Appendix B presents witnesses that appeared at the Commission's hearing.

Effective date	Action
August 17, 1993	Commerce's countervailing duty order on corrosion-resistant steel from Korea (58 FR 43752)
August 19, 1993	Commerce's antidumping duty orders on corrosion-resistant steel from Germany and Korea (58 FR 44159 and 44170)
December 15, 2000	Commerce's first continuation orders on corrosion-resistant steel from Germany and Korea (65 FR 78469)
February 14, 2007	Commerce's second continuation orders on corrosion-resistant steel from Germany and Korea (72 FR 7009)
January 3, 2012	Commission's institution of five-year reviews (77 FR 301, January 4, 2012)
January 3, 2012	Commerce's initiation of five-year reviews (77 FR 85)
April 9, 2012	Commission's determinations to conduct full five-year reviews (77 FR 24221, April 23, 2012)
May 10, 2012	Commerce's final results of expedited five-year review of the countervailing duty order on corrosion-resistant steel from Korea (77 FR 27438)
May 21, 2012	Commission's scheduling of the reviews (77 FR 31877, May 30, 2012)
November 2, 2012	Commission's revised schedule of the reviews (77 FR 67395, November 9, 2012)
December 6, 2012	Commerce's final results of full five-year reviews of the antidumping duty orders on corrosion-resistant steel from Germany and Korea (77 FR 72827)
January 9, 2013	Commission's hearing
February 15, 2013	Commission's vote
March 5, 2013	Commission's determinations transmitted to Commerce

The Original Investigations

The original investigations resulted from petitions filed by Armco, Bethlehem, Geneva, Gulf States, Ispat/Inland, LTV, Lukens, National, Sharon, USX, and WCI, on June 30, 1992, alleging that an industry in the United States was materially injured and threatened with material injury by reason of subsidized imports of corrosion-resistant steel from Korea and less-than-fair-value ("LTFV") imports of

corrosion-resistant steel from Germany and Korea.[6] Following notification of a final determination by Commerce that imports of corrosion-resistant steel from Korea were being subsidized and that imports of corrosion-resistant steel from Germany and Korea were being sold at LTFV, the Commission determined in August 1993 that a domestic industry was materially injured by reason of subsidized imports of corrosion-resistant steel from Korea and by reason of LTFV imports of corrosion-resistant steel from Germany and Korea.[7] The Commission's affirmative determination also included U.S. imports from Australia, Canada, France, and Japan. Commerce published the countervailing duty order on subject imports of corrosion-resistant steel from Korea on August 17, 1993.[8] Commerce published the antidumping duty orders on corrosion-resistant steel from Germany and Korea on August 19, 1993.[9]

First Five-Year Reviews

In November 2000, the Commission completed its full first five-year reviews of the orders subject to these reviews and determined that revocation of the orders on corrosion-resistant steel from Germany and Korea would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[10] Commerce and the Commission

[6] The petitions that led to the original investigations underlying these current five-year reviews included allegations that an industry in the United States was materially injured 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 from 8 countries. The petitions further alleged that an industry in the United States was materially injured 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 from 9 countries. *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, Invs. 701-TA-319-354 and 731-TA-573-620 (Preliminary)*, USITC Publication 2549 (August 1992), pp. 2-4. The corrosion-resistant steel orders concerning Germany and Korea that are the subject of these current third five-year reviews are the only orders that were part of the original underlying investigations that currently remain in effect. Further information concerning the disposition of all corrosion-resistant steel cases involved in the underlying investigations are included in table I-4.

[7] *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, and the United Kingdom, Inv. Nos. 701-TA-319-332, 334, 336-342, 344, and 347-353 (Final) and Inv. Nos. 731-TA-573-579, 581-592, 594-597, 599-609, and 612-619 (Final), VOLUME I: Determinations and Views of the Commission*, USITC Publication 2664 (August 1993), pp. 1-4.

[8] *Countervailing Duty Orders and Amendments to Final Affirmative Countervailing Duty Determinations: Certain Steel Products From Korea*, 58 FR 43752, August 17, 1993.

[9] *Antidumping Duty Orders on Certain Cold-Rolled Carbon Steel Flat Products and Certain Corrosion-Resistant Carbon Steel Flat Products From Korea*, 58 FR 44159, August 19, 1993, and *Antidumping Duty Orders and Amendments to Final Determinations of Sales at Less Than Fair Value: Certain Hot-Rolled Carbon Steel Flat Products, Certain Cold-Rolled Carbon Steel Flat Products, Certain Corrosion-resistant Carbon Steel Flat Products and Certain Cut-to-Length Carbon Steel Plate From Germany*, 58 FR 44170, August 19, 1993.

[10] *Certain Carbon Steel Products From Australia, Belgium, Brazil, Canada, Finland, France, Germany, Japan, Korea, Mexico, The Netherlands, Poland, Romania, Spain, Sweden, Taiwan, and The United Kingdom, Inv. Nos. AA1921-197(Review), 701-TA-231, 319-320, 322, 325-328, 340, 342, and 348-350 (Review), and 731-TA-573-576, 578, 582-587, 604, 607-608, 612, and 614-618 (Review)*, USITC Publication 3364 (November 2000), pp. 1-2.

issued affirmative determinations in the first five-year reviews.[11] The Commission's affirmative determination also included U.S. imports from Australia, Canada, France, and Japan. Commerce issued continuations of the countervailing duty order on imports of corrosion-resistant steel from Korea and the antidumping duty orders on imports of corrosion-resistant steel from Germany and Korea, effective December 15, 2000.[12]

Second Five-Year Reviews

In January 2007, the Commission completed its full second five-year reviews of the subject orders and determined that revocation of the orders on corrosion-resistant steel from Germany and Korea would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[13] Following affirmative determinations in second five-year reviews by Commerce and the Commission,[14] Commerce issued continuations of the countervailing duty order on imports of corrosion-resistant steel from Korea and the antidumping duty orders on imports of corrosion-resistant steel from Germany and Korea, effective February 14, 2007.[15] The Commission issued negative determinations with respect to U.S. imports of corrosion-resistant steel from Australia, Canada, France, and Japan, and Commerce revoked those orders effective December 15, 2005.[16]

SUMMARY DATA

Table I-1 presents a summary of data from the original investigations and the full first five-year reviews. Table I-2 presents a summary of data from the full second five-year reviews. Table I-3 presents a summary of data from the current full five-year reviews.

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[11] *Certain Carbon Steel Products From Australia, Belgium, Brazil, Canada, Finland, France, Germany, Japan, Korea, Mexico, Netherlands, Poland, Romania, Spain, Sweden, Taiwan, and United Kingdom,* 65 FR 75301, December 1, 2000; *Certain Corrosion-Resistant Carbon Steel Flat Products; Cold-Rolled Carbon Steel Flat Products; and Cut-to-Length Carbon Steel Plate Products From Germany; Final Results of Full Sunset Reviews,* 65 FR 47407, August 2, 2000.

[12] *Continuation of Antidumping and Countervailing Duty Orders on Certain Carbon Steel Products from Australia, Belgium, Brazil, Canada, Finland, France, Germany, Japan, South Korea, Mexico, Poland, Romania, Spain, Sweden, Taiwan, and the United Kingdom,* 65 FR 78469, December 15, 2000.

[13] *Certain Carbon Steel Products From Australia, Belgium, Brazil, Canada, Finland, France, Germany, Japan, Korea, Mexico, Poland, Romania, Spain, Sweden, Taiwan, and the United Kingdom, Inv. Nos. AA1921-197 (Second Review); 701-TA-319, 320, 325-327, 348, and 350 (Second Review); and 731-TA-573, 574, 576, 578, 582-587, 612, and 614-618 (Second Review), VOLUME I: Determination and Views of the Commission,* USITC Publication 3899 (January 2007), p. 1.

[14] *Certain Carbon Steel Products From Australia, Belgium, Brazil, Canada, Finland, France, Germany, Japan, Korea, Mexico, Poland, Romania, Spain, Sweden, Taiwan, and the United Kingdom,* 72 FR 4529, January 31, 2007.

[15] *Continuation Pursuant to Second Five-Year ("Sunset") Reviews of Antidumping and Countervailing Duty Orders: Certain Corrosion-Resistant Carbon Steel Flat Products from Germany and Korea,* 72 FR 7009, February 14, 2007.

[16] *Revocation Pursuant to Second Five-Year ("Sunset") Reviews of Antidumping and Countervailing Duty Orders: Certain Corrosion-Resistant Carbon Steel Flat Products from Australia, Canada, Japan, and France,* 72 FR 7010, February 14, 2007.

Table I-1
Corrosion-resistant steel: Comparative data from the original investigations and first five-year reviews, 1990-92 and 1997-99

(Quantity=*short tons*; value=*$1,000*; unit values are *per short ton*)

Item	Original investigations			First five-year reviews		
	1990	1991	1992	1997	1998	1999
U.S. consumption quantity:						
Amount	12,795,000	11,489,000	13,562,000	17,776,625	18,318,059	19,934,889
Producers' share[1]	85.6	85.0	82.7	91.2	91.7	90.2
Importer's share:[1]						
Germany	1.3	1.2	1.4	0.3	0.1	0.2
Korea	1.0	1.1	1.4	0.3	0.8	1.6
Subtotal	2.3	2.3	2.8	0.6	0.9	1.8
Australia	0.9	1.3	1.4	(2)	(2)	(2)
Canada	1.4	2.1	3.4	2.2	2.2	1.8
France	0.5	0.6	0.7	(2)	(2)	(2)
Japan	6.6	6.0	6.1	0.1	0.2	0.2
All other sources	2.7	2.7	2.9	5.8	4.9	6.0
Subtotal	12.1	12.7	14.5	8.2	7.4	8.0
Total imports	14.4	15.0	17.3	8.8	8.3	9.8
U.S. consumption value:						
Amount	7,786,000	6,801,000	7,826,000	10,896,245	10,880,352	11,031,334
Producers' share[1]	84.1	84.0	81.7	91.5	91.9	90.8
Importer's share:[1]						
Germany	1.4	1.2	1.5	0.3	0.1	0.2
Korea	1.2	1.2	1.5	0.4	0.9	1.5
Subtotal	2.6	2.4	3.0	0.7	1.0	1.7
Australia	1.1	1.1	1.4	(2)	(2)	(2)
Canada	1.3	1.9	3.0	2.0	1.9	1.7
France	0.5	0.6	0.7	(2)	(2)	(2)
Japan	7.6	6.9	7.2	0.2	0.2	0.3
All other sources	2.8	3.1	3.0	5.6	5.0	5.5
Subtotal	13.3	13.6	15.3	7.8	7.1	7.5
Total imports	15.9	16.0	18.3	8.5	8.1	9.2

Table continued on following page.

Table I-1--*Continued*
Corrosion-resistant steel: Comparative data from the original investigations and first five-year reviews, 1990-92 and 1997-99

(Quantity=*short tons*; value=*$1,000*; unit values are *per short ton*)

Item	Original investigations			First five-year reviews		
	1990	1991	1992	1997	1998	1999
U.S. imports from--						
Germany:						
Quantity	161,712	137,767	189,192	54,869	21,557	34,434
Value	106,892	84,820	119,055	33,776	16,060	21,071
Unit value	$661	$616	$629	$616	$745	$612
Korea:						
Quantity	124,220	124,897	193,513	58,658	154,984	309,989
Value	89,731	83,030	119,120	42,580	97,667	166,010
Unit value	$722	$665	$616	$726	$630	$536
Subtotal (Germany and Korea):						
Quantity	285,932	262,664	382,705	113,527	176,541	344,423
Value	196,623	167,850	238,175	76,356	113,727	187,081
Unit value	$688	$639	$622	$673	$644	$543
Australia:						
Quantity	121,230	147,624	183,782	636	82	39
Value	82,377	94,020	112,968	524	111	100
Unit value	$680	$637	$615	$824	$1,359	$2,561
Canada:						
Quantity	180,030	245,091	451,082	393,986	397,529	356,620
Value	102,188	132,391	234,752	215,365	208,575	192,081
Unit value	$568	$540	$520	$547	$525	$539
France:						
Quantity	59,087	70,786	94,523	5,677	2,478	4,121
Value	36,666	40,776	53,306	3,725	1,890	2,377
Unit value	$621	$576	$564	$656	$763	$577
Japan:						
Quantity	838,598	681,563	824,743	24,269	34,182	49,248
Value	591,512	468,218	562,349	21,908	27,159	35,961
Unit value	$705	$687	$682	$903	$795	$730
All other sources:						
Quantity	348,330	308,147	391,118	1,030,237	906,203	1,198,894
Value	225,255	184,471	230,977	612,252	532,307	595,013
Unit value	$647	$599	$591	$594	$587	$496
Subtotal (other than Germany and Korea):						
Quantity	1,547,275	1,453,211	1,945,248	1,454,805	1,340,473	1,608,922
Value	1,037,998	919,876	1,194,352	853,774	770,043	825,532
Unit value	$671	$633	$614	$587	$574	$513
All countries:						
Quantity	1,833,207	1,715,875	2,327,953	1,568,332	1,517,014	1,953,345
Value	1,234,621	1,087,726	1,432,527	930,130	883,770	1,012,613
Unit value	$673	$634	$615	$593	$583	$518

Table continued on following page.

Table I-1--*Continued*
Corrosion-resistant steel: Comparative data from the original investigations and first five-year reviews, 1990-92 and 1997-99

(Quantity=*short tons*; value=*$1,000*; unit values are *per short ton*)

Item	Original investigations			First five-year reviews		
	1990	1991	1992	1997	1998	1999
U.S. producers'--						
Capacity quantity	13,752,000	14,258,000	14,983,000	18,325,094	19,870,392	21,725,474
Production quantity	11,288,000	9,941,000	11,450,000	16,777,451	17,747,333	18,960,113
Capacity utilization[1]	82.1	69.7	76.4	91.6	89.3	87.3
U.S. shipments:						
Quantity	10,962,000	9,774,000	11,235,000	16,208,293	16,801,045	17,981,544
Value	6,551,000	5,714,000	6,393,000	9,966,115	9,996,582	10,018,721
Unit value	$599	$589	$575	$615	$595	$557
Ending inventory quantity	1,398,000	1,376,000	1,409,000	1,511,463	1,845,068	2,123,546
Inventories/total shipments[1]	12.8	14.2	12.6	9.1	10.7	11.5
Production workers	10,129	9,680	9,942	23,318	24,074	22,879
Hours worked (*1,000 hours*)	20,366	19,025	20,113	48,468	50,251	49,057
Net sales:						
Quantity	10,789,000	9,526,000	11,048,000	16,637,652	17,380,151	18,614,348
Value	6,513,000	5,615,000	6,312,000	10,224,465	10,348,910	10,393,878
Unit value	$604	$589	$571	$615	$595	$558
Cost of goods sold	5,780,000	5,357,000	5,959,000	8,810,259	9,062,220	9,383,494
Gross profit or (loss)	733,000	258,000	353,000	1,414,206	1,286,690	1,010,384
Operating income or (loss)	447,000	(28,000)	77,000	1,070,501	895,383	617,421
Unit cost of goods sold	$536	$562	$539	$530	$521	$504
Unit operating income or (loss)	$41	($3)	$7	$64	$52	$33
Cost of goods sold/sales[1]	88.7	95.4	94.4	86.2	87.6	90.3
Operating income or (loss)/sales[1]	6.9	(0.5)	1.2	10.5	8.7	5.9

[1] In *percent*.
[2] Less than 0.05 percent.

Note.--U.S. producers' data presented for the period 1990-92 include data from 22 producers. U.S. producers' data presented for the period 1997-99 includes data from 18 producers, which were estimated to have represented *** percent of U.S. production during 1999.

Source: Compiled from data in *Certain Carbon Steel Products From Australia, Belgium, Brazil, Canada, Finland, France, Germany, Japan, Korea, Mexico, Poland, Romania, Spain, Sweden, Taiwan, and the United Kingdom, Inv. Nos. AA1921-197 (Second Review); 701-TA-319, 320, 325-327, 348, and 350 (Second Review); and 731-TA-573, 574, 576, 578, 582-587, 612, and 614-618 (Second Review), VOLUME II: Information Obtained in the Reviews*, USITC Publication 3899 (January 2007), table CORE I-1; *Investigations Nos. 701-TA-319-332, 334, 336-342, 344, 347-353, 731-TA-573-579, 581-592, 594-597, 599-609, and 612-619 (Final): 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, and the United Kingdom--Staff Report*, INV-Q-115, July 20, 1993, table 12; *Investigations Nos. AA1921-197 (Review), 701-TA-231, 319-320, 322, 325-328, 340, 342, and 348-350 (Review), and 73 l-TA-573-576, 578, 582-587, 604, 607-608, 612, and 614-618 (Review): Certain Carbon Steel Products from Australia, Belgium, Brazil, Canada, Finland, France, Germany, Japan, Korea, Mexico, Netherlands, Poland, Romania, Spain, Sweden, Taiwan, and the United Kingdom--Staff Report*, INV-X-221, October 18, 2000, OVERVIEW table 2 and p. CORROSION I-1.

Table I-2
Corrosion-resistant steel: Comparative data from the second five-year reviews, 2000-05
(Quantity=*short tons*; value=*$1,000*; unit values are *per short ton*)

Item	Second five-year reviews					
	2000	2001	2002	2003	2004	2005
U.S. consumption quantity:						
Amount	21,948,820	20,478,057	22,680,025	21,693,361	25,012,571	22,686,342
Producers' share[1]	92.6	92.4	90.5	92.3	87.2	88.4
Importer's share:[1]						
Germany	0.2	0.1	0.2	0.2	0.1	0.3
Korea	1.2	1.1	0.9	0.5	0.8	1.5
Subtotal	1.4	1.2	1.1	0.7	0.9	1.8
Australia	(2)	(2)	(2)	(2)	(2)	(2)
Canada	1.7	1.6	2.3	2.5	2.1	2.4
France	(2)	(2)	0.1	(2)	(2)	(2)
Japan	0.1	0.1	0.1	0.1	0.1	0.1
All other sources	4.2	4.6	5.8	4.3	9.7	7.3
Subtotal	6.0	6.4	8.4	7.0	11.9	9.8
Total imports	7.4	7.6	9.5	7.7	12.8	11.6
U.S. consumption value:						
Amount	11,997,978	10,138,475	11,839,622	11,817,862	17,324,558	16,414,341
Producers' share[1]	92.6	92.6	90.4	91.8	86.4	87.6
Importer's share:[1]						
Germany	0.2	0.1	0.3	0.2	0.1	0.3
Korea	1.2	1.2	1.0	0.7	0.9	1.7
Subtotal	1.4	1.3	1.3	0.9	1.0	2.0
Australia	(2)	(2)	(2)	(2)	(2)	(2)
Canada	1.7	1.7	2.5	2.8	2.0	2.4
France	(2)	(2)	0.1	(2)	(2)	(2)
Japan	0.2	0.2	0.3	0.2	0.1	0.1
All other sources	4.0	4.2	5.5	4.4	10.4	7.8
Subtotal	6.0	6.1	8.3	7.3	12.6	10.4
Total imports	7.4	7.4	9.6	8.2	13.6	12.4

Table continued on following page.

Table I-2--*Continued*
Corrosion-resistant steel: Comparative data from the second five-year reviews, 2000-05
(Quantity=*short tons*; value=*$1,000*; unit values are *per short ton*)

Item	Second five-year reviews					
	2000	2001	2002	2003	2004	2005
U.S. imports from--						
Germany:						
Quantity	46,453	23,557	53,479	34,530	31,191	75,941
Value	28,221	13,955	30,585	20,312	17,999	48,634
Unit value	$608	$592	$572	$588	$577	$640
Korea:						
Quantity	253,528	235,041	212,413	113,810	201,002	330,858
Value	140,605	123,305	122,919	77,195	156,934	285,156
Unit value	$555	$525	$579	$678	$781	$862
Subtotal (Germany and Korea):						
Quantity	299,981	258,598	265,892	148,340	232,193	406,799
Value	168,826	137,260	153,504	97,507	174,933	333,790
Unit value	$563	$531	$577	$657	$753	$821
Australia:						
Quantity	220	176	275	297	119	16
Value	216	228	260	262	123	22
Unit value	$981	$1,292	$945	$883	$1,039	$1,348
Canada:						
Quantity	380,490	331,774	530,248	552,434	524,711	547,326
Value	208,645	173,957	292,684	331,067	341,546	398,538
Unit value	$548	$524	$552	$599	$651	$728
France:						
Quantity	3,608	9,302	15,753	6,530	4,613	1,778
Value	1,543	3,944	8,601	3,848	3,268	1,949
Unit value	$428	$424	$546	$589	$708	$1,096
Japan:						
Quantity	27,543	17,338	24,304	18,570	19,628	16,762
Value	23,072	15,273	30,092	20,206	19,464	19,054
Unit value	$838	$881	$1,238	$1,088	$992	$1,137
All other sources:						
Quantity	919,625	933,033	1,325,751	936,741	2,424,153	1,647,998
Value	481,017	420,783	647,862	515,137	1,808,700	1,286,429
Unit value	$523	$451	$489	$550	$746	$781
Subtotal (other than Germany and Korea):						
Quantity	1,331,486	1,291,623	1,896,332	1,514,571	2,973,223	2,213,880
Value	714,492	614,185	979,500	870,520	2,173,100	1,705,992
Unit value	$537	$476	$517	$575	$731	$771
All countries:						
Quantity	1,631,467	1,550,221	2,162,224	1,662,911	3,205,416	2,620,679
Value	883,318	751,445	1,133,004	968,027	2,348,033	2,039,782
Unit value	$541	$485	$524	$582	$733	$778

Table continued on following page.

Table I-2--*Continued*
Corrosion-resistant steel: Comparative data from the second five-year reviews, 2000-05
(Quantity=*short tons*; value=*$1,000*; unit values are *per short ton*)

Item	Second five-year reviews					
	2000	2001	2002	2003	2004	2005
U.S. producers'--						
Capacity quantity	26,321,105	25,698,401	26,161,576	25,663,099	26,283,125	26,280,223
Production quantity	21,213,322	19,537,128	21,289,304	20,455,321	22,392,513	20,889,145
Capacity utilization[1]	80.6	76.0	81.4	79.7	85.2	79.5
U.S. shipments:						
Quantity	20,317,353	18,927,836	20,517,801	20,030,450	21,807,155	20,065,663
Value	11,114,660	9,387,030	10,706,618	10,849,835	14,976,525	14,374,559
Unit value	$547	$496	$522	$542	$687	$716
Ending inventory quantity	2,086,296	1,900,994	1,939,320	1,855,669	1,745,399	1,701,618
Inventories/total shipments[1]	9.9	9.6	9.1	8.9	7.7	8.1
Production workers	24,546	24,568	20,868	15,211	13,999	13,348
Hours worked (*1,000 hours*)	50,757	44,888	41,018	32,512	31,531	29,927
Net sales:						
Quantity	20,141,105	19,629,769	20,954,676	19,537,241	22,276,759	20,679,606
Value	11,091,856	9,797,243	10,989,071	10,474,476	15,186,936	14,712,596
Unit value	$551	$499	$524	$536	$682	$711
Cost of goods sold	10,514,307	9,868,736	10,726,907	9,911,144	13,047,722	13,466,769
Gross profit or (loss)	577,549	(71,493)	262,164	563,332	2,139,214	1,245,827
Operating income or (loss)	151,581	(485,119)	(173,824)	74,289	1,644,320	717,789
Unit cost of goods sold	$522	$503	$512	$507	$586	$651
Unit operating income or (loss)	$8	($25)	($8)	$4	$74	$35
Cost of goods sold/sales[1]	94.8	100.7	97.6	94.6	85.9	91.5
Operating income or (loss)/sales[1]	1.4	(5.0)	(1.6)	0.7	10.8	4.9

[1] In *percent*.
[2] Less than 0.05 percent.

Note.--U.S. producers' data presented for the period 2000-05 include data from 23 producers, which were estimated to have represented 94 percent of U.S. production during 2005.

Source: Compiled from data in *Certain Carbon Steel Products From Australia, Belgium, Brazil, Canada, Finland, France, Germany, Japan, Korea, Mexico, Poland, Romania, Spain, Sweden, Taiwan, and the United Kingdom, Inv. Nos. AA1921-197 (Second Review); 701-TA-319, 320, 325-327, 348, and 350 (Second Review); and 731-TA-573, 574, 576, 578, 582-587, 612, and 614-618 (Second Review), VOLUME II: Information Obtained in the Reviews*, USITC Publication 3899 (January 2007), p. CORE-I-19 and table CORE I-1; and *Investigation Nos. AA1921-197 (Second Review); 701-TA-319, 320, 325-327, 348, and 350 (Second Review); and 731-TA-573, 574, 576, 578, 582-587, 612, and 614-618 (Second Review): Certain Carbon Steel Products from Australia, Belgium, Brazil, Canada, Finland, France, Germany, Japan, Korea, Mexico, Poland, Romania, Spain, Sweden, Taiwan, and the United Kingdom - Staff Report, INV-DD-159*, November 22, 2006, p. CORE I-23 and table CORE I-12.

Table I-3
Corrosion-resistant steel: Comparative data from the third five-year reviews
(Quantity=*short tons*; value=*$1,000*; unit values are *per short ton*)

Item	Third five-year reviews					
	2006	2007	2008	2009	2010	2011
U.S. consumption quantity:						
Amount	23,524,952	20,650,325	19,410,102	13,456,451	17,205,842	18,425,614
Producers' share[1]	82.2	87.7	88.6	90.8	90.7	90.0
Importer's share:[1]						
Germany[2]	0.2	0.3	0.2	0.1	0.1	0.2
Korea	2.3	1.8	1.6	1.5	1.0	1.2
Subtotal	2.5	2.1	1.9	1.6	1.1	1.4
All other sources	15.3	10.3	9.5	7.6	8.2	8.5
Total imports	17.8	12.3	11.4	9.2	9.3	10.0
U.S. consumption value:						
Amount	17,728,312	16,369,845	18,555,048	8,832,528	14,475,037	17,270,821
Producers' share[1]	82.1	86.8	87.6	87.7	89.9	89.2
Importer's share:[1]						
Germany[2]	0.2	0.3	0.3	0.2	0.1	0.2
Korea	2.4	1.9	1.8	1.9	1.1	1.3
Subtotal	2.6	2.3	2.1	2.1	1.2	1.6
All other sources	15.3	10.9	10.3	10.2	8.9	9.2
Total imports	17.9	13.2	12.4	12.3	10.1	10.8
U.S. imports from--						
Germany:						
Quantity[2]	45,297	64,201	46,629	10,532	14,768	38,813
Value	32,465	54,825	57,287	13,361	18,643	41,299
Unit value	$717	$854	$1,229	$1,269	$1,262	$1,064
Korea:						
Quantity	541,056	366,307	318,011	201,312	169,528	225,518
Value	430,800	317,530	332,283	170,728	153,257	231,242
Unit value	$796	$867	$1,045	$848	$904	$1,025
Subtotal (Germany and Korea):						
Quantity	586,354	430,508	364,641	211,843	184,296	264,330
Value	463,265	372,355	389,570	184,088	171,900	272,542
Unit value	$790	$865	$1,068	$869	$933	$1,031
All other sources:						
Quantity	3,600,019	2,118,640	1,843,343	1,020,108	1,416,929	1,575,138
Value	2,710,700	1,784,407	1,914,764	901,313	1,289,113	1,589,472
Unit value	$753	$842	$1,039	$884	$910	$1,009
All countries:						
Quantity	4,186,373	2,549,149	2,207,984	1,231,952	1,601,224	1,839,468
Value	3,173,965	2,156,763	2,304,334	1,085,401	1,461,013	1,862,014
Unit value	$758	$846	$1,044	$881	$912	$1,012

Table continued on following page.

Table I-3--*Continued*
Corrosion-resistant steel: Comparative data from the third five-year reviews
(Quantity=*short tons*; value=*$1,000*; unit values are *per short ton*)

Item	Third five-year reviews					
	2006	2007	2008	2009	2010	2011
U.S. producers'--						
Capacity quantity	23,472,040	24,164,040	24,470,863	23,612,015	23,720,936	24,044,200
Production quantity	20,501,724	19,467,661	17,689,915	12,948,787	16,949,461	18,339,457
Capacity utilization[1]	87.3	80.6	72.3	54.8	71.5	76.3
U.S. shipments:						
Quantity	19,338,579	18,101,176	17,202,118	12,224,500	15,604,618	16,586,146
Value	14,554,347	14,213,082	16,250,714	7,747,127	13,014,024	15,408,807
Unit value	$753	$785	$945	$634	$834	$929
Ending inventory quantity	1,645,919	2,026,363	1,636,171	1,616,872	1,724,176	2,191,408
Inventories/total shipments[1]	8.0	10.6	9.0	12.4	10.2	12.3
Production workers	12,170	12,575	12,330	9,980	11,112	11,866
Hours worked (*1,000 hours*)	27,358	27,281	26,441	20,421	24,468	26,201
Wages paid (*1,000 dollars*)	947,621	932,141	921,049	700,474	893,276	957,760
Hourly wages	$34.64	$34.17	$34.83	$34.30	$36.51	$36.55
Productivity (*short tons per 1,000 hours*)	749.4	713.6	669.0	634.1	692.7	700.0
Net sales:						
Quantity	19,925,800	18,824,213	17,532,045	12,721,074	16,424,896	17,317,412
Value	14,824,169	14,654,684	16,373,449	9,417,466	13,643,398	16,014,791
Unit value	$744	$779	$934	$740	$831	$925
Cost of goods sold	13,986,360	13,701,678	15,300,636	9,653,108	12,894,119	14,995,437
Gross profit or (loss)	837,809	953,006	1,072,813	(235,642)	749,279	1,019,354
Operating income or (loss)	414,836	526,495	681,169	(546,165)	410,249	659,088
Unit cost of goods sold	$702	$728	$873	$759	$785	$866
Unit operating income or (loss)	$21	$28	$39	$(43)	$25	$38
Cost of goods sold/sales[1]	94.3	93.5	93.4	102.5	94.5	93.6
Operating income or (loss)/sales[1]	2.8	3.6	4.2	(5.8)	3.0	4.1

[1] In *percent*.
[2] U.S. import data presented for Germany are from official Commerce statistics, which include nonsubject merchandise that has been excluded from the scope of the order by Commerce (e.g., Granocoat). Based on data submitted in U.S. importer questionnaire responses, nonsubject merchandise is believed to account for the following shares of U.S. import data presented in this table for Germany: *** percent in 2006, *** percent in 2007, *** percent in 2008, *** percent in 2009, *** percent in 2010, and *** percent in 2011. Subtracting nonsubject U.S. imports from the German data presented results in the following U.S. import volumes and shares of apparent U.S. consumption (based on quantity) for the German imports: *** short tons and *** percent in 2006, *** short tons and *** percent in 2007, *** short tons and *** percent in 2008, *** short tons and *** percent in 2009, *** short tons and *** percent in 2010, and *** short tons and *** percent in 2011.

Note.–U.S. producers' data presented for the period 2006-11 include data from 18 producers, which were estimated to have represented more than 90 percent of U.S. capacity during 2011.

Source: Compiled from data submitted in response to Commission questionnaires in these third five-year reviews and from official Commerce statistics (7210.30.0030, 7210.30.0060, 7210.41.0000, 7210.49.0030, 7210.49.0090, 7210.49.0091, 7210.49.0095, 7210.61.0000, 7210.69.0000, 7210.70.6030, 7210.70.6060, 7210.70.6090, 7210.90.6000, 7210.90.9000, 7212.20.0000, 7212.30.1030, 7212.30.1090, 7212.30.3000, 7212.30.5000, and 7212.50.0000).

PREVIOUS AND RELATED TITLE VII INVESTIGATIONS

The Commission has conducted a number of previous import relief investigations on corrosion-resistant steel. As previously indicated, the petitions that led to the original investigations underlying these current five-year reviews concerning corrosion-resistant steel from Germany and Korea included allegations that an industry in the United States was materially injured by reason of subsidized imports of CTL plate from 10 countries; hot-rolled products from 7 countries; cold-rolled products from 11 countries; and corrosion-resistant products from 8 countries. The petitions further alleged that an industry in the United States was materially injured 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 from 9 countries.[17] The corrosion-resistant steel orders concerning Germany and Korea that are the subject of these current third five-year reviews are the only orders that were part of the original underlying investigations that currently remain in effect. Further information concerning the disposition of Commission investigations and reviews concerning corrosion-resistant steel are presented in table I-4.[18]

[17] *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), pp. 2-4.

[18] The Commission made negative determinations with respect to imports of hot-rolled products from all countries in the original investigations. Antidumping and countervailing duty orders on imports of CTL plate, cold-rolled products, and corrosion-resistant products were issued following affirmative determinations by Commerce and the Commission in the original investigations. The last orders covering the cold-rolled products subject to the original determinations were revoked following negative determinations by the Commission in its first reviews. The last orders covering CTL plate subject to the original determinations were revoked following negative determinations by the Commission in its second reviews.

Table I-4
Corrosion-resistant steel: Previous and related Commission investigations

Original investigation				First review (1999)[1]	Second review (2006)[1]	Notes
Date[1]	Number	Country	Outcome			
	731-TA-18	Belgium	Affirmative[2]	--	--	Terminated 10/01/80
	731-TA-19	W. Germany	Affirmative[2]	--	--	Terminated 10/01/80
	731-TA-20	France	Affirmative[2]	--	--	Terminated 10/01/80
	731-TA-21	Italy	Affirmative[2]	--	--	Terminated 10/01/80
	731-TA-23	Netherlands	Affirmative[2]	--	--	Terminated 10/01/80
1980	731-TA-24	U.K.	Affirmative[2]	--	--	Terminated 10/01/80
	701-TA-110	Belgium	Negative[2]	--	--	--
	701-TA-111	France	Negative[2]	--	--	--
	701-TA-112	Italy	Negative[2]	--	--	--
	701-TA-113	Luxembourg	Negative[2]	--	--	--
	701-TA-114	Netherlands	Negative[2]	--	--	--
	701-TA-115	U.K.	Negative[2]	--	--	--
	701-TA-116	W. Germany	Negative[2]	--	--	--
	701-TA-158	Spain	Affirmative	--	--	ITA revoked 08/21/85
	701-TA-173	Korea	Affirmative	--	--	ITA revoked 10/10/85
	731-TA-75	Belgium	Negative[2]	--	--	--
	731-TA-76	France	Negative[2]	--	--	--
	731-TA-77	Italy	Negative[2]	--	--	--
	731-TA-78	Luxembourg	Negative[2]	--	--	--
	731-TA-79	Netherlands	Negative[2]	--	--	--
	731-TA-80	U.K.	Negative[2]	--	--	--
1982	731-TA-81	W. Germany	Negative[2]	--	--	--

Table continued on following page.

Table I-4--*Continued*
Corrosion-resistant steel: Previous and related Commission investigations

Original investigation				First review (1999)[1]	Second review (2006)[1]	Notes
Date[1]	Number	Country	Outcome			
	701-TA-212	Australia	Affirmative[2]	--	--	ITA negative 05/10/84
	701-TA-233	Austria	Negative[2]	--	--	--
	701-TA-234	Venezuela	Negative[2]	--	--	--
	731-TA-178	Australia	Affirmative[2]	--	--	Petition withdrawn 01/18/85
	731-TA-179	South Africa	Affirmative[2]	--	--	Petition withdrawn 06/07/84
	731-TA-180	Spain	Affirmative[2]	--	--	Petition withdrawn 01/18/85
	731-TA-230	Austria	Negative[2]	--	--	--
	731-TA-231	E. Germany	Negative[2]	--	--	--
	731-TA-232	Romania	Negative[2]	--	--	--
1984	731-TA-233	Venezuela	Negative[2]	--	--	--
	701-TA-347	Brazil	Affirmative	Affirmative	Negative	--
	701-TA-348	France	Affirmative	Affirmative	Negative	--
	701-TA-349	Germany	Affirmative	Affirmative	--	Order revoked by Commerce 04/01/04
	701-TA-350	Korea	Affirmative	Affirmative	Affirmative	Current review
	701-TA-351	Mexico	Negative	--	--	--
	701-TA-352	N. Zealand	Negative	--	--	--
	701-TA-353	Sweden	Negative	--	--	--
	731-TA-612	Australia	Affirmative	Affirmative	Negative	--
	731-TA-613	Brazil	Negative	--	--	--
	731-TA-614	Canada	Affirmative	Affirmative	Negative	--
	731-TA-615	France	Affirmative	Affirmative	Negative	--
	731-TA-616	Germany	Affirmative	Affirmative	Affirmative	Current review
	731-TA-617	Japan	Affirmative	Affirmative	Negative	--
	731-TA-618	Korea	Affirmative	Affirmative	Affirmative	Current review
	731-TA-619	Mexico	Negative	--	--	--
1992	731-TA-620	Taiwan	Negative[2]	--	--	--

[1] The dates presented in this table refer to the year in which the investigation or review were instituted by the Commission.
[2] Preliminary determination.

Source: Compiled from Commission publications and determinations published in the Federal Register.

PREVIOUS AND RELATED SAFEGUARD INVESTIGATIONS

In 1984, the Commission determined that carbon and alloy steel sheet (including galvanized sheet and strip) 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. President Ronald Reagan determined that import relief under section 201 of the Trade Act of 1974 was not in the national interest. At the President's direction, quantitative limitations under voluntary restraint agreements ("VRAs") for a five-year period ending September 30, 1989, were negotiated. In July 1989, the VRAs were extended for two and one half years until March 31, 1992.

In 2001, the Commission determined that certain carbon and alloy steel, including corrosion-resistant steel, was being imported into the United States in such increased quantities as to be a substantial cause of serious injury to the domestic industry producing such articles, and recommended additional duties on imports for a period of four years.[19] On March 5, 2002, President George W. Bush announced the implementation of steel safeguard measures. Import relief relating to corrosion-resistant steel consisted of an additional tariff for a period of three years and one day (30 percent *ad valorem* on imports in the first year, 24 percent in the second year, and 18 percent in the third year).[20] Following receipt of the Commission's mid-term monitoring report in September 2003, and after seeking information from the U.S. Secretary of Commerce and U.S. Secretary of Labor, President Bush determined that the effectiveness of the action taken had been impaired by changed circumstances. Therefore, he terminated the U.S. measure with respect to increased tariffs on December 4, 2003.[21]

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--*

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

[20] *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.

[21] *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, remained in place through March 21, 2005, and continues in modified form at this time.

(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 the Report

Information obtained during the course of the reviews that relates to the statutory criteria is presented throughout this report. A summary of trade and financial data for corrosion-resistant steel as collected in the reviews is presented in appendix C. U.S. industry data are based on the questionnaire responses of 18 U.S. producers of corrosion-resistant steel that are believed to have accounted for more than 90 percent of domestic capacity to produce corrosion-resistant steel in 2011. U.S. import data and related information are based on Commerce's official import statistics and the questionnaire responses of 29 U.S. importers of corrosion-resistant steel that are believed to have accounted for virtually all subject U.S. imports from Germany and Korea and for more than 60 percent of total U.S. imports of corrosion-resistant steel from other sources during 2011. Foreign industry data and related information are based on the questionnaire responses of eight producers of corrosion-resistant steel: three German producers and five Korean producers. According to ***, the three responding German producers account for all known capacity to produce corrosion-resistant steel in Germany and the five responding Korean producers account for *** percent of the total capacity to produce corrosion-resistant steel in Korea.[22] Responses by U.S. producers, importers, purchasers, and foreign producers of corrosion-resistant steel to a series of questions concerning the significance of the existing antidumping and countervailing duty orders and the likely effects of revocation of such orders are presented in appendix D.

[22] ***.

COMMERCE'S REVIEWS

Administrative Reviews

Germany

There were no administrative reviews for firms covered by the antidumping duty order on corrosion-resistant steel from Germany.[23] There were no duty absorption findings with respect to corrosion-resistant steel from Germany.

Commerce has completed three changed circumstances review concerning the antidumping duty order on corrosion-resistant steel from Germany. As a result of its first changed circumstances review published on September 22, 1999, Commerce partially revoked the German antidumping duty order with respect to deep-drawing carbon steel strip, roll-clad on both sides with aluminum (AlSi) foils in accordance with St3 LG as to EN 10139/10140.[24] Commerce subsequently partially revoked the German antidumping duty order with respect to certain wear plate products in its second changed circumstances review published on March 22, 2006.[25] As a result of its third changed circumstances review published on November 13, 2006, Commerce excluded from the scope of the antidumping duty order corrosion-resistant carbon steel from Germany, meeting the following description, effective August 1, 2005:

> electrolytically zinc coated flat steel products, with a coating mass between 35 and 72 grams per meter squared on each side; with a thickness range of 0.67 mm or more but not more than 2.95 mm and width 817 mm or more but not over 1830 mm; having the following chemical composition (percent by weight): carbon not over 0.08, silicon not over 0.25, manganese not over 0.9, phosphorous not over 0.025, sulfur not over 0.012, chromium not over 0.1, titanium not over 0.005 and niobium not over 0.05; with a minimum yield strength of 310 Mpa and a minimum tensile strength of 390 Mpa; additionally coated on one or both sides with an organic coating containing not less than 30 percent and not more than 60 percent zinc and free of hexavalent chrome.[26]

Korea

Commerce has completed 15 administrative reviews of the antidumping duty order on corrosion-resistant steel from Korea. The final results of the completed antidumping administrative reviews are shown in table I-5.

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[23] Likewise, there were no administrative reviews for firms covered by the countervailing duty order (prior to its revocation) on corrosion-resistant steel from Germany. Commerce revoked Germany's countervailing duty order in 2004. *Certain Corrosion-Resistant Carbon Steel Flat Products and Cut-to-Length Carbon Steel Plate Products from Germany: Final Restults of Countervailing Duty Changed Circumstances Reviews and Revocation of the Orders, In Whole*, 69 FR 17131, April 1, 2004.

[24] *Notice of Final Results of Changed Circumstances Antidumping Duty and Countervailing Duty Reviews and Revocation of Orders in Part: Certain Corrosion-Resistant Carbon Steel Flat Products From Germany*, 64 FR 51292, September 22, 1999.

[25] *Notice of Final Results of Antidumping Duty Changed Circumstances Reviews and Revocation of Orders In Part: Certain Corrosion-Resistant Carbon Steel Flat Products From Canada and Germany*, 71 FR 14498, March 22, 2006.

[26] *Notice of Final Results of Antidumping Duty Changed Circumstances Review and Revocation of Order In Part: Certain Corrosion-Resistant Carbon Steel Flat Products from Germany*, 71 FR 66163, November 13, 2006.

Table I-5
Corrosion-resistant steel: Administrative reviews of the antidumping duty order for Korea

Date results published	Period of review	Producer/exporter	Margin (*percent*)
April 26, 1996 (61 FR 18547)	2/04/1993 - 7/31/1994	Dongbu	1.50
		Union	10.74
April 15, 1997 (62 FR 18404) (amended June 20, 1997 (62 FR 33587) and June 11, 2002 (67 FR 39955))	8/01/1994 - 7/31/1995	Dongbu	0.04
		POSCO Group	0.09 (*de minimis*)
		Union	1.41
March 18, 1998 (63 FR 13170) (amended April 27, 1998 (63 FR 20572) June 11, 2002 (67 FR 39956))	8/01/1995 - 7/31/1996	Dongbu	0.60
		POSCO Group	1.46
		Union	0.39 (*de minimis*)
March 16, 1999 (64 FR 12927)	8/01/1996 - 7/31/1997	Dongbu	1.49
		POSCO Group	0.16
		Union	0.14
March 13, 2000 (65 FR 13359) (amended April 25, 2000 (65 FR 24180))	8/01/1997 - 7/31/1998	Dongbu	1.42
		POSCO Group	0.68
		Union	0.14
January 16, 2001 (66 FR 3540) (amended March 14, 2001 (66 FR 14883))	8/01/1998 - 7/31/1999	Dongbu	0.13
		POSCO Group	2.24
		Union	0.29
March 18, 2002 (67 FR 11976) (amended April 29, 2002 (67 FR 20956))	8/01/1999 - 7/31/2000	Dongbu	0.26
		POSCO Group	0.00
		SeAH	0.86
		Union	0.27
March 14, 2005 (70 FR 12443)	8/01/2002 - 7/31/2003	Dongbu	0.33 (*de minimis*)
		Dongshin	17.70
		HYSCO	0.00
		POSCO Group	2.34
		Union	0.36 (*de minimis*)
February 13, 2006 (71 FR 7513) (amended March 20, 2006 (71 FR 13962))	8/01/2003 - 7/31/2004	Dongbu	2.26
		Dongshin	17.70
		HYSCO	0.00
		POSCO Group	2.16
		Union	1.60

Table continued on following page.

Table I-5--*Continued*
Corrosion-resistant steel: Administrative reviews of the antidumping duty order for Korea

Date results published	Period of review	Producer/exporter	Margin (*percent*)
March 20, 2007 (72 FR 13086) (amended April 26, 2007 (71 FR 20815))	8/01/2004 - 7/31/2005	Dongbu	2.07
		HYSCO	0.09 (*de minimis*)
		POSCO Group	0.35 (*de minimis*)
		Union	1.46
March 17, 2008 (73 FR 14220)	8/01/2005 - 7/31/2006	Dongbu	4.96
		HYSCO	0.53
		Union	4.35
March 16, 2009 (74 FR 11082) (amended April 29, 2009 (74 FR 19199))	8/01/2006 - 7/31/2007	Dongbu	1.85
		Dongkuk	5.01[1]
		HYSCO	1.57
		LG	5.01[1]
		POSCO Group	0.53
		Union	7.56
March 22, 2010 (75 FR 13490)	8/01/2007 - 7/31/2008	Dongbu	8.65[2]
		Haewon	8.65[2]
		HYSCO	3.29
		LG	8.65[2]
		POSCO Group	0.01 (*de minimis*)
		Union	14.01
March 21, 2011 (76 FR 15291) (amended March 29, 2011 (76 FR 17381)	8/01/2008 - 7/31/2009	Dongbu	3.89
		Dongkuk	3.01[2]
		Haewon	3.01[2]
		Hausys	3.01[2]
		HYSCO	0.20 (*de minimis*)
		LG	3.01[2]
		POSCO Group	0.05 (*de minimis*)
		Union	2.27
March 12, 2012 (77 FR 14501)	08/01/09 - 07/31-10	Dongbu	4.80
		Dongkuk	4.23[2]
		Haewon	4.23[2]
		Hausys	4.23[2]
		HYSCO	0.25 (*de minimis*)
		LG	4.23[2]
		POSCO Group[3]	0.04 (*de minimis*)
		Union	3.66

[1] Review-specific average rate based on the weighted average of the margins calculated for those companies selected for individual review, excluding *de minimis* margins or margins based entirely on adverse facts available.

[2] This rate is a simple average percentage margin (based on the two reviewed companies with an affirmative deposit rate) for the period examined, and normally does not include zero and *de minimis* rates or any rates based solely on the facts available.

[3] Antidumping duty order revoked with respect to Pohang Iron & Steel Co., Ltd. and Pohang Coated Steel Co., Ltd. (collectively, "POSCO Group"), effective August 1, 2010. 77 FR 14501, March 12, 2012.

Source: Cited *Federal Register* notices.

Commerce has completed two duty absorption findings since the original investigations. Commerce found that, for the August 1, 1995 to July 31, 1996 period, duty absorption occurred through the Korean respondents' U.S. affiliates: the percentage of U.S. affiliates' sales with dumping margins was 5.82 percent for Dongbu, 14.64 percent for POSCO, and 8.99 percent for Union.[27] In addition, Commerce found for the August 1, 1997 to July 31, 1998 period, that duty absorption occurred through Korean respondents' U.S. affiliates: the percentage of U.S. affiliates' sales with dumping margins was 20.68 percent for Dongbu and 6.85 percent for POSCO.[28]

Since the original investigations, Commerce has published results of one antidumping duty new shipper review. On June 3, 2008, Commerce published notice of its final results of an antidumping duty new shipper review. In that new shipper review, Commerce found that the dumping margin for the period August 1, 2006, through April 10, 2007, for Haewon MSC Co. Ltd. (Haewon) was 0.0 percent.[29]

Since issuing its final results of the second five-year review, Commerce has completed six administrative reviews of the countervailing duty order covering corrosion-resistant steel produced/exported from Korea for the annual time periods covering 2004-09. Commerce completed no administrative reviews of the countervailing duty order prior to the second five-year review. Table I-6 presents the final results of Commerce's countervailing duty administrative reviews.[30]

Table I-6
Corrosion-resistant steel: Administrative reviews of the countervailing duty order for Korea

Date results published	Period of review	Producer or exporter	Net subsidy rate (*percent ad valorem*)
January 3, 2007 (72 FR 119)	01/01/04 - 12/31/04	Dongbu Steel Co. Ltd. ("Dongbu")	0.39 (*de minimis*)
		Pohang Iron and Steel Co. Ltd. ("POSCO")	0.07 (*de minimis*)
January 15, 2008 (73 FR 2444)	01/01/05 - 12/31/05	Dongbu	0.27 (*de minimis*)
		POSCO	0.09 (*de minimis*)
January 15, 2009 (74 FR 2512)	01/01/06 - 12/31/06	Dongbu	0.22 (*de minimis*)
		POSCO	0.09 (*de minimis*)
October 27, 2009 (74 FR 55192)	01/01/07 - 12/31/07	Dongbu	0.21 (*de minimis*)
		Hyundai Hysco Ltd. ("HYSCO")	0.04 (*de minimis*)
		POSCO	0.01 (*de minimis*)
January 20, 2011 (76 FR 3613)	01/01/08 - 12/31/08	HYSCO	0.05 (*de minimis*)
January 5, 2012 (77 FR 13093)	01/01/09- 12/31/09	HYSCO	0.46 (*de minimis*)

Source: Cited *Federal Register* notices.

[27] *Certain Cold-Rolled and Corrosion-Resistant Carbon Steel Flat Products From Korea: Final Results of Antidumping Duty Administrative Reviews*, 63 FR 13170, March 18, 1998.

[28] *Notice of Amended Final Results of Antidumping Duty Administrative Reviews: Certain Cold-Rolled and Corrosion-Resistant Carbon Steel Flat Products From Korea*, 65 FR 24180, April 25, 2000.

[29] *Certain Corrosion-Resistant Carbon Steel Flat Products From Korea: Notice of Final Results of Antidumping Duty New Shipper Review*, 73 FR 35366, June 23, 2008.

[30] For previously reviewed or investigated companies not included in an administrative review, the cash deposit rate continues to be the company-specific rate published for the most recent period.

Five-Year Reviews

Countervailing Duty Order

On July 9, 1993, Commerce published its final affirmative countervailing duty determination and, on August 17, 1993, Commerce published the countervailing duty order and an amendment to its final determination.[31] On March 27, 2001, following proceedings before the Court of International Trade and the Court of Appeals for the Federal Circuit, Commerce published an amendment to its final affirmative countervailing duty determination that adjusted the original margins and excluded Korean producer/exporter Union Steel from the countervailing duty order based on an amended *de minimis* margin.[32] On April 10, 2000, and on June 6, 2006, Commerce issued its final results of the first and second five-year reviews of the countervailing duty order, respectively.[33] On May 10, 2012, Commerce issued the final results of its expedited third five-year review with respect to the countervailing duty order on U.S. imports of corrosion-resistant steel from Korea. The countervailable subsidy margins calculated by Commerce in its original investigations and subsequent five-year reviews are presented in table I-7.

Table I-7
Corrosion-resistant steel: Commerce's original and subsequent five-year countervailable subsidy margins for producers/exporters in Korea

Producer/exporter	Original margin (*percent*)	First five-year review margin (*percent*)	Second five-year review margin (*percent*)	Third five-year review margin (*percent*)
Dongbu	--	--	--	0.75
POSCO	--	--	--	0.57
Country-wide (other than Union)[1]	1.15	1.15	1.15	1.26

[1] Union was excluded from the original countervailing duty order on the basis of a *de minimis* net subsidy rate.

Source: *Final Affirmative Countervailing Duty Determinations and Final Negative Critical Circumstances Determinations: Certain Steel Products from Korea*, 58 FR 37338, July 9, 1993; *Countervailing Duty Orders and Amendments to Final Affirmative Countervailing Duty Determinations: Certain Steel Products from Korea*, 58 FR 43752, August 17, 1993; *Certain Cold-Rolled and Corrosion-Resistant Carbon Steel Flat Products From Korea: Amended Final Affirmative Countervailing Duty Determinations in Accordance with Decision Upon Remand*, 66 FR 16656, March 27, 2001; *Certain Cold-Rolled and Corrosion-Resistant Carbon Steel Flat Products From Korea: Final Results of Expedited Sunset Reviews* (first five-year review), 65 FR 18973, April 10, 2000; *Certain Corrosion-Resistant Carbon Steel Flat Products From Korea: Final Results of Expedited Five-Year ("Sunset") Review of the Countervailing Duty Order* (second five-year review), 71 FR 32519, June 6, 2006; *Certain Corrosion-Resistant Carbon Steel Flat Products From Korea: Final Results of Expedited Five-Year ("Sunset") Review of the Countervailing Duty Order* (third five-year review), 77 FR 27438, May 10, 2012.

[31] *Final Affirmative Countervailing Duty Determinations and Final Negative Critical Circumstances Determinations: Certain Steel Products from Korea*, 58 FR 37338, July 9, 1993; *Countervailing Duty Orders and Amendments to Final Affirmative Countervailing Duty Determinations: Certain Steel Products from Korea*, 58 FR 43752, August 17, 1993.

[32] *Certain Cold-Rolled and Corrosion-Resistant Carbon Steel Flat Products From Korea: Amended Final Affirmative Countervailing Duty Determinations in Accordance with Decision Upon Remand*, 66 FR 16656, March 27, 2001. Although Union Steel was excluded from the countervailing duty order, the Korean producer/exporter remains subject to the antidumping duty order.

[33] *Certain Cold-Rolled and Corrosion-Resistant Carbon Steel Flat Products From Korea: Final Results of Expedited Sunset Reviews* (first five-year review), 65 FR 18973, April 10, 2000; *Certain Corrosion-Resistant Carbon Steel Flat Products From Korea: Final Results of Expedited Five-Year (''Sunset'') Review of the Countervailing Duty Order* (second five-year review), 71 FR 32519, June 6, 2006.

Commerce identified in its original investigation the following government programs in Korea that were found to confer countervailable subsidies to Korean producers/exporters of the subject merchandise:

1. Government Equity Infusions in POSCO
2. Loans Inconsistent With Commercial Considerations/Preferential Access to Foreign Loans
3. Government Infrastructure Assistance for POSCO's Integrated Steel Mill at Kwangyang Bay
4. Dockyard Fees
5. Reserve for Export Loss
6. Reserve for Overseas Market Development
7. Unlimited Deduction of Overseas Entertainment Expenses
8. Reserve for Investment
9. Duty Drawback
10. Preferential Utility Rates
11. Short-term Export Financing

In administrative reviews covering annual time periods 2004-09 conducted after the completion of the second five-year review of the order, Commerce found that the Government of Korea was providing countervailable subsidies to the producers/exporters in Korea pursuant to the following additional programs:

1. Exemption of Value Added Tax on Imports of Anthracite Coal (2004 Final)
2. Asset Revaluation under Article 56(2) of TERCEL (2004 Final)
3. Provision of Land at Asan Bay (2004 Final)
4. Exemptions from Port Fees at Asan Bay under the Harbor Act (2004 Final)
5. R&D Grants under the Industrial Development Act (2004 Final)
6. R&D Grants under the Promotion of Industrial Technology Innovation Act (2007 Final)
7. Reduction in Taxes for Operation in Regional and National Industrial Complexes (2007 Final)
8. Act on Special Measures for the Promotion of Specialized Enterprises for Parts and Materials (2008 Final)
9. RSTA Article 26 (2009 Final)

Commerce adjusted the rate likely to prevail in the absence of an order in its final results of the expedited third five-year review of the countervailing duty order to account for the additional countervailable subsidies identified in its administrative reviews. In addition, Commerce determined in its third five-year review that the Government of Korea no longer provides countervailable benefits to the Korean producers/exporters of corrosion-resistant steel through the direction of credit and that the benefits from previously directed credit no longer exist. Commerce also adjusted the rate found in the original investigation to reflect the elimination of benefits from that program.[34]

[34] "Issues and Decision Memorandum for the Expedited Sunset Review of the Countervailing Duty Order on Corrosion-Resistant Carbon Steel Flat Products from Korea: Final Results," International Trade Administration, U.S. Department of Commerce, May 2, 2012.

Antidumping Duty Orders

Commerce issued the antidumping duty orders on corrosion-resistant steel from Germany and Korea on August 19, 1993.[35] Following Commerce's first and second five-year reviews, on December 15, 2000, and February 14, 2007, respectively, Commerce published the notices of continuation of the antidumping duty orders.[36] Commerce issued the final results of its full third five-year reviews with respect to the antidumping duty orders on U.S. imports of corrosion-resistant steel from Germany and Korea on December 6, 2012.[37] Table I-8 presents the antidumping duty margins calculated by Commerce in its original investigations and subsequent five-year reviews. After the initiation of its seventeenth administrative review concerning the antidumping duty order on U.S. imports of corrosion-resistant steel from Korea, Commerce revoked the antidumping duty order with respect to Pohang Iron & Steel Co., Ltd. and Pohang Coated Steel Co., Ltd. (collectively, "POSCO Group" or "POSCO"), effective August 1, 2010.[38] All German producers of the subject corrosion-resistant steel are covered by the antidumping duty order.

[35] *Antidumping Duty Orders on Certain Cold-Rolled Carbon Steel Flat Products and Certain Corrosion-Resistant Carbon Steel Flat Products from Korea*, 58 FR 44159, August 19, 1993; *Antidumping Duty Orders and Amendments to Final Determinations of Sales at Less Than Fair Value: Certain Hot-Rolled Carbon Steel Flat Products, Certain Cold-Rolled Carbon Steel Flat Products, Certain Corrosion-Resistant Carbon Steel Flat Products and Certain Cut-to-Length Carbon Steel Plate from Germany*, 58 FR 44170, August 19, 1993; and *Amended Final Determinations of Sales at Less Than Fair Value: Certain Cold-Rolled and Corrosion-Resistant Carbon Flat Products From Germany*, 65 FR 58044, September 27, 2000.

[36] *Continuation of Antidumping and Countervailing Duty Orders on Certain Carbon Steel Products from Australia, Belgium, Brazil, Canada, Finland, France, Germany, Japan, South Korea, Mexico, Poland, Romania, Spain, Sweden, Taiwan, and the United Kingdom*, 65 FR 78469 (December 15, 2000); and *Continuation Pursuant to Second Five-Year ("Sunset") Reviews of Antidumping and Countervailing Duty Orders: Certain Corrosion-Resistant Carbon Steel Flat Products from Germany and Korea*, 72 FR 7009, February 14, 2007.

[37] *Corrosion-Resistant Carbon Steel Flat Products From Germany and the Republic of Korea: Final Results of Full Sunset Reviews*, 77 FR 72827, December 6, 2012.

[38] *Certain Corrosion-Resistant Carbon Steel Flat Products From the Republic of Korea: Notice of Final Results of the 2009-2010 Administrative Review and Revocation, in Part*, 77 FR 14501, March 12, 2012. Although the antidumping duty order was revoked with respect to POSCO, the Korean producer/exporter remains subject to the countervailing duty order.

Table I-8
Corrosion-resistant steel: Commerce's original and subsequent five-year antidumping duty margins for producers/exporters in Germany and Korea

Producer/exporter	Original margin (*percent*)	First five-year review margin (*percent*)	Second five-year review margin (*percent*)	Third five-year review margin (*percent*)
Germany[1]				
Thyssen Stahl AG	10.02	10.02	10.02	at least 9.35
All others	10.02	10.02	10.02	at least 9.35
Korea[2]				
POSCO Group	17.70	17.70	17.70	([3])
All others	17.70	17.70	17.70	at least 12.85

[1] *Antidumping Duty Orders and Amendments to Final Determinations of Sales at Less Than Fair Value: Certain Hot-Rolled Carbon Steel Flat Products, Certain Cold-Rolled Carbon Steel Flat Products, Certain Corrosion-Resistant Carbon Steel Flat Products and Certain Cut-to-Length Carbon Steel Plate from Germany*, 58 FR 44170, August 19, 1993; *Corrosion-Resistant Carbon Steel Flat Products From Germany; Final Results of Expedited Sunset review of Antidumping Duty Order*, 65 FR 18051, April 6, 2000; *Amended Final Determinations of Sales at Less Than Fair Value: Certain Cold-Rolled and Corrosion-Resistant Carbon Flat Products From Germany*, 65 FR 58044, September 27, 2000; *Final Results of Expedited Sunset Reviews: Corrosion-Resistant Carbon Steel Flat Products from Australia, Canada, France, Germany, Japan, and South Korea*, 71 FR 32508, June 6, 2006; and *Corrosion-Resistant Carbon Steel Flat Products From Germany and the Republic of Korea: Final Results of Full Sunset Reviews*, 77 FR 72827, December 6, 2012.

[2] *Amendment of Final Determinations of Sales at Less Than Fair Value: Certain Hot-Rolled Carbon Steel Flat Products, Certain Cold-Rolled Carbon Steel Flat Products, Certain Corrosion-Resistant Carbon Steel Flat Products, and Certain Cut-to-Length Carbon Steel Plate From Korea*, 58 FR 41083, August 2, 1993; *Antidumping Duty Orders on Certain Cold-Rolled Carbon Steel Flat Products and Certain Corrosion-Resistant Carbon Steel Flat Products from Korea*, 58 FR 44159, August 19, 1993; *Certain Cold-Rolled and Corrosion-Resistant Carbon Steel Flat Products From Korea; Final Results of Expedited Sunset Reviews*, 65 FR 18044, April 6, 2000; *Final Results of Expedited Sunset Reviews: Corrosion-Resistant Carbon Steel Flat Products from Australia, Canada, France, Germany, Japan, and South Korea*, 71 FR 32508, June 6, 2006; and *Corrosion-Resistant Carbon Steel Flat Products From Germany and the Republic of Korea: Final Results of Full Sunset Reviews*, 77 FR 72827, December 6, 2012.

[3] Antidumping duty order revoked with respect to Pohang Iron & Steel Co., Ltd. and Pohang Coated Steel Co., Ltd. (collectively, "POSCO Group"), effective August 1, 2010 (77 FR 14501, March 12, 2012).

Source: Cited *Federal Register* notices.

THE SUBJECT MERCHANDISE

Commerce's Scope

The imported product subject to the antidumping and countervailing duty orders under review, as defined by Commerce, is as follows:

> The merchandise covered by the order includes flat-rolled carbon steel products, of rectangular shape, either clad, plated, or coated with corrosion-resistant metals such as zinc, aluminum, or zinc-, aluminum-, nickel- or iron-based alloys, whether or not corrugated or painted, varnished or coated with plastics or other nonmetallic substances in addition to the metallic coating, in coils (whether or not in successively superimposed layers) and of a width of 0.5 inch or greater, or in straight lengths which, if of a thickness less than 4.75 millimeters, are of a width of 0.5 inch or greater and which measures at least 10 times the thickness or if of a thickness of 4.75 millimeters or more are of a width which exceeds 150 millimeters and measures at least twice the thickness, . . .
>
> Included in the order are flat-rolled products of non-rectangular cross-section where such cross-section is achieved subsequent to the rolling process (i.e., products which have been "worked after rolling")—for example, products which have been beveled or rounded at the edges. Excluded from the order are flat-rolled steel products either plated or coated with tin, lead, chromium, chromium oxides, both tin and lead ("terne plate"), or both chromium and chromium oxides ("tin-free steel"), whether or not painted, varnished or coated with plastics or other nonmetallic substances in addition to the metallic coating. Excluded from the order are clad products in straight lengths of 0.1875 inch or more in composite thickness and of a width which exceeds 150 millimeters and measures at least twice the thickness. Also excluded from the order are certain clad stainless flat-rolled products, which are three-layered corrosion-resistant carbon steel flat-rolled products less than 4.75 millimeters in composite thickness that consist of a carbon steel flat-rolled product clad on both sides with stainless steel in a 20%–60%–20% ratio.[39]

As a result of three changed circumstances determinations with respect to the antidumping duty order on U.S. imports from Germany, Commerce partially revoked the order with respect to several items. The applicable scope language concerning these partial revocations from the German antidumping duty order is as follows:

> The Department partially revoked the order with respect to deep-drawing carbon steel strip, roll-clad on both sides with aluminum (AlSi) foils in accordance with St3 LG as to EN 10139/ 10140. The Department also partially revoked the order with respect to certain wear plate products. In addition, the Department partially revoked the order with respect to the following products: Certain corrosion-resistant carbon steel from Germany, meeting the following description: electrolytically zinc coated flat steel

[39] *Certain Corrosion-Resistant Carbon Steel Flat Products From Korea: Final Results of Expedited Five-Year ("Sunset") Review of the Countervailing Duty Order*, 77 FR 27438, May 10, 2012.

products, with a coating mass between 35 and 72 grams per meter squared on each side; with a thickness range of 0.67 mm or more but not more than 2.95 mm and width 817 mm or more but not over 1830 mm; having the following chemical composition (percent by weight): carbon not over 0.08, silicon not over 0.25, manganese not over 0.9, phosphorous not over 0.025, sulfur not over 0.012, chromium not over 0.1, titanium not over 0.005 and niobium not over 0.05; with a minimum yield strength of 310 Mpa and a minimum tensile strength of 390 Mpa; additionally coated on one or both sides with an organic coating containing not less than 30 percent and not more than 60 percent zinc and free of hexavalent chrome.[40]

Tariff Treatment

The subject merchandise is imported under the following HTS statistical reporting numbers: 7210.30.0030, 7210.30.0060, 7210.41.0000, 7210.49.0030, 7210.49.0090, 7210.61.0000, 7210.69.0000, 7210.70.6030, 7210.70.6060, 7210.70.6090, 7210.90.1000, 7210.90.6000, 7210.90.9000, 7212.20.0000, 7212.30.1030, 7212.30.1090, 7212.30.3000, 7212.30.5000, 7212.40.1000, 7212.40.5000, 7212.50.0000, 7212.60.0000, 7215.90.1000, 7215.90.3000, 7215.90.5000, 7217.20.1500, 7217.30.1530, 7217.30.1560, 7217.90.1000, 7217.90.5030, 7217.90.5060, 7217.90.5090. General U.S. tariffs on corrosion-resistant steel, applicable to U.S. imports that are products of Germany and Korea and classified under these headings, ranged from 2.4 to 6.5 percent *ad valorem* at the time of the original investigations. These duties were subject to phased elimination beginning in 1995 and were eliminated as of January 1, 2004.

THE DOMESTIC LIKE PRODUCT

Description and Applications[41]

Corrosion-resistant steel is steel sheet that has been coated or plated with a corrosion- or heat-resistant metal to prevent corrosion and thereby extend the service life of products produced from the steel. Steel coated with zinc (galvanized), aluminum, or any of several zinc-aluminum alloys comprise almost all of the product at issue.[42] Steel coated with other metals, however, including nickel and copper, as well as steel clad with aluminum or stainless steel sheet, also are included within Commerce's scope.[43] Corrosion-resistant steel is used in the manufacture of automobile bodies, in appliances, and in commercial and residential buildings and other construction applications.

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[40] *Corrosion-Resistant Carbon Steel Flat Products From Germany and the Republic of Korea: Final Results of Full Sunset Reviews*, 77 FR 72827, December 6, 2012 (footnotes omitted).

[41] Unless otherwise noted the information in this section is obtained from *Galvanizing - 2012: Continuous Hot-Dip Galvanizing –Process and Products, August 2012*, published by the International Zinc Association.

[42] Other than galvanized, some other coatings are: 55 percent Aluminum-45 percent Zinc alloy (Galvalume™), 95 percent zinc-almost 5 percent aluminum, and the remainder rare earth mischmetal (an alloy of rare earth metals) (Galfan™), and aluminum (aluminized). *See* American Metal Market, "Galvstar Starts $50M Galfan Coating Line," March 29, 2012.

[43] Apollo Metals Ltd., and Thomas Steel Strip Corp. produce nickel- and copper-coated steel products and "operate within a small niche of the overall market for Corrosion-Resistant steel." Apollo Metals Ltd., and Thomas Steel Strip Corp., *Response to the Notice of Institution,* p. 5 and p. 7, February 2, 2012.

Corrosion-resistant steel with other metal coatings, including copper, nickel, nickel-zinc, and cobalt, is produced in much smaller quantities than galvanized and aluminized steel, and usually by smaller firms specializing in such coatings. Such products are used for specialized applications.[44]

Manufacturing Processes[45]

There are two widely used processes for producing corrosion-resistant steel: the hot-dip process, in which steel sheet passes through a bath of molten zinc or aluminum, and the electrolytic process, in which steel sheet passes though a series of electrolytic cells that electrolytically plate zinc or other metals onto the surface of the steel. Most galvanized steel in the United States is produced using the continuous hot-dip process. In either case, the starting material is usually cold-rolled sheet steel.[46]

In general, the continuous hot-dip process consists of unwinding coils of steel and feeding the sheet continuously through a cleaner, an annealing furnace, and then into a molten zinc bath. As the steel exits the molten zinc bath, any excess coating is blown off from the steel sheet to control the coating thickness to the specified requirement (figure I-1). The coating is left to solidify as traditional galvanize, or can be thermally treated to convert it to galvanneal, a zinc-iron alloy. The coated sheet steel is oiled and recoiled for shipment to the fabricator.

The process begins by placing coils of full hard cold-rolled steel on two entry reels. The lead end of each coil is cropped to remove any off-gauge or damaged steel. The end of each coil is cropped square and is welded to the tail end of the previous coil. While the entry end of the line is stopped, the process section is kept running using the strip that is stored in the vertical accumulator.[47]

Liquid alkali cleaning is an important part of making high quality galvanized and galvannealed steel. Cleaning the coils in hot alkali using scrub brushes, followed by rinsing and hot air drying, removes residual rolling oils and iron fines from the surface. This cleansing of the surface prior to annealing improves coating adhesion, optimum appearance and better paintability. It also removes loose ironbearing debris from the surface that could get carried through to the zinc bath and form pot dross or surface dross on the steel. Alone, or in combination with liquid cleaning, some hot-dip lines use direct flame cleaning. The strip is heated which volatilizes the organic surface contaminants.

Modern hot-dip galvanizing lines use vertical, radiant tube annealing furnaces with multi independently monitored combustion zones for precise and uniform temperature control. Annealing temperatures vary from 1330°F to 1550°F. After annealing, the strip is cooled to a temperature more compatible with the upcoming zinc bath.

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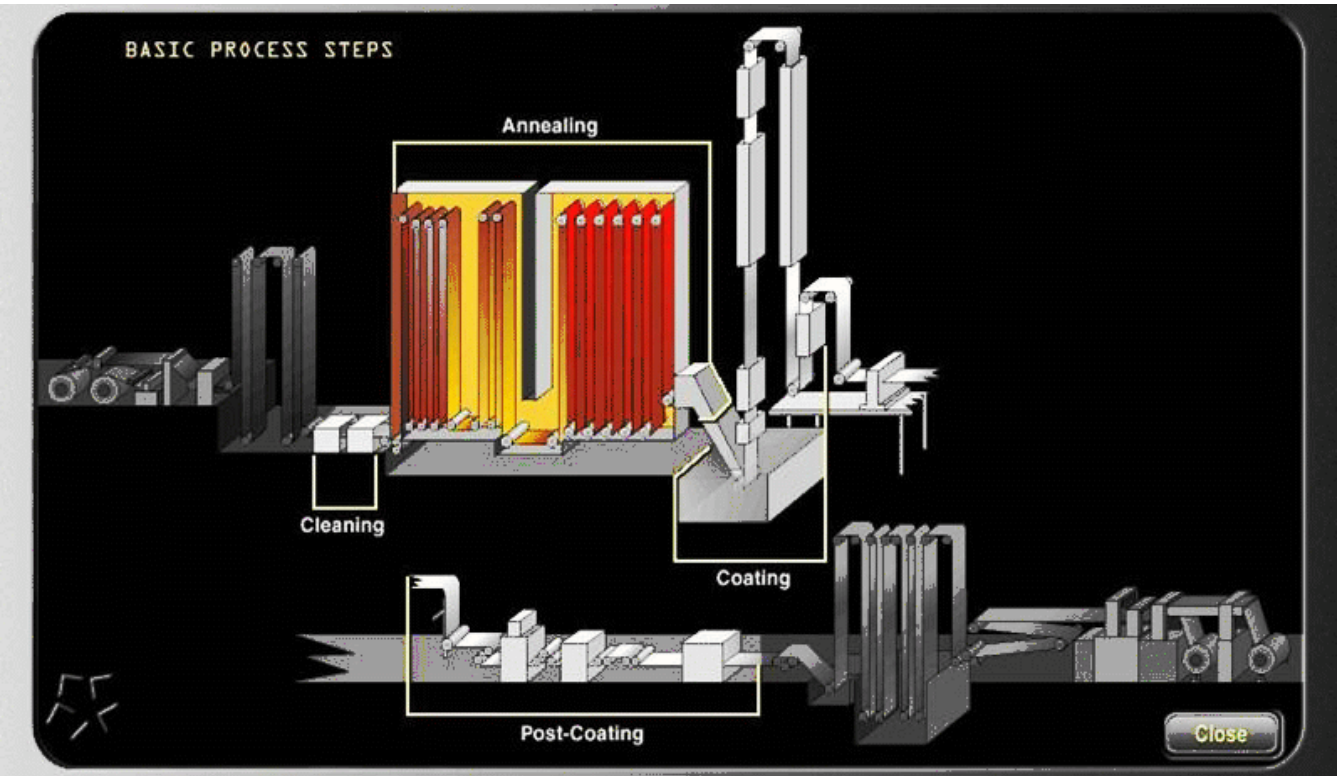
[44] For example, Apollo Metals Ltd. produces copper and brass plated steel strip for use in critical automotive applications as well as a variety of non-automotive precision stamped parts. Tata Steel, "Apollo Metals, Ltd., Bethlehem, Pennsylvania, USA," http://www.tatasteeleurope.com/en/company/activities/plating/production_sites/apollo_metals/, retrieved January23, 2013.

[45] Unless otherwise noted the information in this section is obtained from *Galvanizing - 2012: Continuous Hot-Dip Galvanizing –Process and Products, August 2012*, published by the International Zinc Association.

[46] The raw material input for cold-rolled steel is hot-rolled steel. Hot-rolled steel is cleaned, or pickled, in a bath of sulfuric or hydrochloric acid to remove surface oxide (scale) formed during hot rolling. The cleaned (pickled) steel is then processed through a cold-rolling mill, which is typically a continuous (or tandem) mill having four to six roll stands, and which reduces the thickness of the hot-rolled material by 30-90 percent. The cold-rolling process hardens steel so that it usually must be heated in an annealing furnace to make it more formable. Although most galvanized steel has been cold rolled, some purchasers utilize the thicker galvanized hot-rolled steel.

[47] The accumulator allows the steel strip to be processed continuously by storing a reserve supply of the steel strip that continues to be fed into processing line during the pause in the coil feeding process when the end of one coil is being welded to the beginning of the next coil being fed into the process.

Figure I-1
Corrosion resistant steel: Basic hot-dip galvanizing process



Source: International Zinc Association, *Galvanizing - 2012: Continuous Hot-Dip Galvanizing –Process and Products,* August 2012, found at: http://www.galvinfo.com/GalvInfo_2012_Course_Docs/Galvanizing%2020120831.pdf, p. 10, retrieved January 23, 2013.

Most zinc baths maintain a zinc temperature of between 865-870°F. Zinc baths on modern continuous galvanizing lines are ceramic lined vessels and typically hold about 200 - 350 tons of liquid zinc, although some have capacities of up to 500 tons. In the zinc pot, the moving strip passes around a rotating, submerged sink roll and is redirected vertically to exit the bath below the coating knives. Typical gas knives employ a low-pressure, high-volume approach to delivery of the wiping medium. Pressure is the principal control parameter for coating mass (weight) control, although height, distance to the strip, and angle of the knives are also adjustable. Automatic coating weight controls using artificial intelligence technology have been installed on some lines to produce consistent, steady state, coating weight with a low standard deviation. If the zinc coating is left to solidify after the gas wiping operation, it forms a "traditional" galvanize coating, the thickness of which is a function of the action of the coating knives. Reheating the strip to a temperature of 1100°F immediately after leaving the coating knives produces galvanneal. The zinc is still liquid when the strip enters the galvanneal furnace.[48]

[48] Many automakers prefer galvannealed steel to galvanized steel because of its paintability and appearance, plus its excellent corrosion resistance under automotive type paints. Galvannealed steel is rarely used in unpainted end uses as it contains 10 percent iron, and the coating thickness is only about one third that of some common coating thicknesses of galvanize. It does not have good corrosion resistance in the unpainted state.

After the zinc has cooled, twin-head x-ray fluorescent gauge utilizing a two inch focused beam repeatedly scan across the width of the strip. The gauge provides a continuous read-out of zinc thickness (weight) of both top and bottom surfaces for control purposes.

There are several processes that can be performed after galvanizing. In-line temper rolling is an important part of producing exposed quality coated sheets. It imparts a carefully controlled surface finish, mechanical property control, and good flatness. Passing the strip through a tension leveler, located immediately after the temper mill, provides superior flatness.

The next step is a treatment with a chemical solution to protect the zinc coating. Some hot-dip lines are now applying organic coatings by in-line roll coating to prevent hand print marks during handling of the sheet by users. These treatments were developed for the aluminum-zinc hot dip coatings, which are particularly susceptible to this problem. The strip then passes through the inspection station, which can incorporate a visual surface inspection. Some lines have automatic inspection to assist the human inspectors in assessing surface quality. Finally a light, consistent, precisely controlled film of a rust preventative oil is applied. Immediately after oiling the strip is recoiled on a mandrel to produce coils to the customer's ordered weight.

The second most common method of producing corrosion-resistant steel is the electrolytic process. Very thin formable zinc coatings, ideally suited for deep drawing or painting, can be produced as coated steel products by electrogalvanizing.[49] The coating is thin and uniform and has excellent adherence. It is also possible to produce electrogalvanize coatings of zinc-nickel and zinc-iron and non-zinc coatings.[50] Electrogalvanize coatings are generally not as thick as those produced by hot-dip galvanizing although some product is made with heavier coating weights. One advantage of electrogalvanizing is that it is a "cold" process that does not alter the mechanical properties of the steel.

The continuous electrolytic process shares some of the basic production steps used in the hot dip process, i.e. the input is steel coils, the way the coils are fed into the production process, cleaning of the coil before it enters the plating process, etc. However, instead of plating the steel coils in a bath of molten zinc, the coils pass through electrolytic plating cells. Each plating cell contains a chemical solution (electrolyte) and a source of the plating metal (anode) submerged in the electrolyte. An electric power source is connected to the anode. As the steel strip is passed through each plating cell, it functions as the cathode and zinc is deposited on the strip (figure I-2). The electrolytic plating process is an incremental process where passage through each plating cell deposits a small amount of coating.[51]

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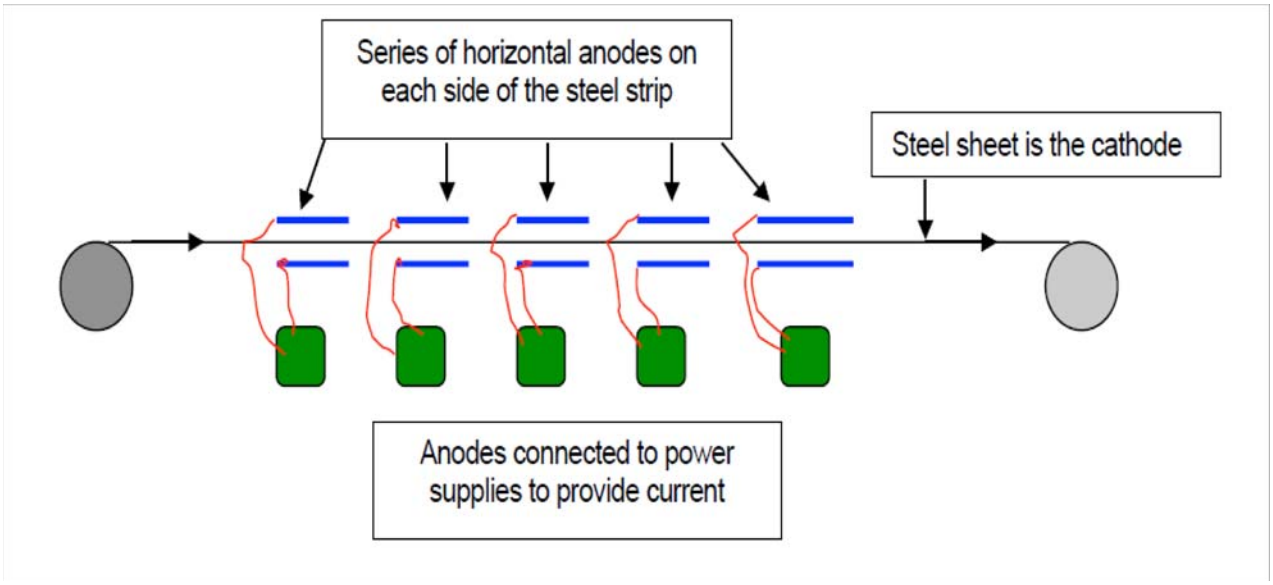
[49] Automotive makers use electrolytic galvanized steel sheet in exposed car-body panels due to these qualities. ***.

[50] For example, Apollo Metals Ltd. produces steel strip electroplated with copper or brass and Thomas Steel Strip Corp. produces steel strip electroplated with nickel. Tata Steel, "Apollo Metals, Ltd., Bethlehem, Pennsylvania, USA ," http://www.tatasteeleurope.com/en/company/activities/plating/production_sites/apollo_metals/ and "Thomas Steel Strip Corp., Warren, Ohio, USA," http://www.tatasteeleurope.com/en/company/activities/plating/production_sites/thomas_steel_strip/, retrieved January 23, 2013.

[51] ***.

Figure I-2
Corrosion resistant steel: Electrolytic plating process



Source: International Zinc Association, *The Continuous Electroplating Process for Steel Sheet Products*, p. 2, January 11, 2012, http://www.galvinfo.com/ginotes/GalvInfoNote_2_2.pdf, retrieved January 23, 2013.

Applications in Major Markets[52]

Due to the different qualities of hot-dip galvanize and electrogalvanize steel, their applications in end-use markets (automotive, construction, and appliance) vary.[53] In the automotive market, most of the unexposed parts are fabricated from either hot-dip galvanized or hot-dip galvannealed while most exposed panels are made from galvannealed or electrogalvanized steel as these forms of corrosion-resistant steel have superior "paintability". The great majority of shipments of electrogalvanized steel go to the automotive market. Since hot-dip galvanized is less expensive than electrogalvanized steel, efforts have been made to substitute hot-dip galvanized for electrogalvanized steel in exposed panels. These efforts at substitution have had limited success.[54] The construction market uses galvanized steel - especially prepainted (i.e. coated with a substance that allows paint to better adhere to the galvanized steel). In general, galvannealed steel is not used to produce prepainted sheet steel, as the coating is brittle

[52] Unless otherwise noted, information in this section was obtained from *Galvanizing - 2012: Continuous Hot-Dip Galvanizing –Process and Products, August 2012*, published by the International Zinc Association.

[53] The two largest known end-use markets for hot-dip galvanize steel are automotive (about 38 percent of U.S. shipments) and construction (about 18 percent of U.S. shipments). About 32 percent of U.S. shipments go to service centers and distributors where the final end-user is unknown. The great majority of U.S. shipments of electrogalvanize steel, about 88 percent, go to the automotive market. *AIS 16C 2010*, American Iron and Steel Institute.

[54] "In the market, hot-dipped galvanized has steadily replaced electrogalvanized over the past decade, because hot-dipped galvanized is less expensive and its performance characteristics have improved." Hearing transcript, p. 202 (Grünhage). "There's been talk for the last 20 years that the EG market is shrinking considerably and we really haven't seen it. It's shrunk a small amount of a change by car companies to hot-dip galvanized, but we operate, as you know since you were there, a couple electrogalvanized lines and they are operating today at a pretty good clip, just at the same levels that our hot dipped galvanized lines are." Hearing transcript, p. 112 (Scherrbaum).

compared to galvanized steel.[55] The appliance market is increasing its use of galvanized steel, including prepainted galvanized steel, as galvanized steel has greater corrosion resistance than cold-rolled steel sheet.

DOMESTIC LIKE PRODUCT ISSUES

The Commission found in its original determinations, as well as it full first and second five-year review determinations, a domestic like product consisting of corrosion-resistant steel (excluding clad plate), as consistent with Commerce's scope definition.[56] Microalloy products were not included in the domestic like product in the original and full first and second five-year review determinations.[57] The Commission defined the domestic industry as all U.S. producers of the domestic like product.

In its notice of institution in these third five-year reviews, the Commission solicited comments from interested parties regarding the appropriate domestic like product and domestic industry.[58] Domestic producers AK Steel, ArcelorMittal USA, Nucor, SDI, and U.S. Steel noted in their response to the Commission's notice of institution that they agree with the definitions of the domestic like product and domestic industry as adopted by the Commission in prior five-year reviews of the antidumping and countervailing duty orders.[59] Likewise, Korean producers Dongbu, HSYCO, POSCO, and Union indicated in their response that they agree with the Commission's definitions.[60] Domestic producers Apollo Metal and Thomas Steel and the German interested parties (Salzgitter, TKSE, TKSNA, and TKSUSA) indicated in their responses that they do not disagree with the Commission's definitions.[61] No party requested that the Commission collect data concerning other possible domestic like products in their comments on the Commission's draft questionnaires and no other interested party provided further comment on the definitions of the domestic like product or domestic industry in that submission. In addition, no party argued in pre- and post-hearing submissions filed with the Commission in these third five-year reviews for a definition of a domestic like product that is different from the Commission's prior determinations.

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[55] A strong bond is formed between the galvanneal coating and the paint and the latter will delaminate during subsequent forming, usually taking the galvanneal coating with it.

[56] In its 1993 original determination on corrosion-resistant steel, the Commission found two separate domestic like products, corrosion-resistant steel and clad steel plate, a specialized corrosion-resistant steel product engineered to achieve specific performance requirements. The Commission made a negative determination with respect to clad steel plate. *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), p. 1-5.

[57] *Certain Carbon Steel Products From Australia, Belgium, Brazil, Canada, Finland, France, Germany, Japan, Korea, Mexico, Poland, Romania, Spain, Sweden, Taiwan, and the United Kingdom, Inv. Nos. AA1921-197 (Second Review); 701-TA-319, 320, 325-327, 348, and 350 (Second Review); and 731-TA-573, 574, 576, 578, 582-587, 612, and 614-618 (Second Review), VOLUME I: Determination and Views of the Commission,* USITC Publication 3899 (January 2007), p. 102.

[58] *Corrosion-Resistant Carbon Steel Flat Products From Germany and Korea: Institution of Five-Year Reviews Concerning the Countervailing Duty Order on Corrosion-Resistant Carbon Steel Flat Products From Korea and the Antidumping Duty Orders on Corrosion-Resistant Carbon Steel Flat Products From Germany and Korea*, 77 FR 301, January 4, 2012.

[59] *Substantive Response of Domestic Producers*, February 2, 2012, p. 23.

[60] *Substantive Response of Korean Respondents*, February 2, 2012, p. 7.

[61] *Substantive Response of Apollo and Thomas*, February 2, 2012, p. 9; *Substantive Response of German Respondents*, February 2, 2012, p. 22.

U.S. MARKET PARTICIPANTS

U.S. Producers

During the original investigations, 22 firms supplied the Commission with information on their U.S. operations with respect to corrosion-resistant steel.[62] During the Commission's full first five-year review, 18 firms provided usable responses to the Commission's questionnaire. These firms are believed to have accounted for *** percent of total U.S. corrosion-resistant steel production in 1999.[63] During the Commission's full second five-year review, 23 U.S. producers of corrosion-resistant steel responded to the Commission's questionnaire with usable data. These mills accounted for approximately 94 percent of U.S. capacity in 2005.[64]

Several U.S. producers that provided separate responses to the Commission's questionnaire in the second reviews provided consolidated questionnaire responses in these reviews. For example, Tata Steel Plating provided a consolidated response on behalf of Apollo Metals and Thomas Steel. In addition, the information for I/N Kote was included in the questionnaire response of ArcelorMittal, the information for Double Eagle and Double G was included in the response of U.S. Steel, and the information for The Techs (GalvTech, MetalTech, and NexTech) was included in the response of SDI. Eighteen U.S. producers provided responses to the Commission's questionnaire with usable data in these third five-year reviews.[65] Based on publicly available sources, the 18 responding U.S. firms are believed to have accounted for more than 90 percent of U.S. capacity in 2011.[66]

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[62] The 22 U.S. producers that supplied the Commission with usable questionnaire information during the original investigations were: Armco, Bethlehem, CSI, Empire, Gregory, Gulf, I/N/ Kote, Inland, LTV, Lukens, Metaltech, National, Nextech, Pinole Point, Rouge, Sharon, Thomas, UPI, USX, WCI, Weirton, and Wheeling-Pitt. *Investigations Nos. 701-TA-319-332, 334, 336-342, 344, 347-353, 731-TA-573-579, 581-592, 594-597, 599-609, and 612-619 (Final): 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, and the United Kingdom--Staff Report*, INV-Q-115, July 20, 1993, table 12.

[63] The 18 U.S. producers that supplied the Commission with usable questionnaire information during the first five-year reviews were: AK, Bethlehem, CSI, GalvTech, Ispat/Inland, LTV, MetalTech, National, NexTech, Nucor, Pro-Tec, Rouge, USX, WCI, Weirton, Wheeling-Nisshin, Wheeling-Pitt, and JIT. ***. *Investigations Nos. AA1921-197 (Review), 701-TA-231, 319-320, 322, 325-328, 340, 342, and 348-350 (Review), and 73 l-TA-573-576, 578, 582-587, 604, 607-608, 612, and 614-618 (Review): Certain Carbon Steel Products from Australia, Belgium, Brazil, Canada, Finland, France, Germany, Japan, Korea, Mexico, Netherlands, Poland, Romania, Spain, Sweden, Taiwan, and the United Kingdom--Staff Report*, INV-X-221, October 18, 2000, OVERVIEW table 2 and p. CORROSION I-1.

[64] The 23 U.S. producers that supplied the Commission with usable questionnaire information during the second five-year reviews were: AK (including AK-ISG), Apollo, Arrow, Canfield, CSI, CSN, Gregory, Mittal, National, Nucor, Pro-Tec, SDI, Severstal, Steelscape, The Techs, Thomas, US Steel, USS-POSCO, WCI, Wheeling-Nisshin, Winner, WPS, and Worthington. Double G also responded to the Commission's questionnaire in the second five-year reviews. ***. *Investigation Nos. AA1921-197 (Second Review); 701-TA-319, 320, 325-327, 348, and 350 (Second Review); and 731-TA-573, 574, 576, 578, 582-587, 612, and 614-618 (Second Review): Certain Carbon Steel Products from Australia, Belgium, Brazil, Canada, Finland, France, Germany, Japan, Korea, Mexico, Poland, Romania, Spain, Sweden, Taiwan, and the United Kingdom - Staff Report, INV-DD-159*, November 22, 2006, p. CORE I-23 and table CORE I-12.

[65] The following US. mills did not return questionnaires and are not otherwise included in domestic industry data presented in this report: (***). *** provided only limited trade data in response to the Commission's questionnaire.

[66] GalvInfo Center, "List of North American Continuous Coating Lines," found at: http://www.galvinfo.com/Documents/North_American_Coating_Lines_Imperial.pdf, retrieved September 24, 2012.

Presented in table I-9 is a list of responding domestic producers and each company's position on the continuation of the orders, production location(s), ownership, and share of reported production of corrosion-resistant steel in 2011.

Table I-9
Corrosion-resistant steel: U.S. producers, positions on the orders, U.S. production locations, parent company, and shares of 2011 reported U.S. production

Firm	Position on continuation of the orders	U.S. production location(s)	Parent	Share of reported production (*percent*)
AK Steel Corp.	***	• West Chester, OH • Ashland, KY • Middletown, OH • Rockport, IN	--	***
ArcelorMittal USA	***	• East Chicago, IN • Burns Harbor, IN • Columbus, OH • Cleveland, OH • Jackson, MS (Double G Coating) • New Carlisle, IN (I/N Kote) • Sparrows Point, Lackawanna, and Hennepin (during periods either open or under ArcelorMittal USA control)	ArcelorMittal SA - Luxembourg (100%)	***
California Steel Industries ("CSI")	***	Fontana, CA	• JFE Steel Corp. - Japan (50%) • Vale - Brazil (50%)	***
Canfield Metal Coating	***	Canfield, OH	--	***
Companhia Siderugica National ("CSN")	***	Terre Haute, IN	CSN - Brazil (100%)	***
Electric Coating Technologies	***	East Chicago, IN	--	***
Gregory Galvanizing	***	Canton, OH	--	***
Material Sciences Corp./Walbridge Coating	***	Walbridge, OH	--	***
National Galvanizing	***	Monroe, MI	--	***
Nucor Corp.	***	• Blytheville, AK • Huger, SC • Trinity, AL • Crawfordsville, IN	--	***

Table continued on the following page.

Table I-9--*Continued*
Corrosion-resistant steel: U.S. producers, positions on the orders, U.S. production locations, parent company, and shares of 2011 reported U.S. production

Firm	Position on continuation of the orders	U.S. production location(s)	Parent	Share of production (*percent*)
Precoat	***	Elkridge, MD	--	***
Pro-Tec Coating	***	Leipsic, OH	• United States Steel - U.S. (50%) • Kobe Steel Ltd. - Japan (50%)	***
RG Steel Sparrows Point	***	Sparrows Point, MD	--	***
RG Steel Warren-Martins Ferry	***	• Warren, OH • Martins Ferry, OH	--	***
Severstal Dearborn	***	Dearborn, MI	--	***
Severstal Columbus	***	Columbus, OH	--	***
Sharon Coating	***	Farrell, PA	--	***
Steel Dynamics, Inc. (“SDI”)	***	• Butler, IN • Jefferson, IN • Pittsburgh, PA (MetalTech and GalvTech,) • Turtle Creek, PA (NexTech)	--	***
Steelscape	***	• Kalama, WA • Rancho Cucamonga, CA • Fairfield, AL	BlueScope Steel - Australia (100%)	***
Tata Steel Plating USA	***	• Warren, OH (Thomas Steel Strip Corp.) • Bethlehem, PA (Apollo Metals Ltd.)	Tata Steel Ltd. - India (100%)	***
Ternium	***	Shreveport, LA	--	***
ThyssenKrupp Steel USA	***	Calvert, AL	ThyssenKrupp AG - Germany (ultimate parent) (100%)	***
USS-POSCO	***	Pittsburgh, CA	• Pitcal, Inc., direct wholly owned subsidiary of U.S. Steel - U.S. (50%) • POSCO-California Corp., indirect wholly owned subsidiary of POSCO - Korea (50%)	***

Table continued on following page.

Table I-9--*Continued*
Corrosion-resistant steel: U.S. producers, positions on the orders, U.S. production locations, parent company, and shares of 2011 reported U.S. production

Firm	Position on continuation of the orders	U.S. production location(s)	Parent	Share of production (*percent*)
U.S. Steel	***	• Ecorse, MI • Granite City, IL • Portage, IN • Gary, IN • Fairless Hills, PA • Dravosburg, PA • Fairfield, AL • Dearborn, MI (Double Eagle) • Jackson, MS (Double G)	--	***
Wheeling-Nisshin	***	Follansbee, WV	Nisshin Steel Co., Ltd. - Japan (ultimate parent) (100%)	***
Worthington Steel	***	• Columbus, OH • Delta, OH	--	***
* * * * * * *				

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

As indicated in table I-9, three responding U.S. producers (ArcelorMittal USA, Tata Steel Plating, and ThyssenKrupp Steel USA), are related to foreign producers of the subject merchandise in Germany and to U.S. importers of the subject merchandise. In addition, domestic producer USS-POSCO is a 50/50 joint venture owned by domestic producer U.S. Steel and Korean producer POSCO. None of the responding U.S. producers reported direct imports of the subject merchandise produced in Germany and Korea and none reported domestic purchases of the subject merchandise imported from Germany. *** reported domestic purchases of corrosion-resistant steel imported from Korea.[67]

U.S. Importers

During the full second five-year review of the orders, the Commission received U.S. importer questionnaire responses from 27 firms, which were believed to have accounted for 82 percent of subject imports from the six then-subject countries during 2005. In these third five-year reviews, usable questionnaire responses were received from 29 U.S. importers of corrosion-resistant steel that are believed to have accounted for virtually all of the total subject U.S. imports from Germany and Korea, and for more than 60 percent of total U.S. imports of corrosion-resistant steel from other sources during 2011. Table I-10 lists all responding U.S. importers of corrosion-resistant steel from Germany, Korea, and other sources, their locations, and their shares of reported U.S. imports in 2011.

[67] Further information concerning *** purchases of subject merchandise imported from Korea is presented in Part III (see table III-7).

Table I-10
Corrosion-resistant steel: U.S. importers, source(s) of imports, U.S. headquarters, and shares of reported U.S. imports in 2011

Firm	Headquarters	Parent	Source of imports	Share of reported 2011 U.S. imports *(percent)*		
				Germany	Korea	Other
ArcelorMittal Dofasco	Ontario, Canada	ArcelorMittal (Luxembourg)	***	***	***	***
ArcelorMittal International	Chicago, IL	ArcelorMittal (Luxembourg)	***	***	***	***
Blum	Stanley, NC	Julius Blum Gmbh (Austria)	***	***	***	***
Cargill	Hopkins, MN	--	***	***	***	***
CSN	Terre Haute, IN	CSN (Brazil)	***	***	***	***
Dongbu USA	Torrance, CA	Dongbu Steel Co., Ltd. (Korea)	***	***	***	***
Dongkuk International	Torrance, CA	• Dongkuk Steel Mill Co., Ltd. (Korea) (***) • Union Steel (Korea) (***)	***	***	***	***
Galvasid	Apodaca, NL Mexico	Grupo Industrial LM SA de CV (Mexico)	***	***	***	***
Hanwha International	Cranbury, NJ	Hanwha Corp. (Korea)	***	***	***	***
Hille & Mueller USA	Warren, OH	Tata Steel (India)	***	***	***	***
Honda Trading America	Marysville, OH	• Honda Trading Corp. (Japan) (***) • American Honda Motor Co. (US) (***)	***	***	***	***
Hysco America	Greenville, AL	Hyundai Hysco (Korea)	***	***	***	***
Hyundai Hysco USA	Houston, TX	Hyundai Hysco (Korea)	***	***	***	***
JFE Shoji Trade America	Long Beach, CA	JFE Shoji Trade Corp. (Japan)	***	***	***	***
Marubeni Itochu Steel America	New York, NY	Marubeni Itochu Steel Inc. (Japan)	***	***	***	***
Metallia USA	Fort Lee, NJ	--	***	***	***	***
Mitsui & Co. USA	New York, NY	Mitsui & Co. Ltd. (Japan)	***	***	***	***
Oxbow Steel International	Pleasant Hill, CA	--	***	***	***	***
Polychem	Mentor, OH	--	***	***	***	***

Table continued on following page.

Table I-10–*Continued*
Corrosion-resistant steel: U.S. importers, source(s) of imports, U.S. headquarters, and shares of imports in 2011

Firm	Headquarters	Parent	Source of imports	Share of imports *(percent)*		
				Germany	Korea	Other
POSCO America	Fort Lee, NJ	• POSCO (Korea) (***) • POSCAN (Canada) (***)	***	***	***	***
Steel Summit International	New York, NY	Sumitomo Corp. of America	***	***	***	***
Stemcor USA	New York, NY	Stemcor Holdings Ltd. (UK)	***	***	***	***
Tata Steel International Americas	Schaumburg, IL	Tata Steel (India)	***	***	***	***
Ternium International USA	Houston, TX	Ternium SA (Luxembourg)	***	***	***	***
ThyssenKrupp Steel North America	Southfield, MI	ThyssenKrupp Steel Europe (Germany)	***	***	***	***
Totem Steel International	Portland, OR	--	***	***	***	***
Toyota Tsusho America	Georgetown, KY	Toyota Tsusho (Japan)	***	***	***	***
U.S. Steel	Pittsburgh, PA	--	***	***	***	***
West Coast Metals/ CLM Enterprises	Capistrano, CA	--	***	***	***	***

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

U.S. Purchasers

The Commission received 35 purchaser questionnaire responses from firms that purchased corrosion-resistant steel during January 2006-June 2012. These purchasers reported corrosion-resistant steel purchases totaling 9.0 million short tons ($8.0 billion) for 2011, which accounted for 49 percent of 2011 U.S. corrosion-resistant steel consumption. The three largest purchasers were ***. Twenty firms reported that they were steel service centers/distributors,[68] 7 automotive end users, 4 trading companies, and 3 construction end users.[69] Three firms reported that they were other end users, specifying functional hardware for kitchen cabinets, agriculture products, and steel drums as their end uses.

[68] Including trading companies, resellers, and brokers.

[69] Some purchasers specified multiple roles.

APPARENT U.S. CONSUMPTION AND MARKET SHARES

Data concerning apparent U.S. consumption and U.S. market shares for corrosion-resistant steel during the period for which data were collected in this proceeding are shown in table I-11.

Table I-11
Corrosion-resistant steel: U.S. shipments of domestic product, U.S. imports, by sources, apparent U.S. consumption, and market shares, 2006-11, January-June 2011, and January-June 2012

Item	Calendar year						January-June	
	2006	2007	2008	2009	2010	2011	2011	2012
Quantity (*short tons*)								
U.S. producers' U.S. shipments	19,338,579	18,101,176	17,202,118	12,224,500	15,604,618	16,586,146	8,332,004	9,138,935
U.S. imports from–								
Germany[1]	45,297	64,201	46,629	10,532	14,768	38,813	22,154	22,045
Korea	541,056	366,307	318,011	201,312	169,528	225,518	105,854	160,186
Subtotal, subject	586,354	430,508	364,641	211,843	184,296	264,330	128,008	182,231
Nonsubject countries[1]	3,600,019	2,118,640	1,843,343	1,020,108	1,416,929	1,575,138	779,168	1,074,115
Total U.S. imports	4,186,373	2,549,149	2,207,984	1,231,952	1,601,224	1,839,468	907,176	1,256,346
Apparent U.S. consumption	23,524,952	20,650,325	19,410,102	13,456,451	17,205,842	18,425,614	9,239,179	10,395,281
Value (*1,000 dollars*)								
U.S. producers' U.S. shipments	14,554,347	14,213,082	16,250,714	7,747,127	13,014,024	15,408,807	7,732,941	8,407,302
U.S. imports--								
Germany[1]	32,465	54,825	57,287	13,361	18,643	41,299	23,375	23,703
Korea	430,800	317,530	332,283	170,728	153,257	231,242	106,601	157,088
Subtotal, subject	463,265	372,355	389,570	184,088	171,900	272,542	129,976	180,791
Nonsubject countries[2]	2,710,700	1,784,407	1,914,764	901,313	1,289,113	1,589,472	772,202	1,046,874
Total U.S. imports	3,173,965	2,156,763	2,304,334	1,085,401	1,461,013	1,862,014	902,178	1,227,665
Apparent U.S. consumption	17,728,312	16,369,845	18,555,048	8,832,528	14,475,037	17,270,821	8,635,119	9,634,967

Table continued on following page.

Table I-11–*Continued*
Corrosion-resistant steel: U.S. shipments of domestic product, U.S. imports, by sources, apparent U.S. consumption, and market shares, 2006-11, January-June 2011, and January-June 2012

Item	Calendar year						January-June	
	2006	2007	2008	2009	2010	2011	2011	2012
Share of quantity (*percent*)								
U.S. producers' U.S. shipments	82.2	87.7	88.6	90.8	90.7	90.0	90.2	87.9
U.S. imports--								
Germany[1]	0.2	0.3	0.2	0.1	0.1	0.2	0.2	0.2
Korea	2.3	1.8	1.6	1.5	1.0	1.2	1.1	1.5
Subtotal, subject	2.5	2.1	1.9	1.6	1.1	1.4	1.4	1.8
Nonsubject countries[2]	15.3	10.3	9.5	7.6	8.2	8.5	8.4	10.3
Total U.S. imports	17.8	12.3	11.4	9.2	9.3	10.0	9.8	12.1
Share of value (*percent*)								
U.S. producers' U.S. shipments	82.1	86.8	87.6	87.7	89.9	89.2	89.6	87.3
U.S. imports--								
Germany[1]	0.2	0.3	0.3	0.2	0.1	0.2	0.3	0.2
Korea	2.4	1.9	1.8	1.9	1.1	1.3	1.2	1.6
Subtotal, subject	2.6	2.3	2.1	2.1	1.2	1.6	1.5	1.9
Nonsubject countries[2]	15.3	10.9	10.3	10.2	8.9	9.2	8.9	10.9
Total U.S. imports	17.9	13.2	12.4	12.3	10.1	10.8	10.4	12.7

[1] U.S. import data presented for Germany are from official Commerce statistics, which include nonsubject merchandise that has been excluded from the scope of the order by Commerce (e.g., Granocoat). Based on data submitted in U.S. importer questionnaire responses, nonsubject merchandise is believed to account for the following shares of U.S. import data presented in this table for Germany: *** percent in 2006, **** percent in 2007, *** percent in 2008, *** percent in 2009, *** percent in 2010, *** percent in 2011, *** percent in January-June 2011, and *** percent in January-June 2012. Subtracting nonsubject U.S. imports from the German data presented results in the following U.S. import volumes and shares of apparent U.S. consumption (based on quantity) for the German imports: *** short tons and *** percent in 2006, *** short tons and *** percent in 2007, *** short tons and *** percent in 2008, *** short tons and *** percent in 2009, *** short tons and *** percent in 2010, *** short tons and *** percent in 2011, *** short tons and *** percent in January-June 2011, and *** short tons and *** percent in January-June 2012.

[2] Major nonsubject countries include Canada, Taiwan, China, Mexico, and India.

Source: Compiled from data submitted in response to Commission questionnaires and from official Commerce statistics (7210.30.0030, 7210.30.0060, 7210.41.0000, 7210.49.0030, 7210.49.0090, 7210.49.0091, 7210.49.0095, 7210.61.0000, 7210.69.0000, 7210.70.6030, 7210.70.6060, 7210.70.6090, 7210.90.6000, 7210.90.9000, 7212.20.0000, 7212.30.1030, 7212.30.1090, 7212.30.3000, 7212.30.5000, and 7212.50.0000).

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

U.S. MARKET CHARACTERISTICS

Corrosion-resistant steel is used primarily in automotive and construction applications. Demand for corrosion-resistant steel follows the trends of these industries as well as overall economic conditions. The majority of corrosion-resistant steel produced in the United States and imported from Germany and Korea is sold commercially, either directly to end users or distributors. Very little corrosion-resistant steel is internally consumed or transferred to related firms.

U.S. CHANNELS OF DISTRIBUTION

U.S. producers reported that corrosion-resistant steel is sold mainly to automotive end users and to steel service centers and distributors with some shipments to construction and other end users. As shown in table II-1, 31 to 38 percent of shipments of U.S.-produced corrosion-resistant steel were sold directly to automotive end users during 2006-11, and 28 to 32 percent of shipments were sold to steel service centers and distributors. Shipments of U.S.-produced corrosion-resistant steel to construction end users declined irregularly as a share of total shipments from 23.0 percent 2006 to 19.6 percent in 2011.

U.S. importers' U.S. shipments of corrosion-resistant steel from Germany were sold primarily to automotive end users. The share of U.S. shipments of corrosion-resistant steel from Germany to automotive end users declined from *** percent in 2006 to *** percent in 2008, then increased in the following three years to *** percent in 2011.

U.S. importers' U.S. shipments of corrosion-resistant steel from Korea were sold primarily to construction end users and steel service centers and distributors during 2006-09, and then to automotive end users and other end users during 2010-11.[1] One factor contributing to the shift in U.S. shipments of corrosion-resistant steel from Korea is a decrease from 2009 to 2010 in the quantity of shipments reported by two importers, ***. In addition, *** reported shipments of corrosion-resistant steel from Korea to automotive and other end users increased from 2009 to 2010, and *** shipments to automotive end users increased from 2009 to 2010.

Four of the top six importers reporting imports from nonsubject sources indicated that most of their shipments were to construction end users and steel service centers and distributors. In contrast, importer (***) reported that most of its imports from nonsubject sources were shipped to other end users, and importer (***) reported that most of its imports from nonsubject sources were shipped to automotive end users.[2]

[1] Two importers provided channels of distribution data for U.S. shipments to other end users, and only one of these firms specified that these shipments were to industrial end users.

[2] While several of the larger importers reported importing corrosion-resistant steel from such countries as Mexico, Taiwan, India, and China, *** reported importing from *** and ***, respectively.

Table II-1
Corrosion-resistant steel: U.S. producers' and importers' U.S. shipments, by sources and channels of distribution, 2006-11, January-June 2011, and January-June 2012

Item	Period							
	Calendar year						January-June	
	2006	2007	2008	2009	2010	2011	2011	2012
	Share of reported shipments (*percent*)							
U.S. producers' U.S. shipments:								
Automotive end users	35.3	38.2	33.8	31.0	35.9	36.3	36.9	41.0
Construction end users	23.0	22.4	23.4	22.6	20.2	19.6	18.9	16.7
Other end users	10.5	11.1	13.0	14.3	15.3	15.1	14.5	14.6
Steel service centers and distributors	31.1	28.4	29.8	32.1	28.7	29.0	29.6	27.7
U.S. importers' U.S. shipments of corrosion-resistant steel from Germany:								
Automotive end users	***	***	***	***	***	***	***	***
Construction end users	***	***	***	***	***	***	***	***
Other end users	***	***	***	***	***	***	***	***
Steel service centers and distributors	***	***	***	***	***	***	***	***
U.S. importers' U.S. shipments of corrosion-resistant steel from Korea:								
Automotive end users	***	***	***	***	***	***	***	***
Construction end users	***	***	***	***	***	***	***	***
Other end users	***	***	***	***	***	***	***	***
Steel service centers and distributors	***	***	***	***	***	***	***	***
U.S. importers' U.S. shipments of corrosion-resistant steel from nonsubject sources:								
Automotive end users	23.6	30.6	25.7	28.5	27.0	23.3	24.5	28.9
Construction end users	37.7	42.2	49.3	44.3	41.7	42.7	46.2	39.5
Other end users	8.6	3.7	6.9	9.4	9.4	10.2	6.1	10.9
Steel service centers and distributors	30.1	23.5	18.2	17.9	21.9	23.7	23.2	20.7
U.S. shipments from all sources:								
Automotive end users	34.1	37.4	33.0	30.8	35.5	35.5	36.3	40.2
Construction end users	24.4	23.6	25.1	23.9	21.2	20.8	20.3	18.0
Other end users	10.4	10.9	12.7	14.1	15.2	15.1	14.3	14.6
Steel service centers and distributors	31.1	28.1	29.2	31.3	28.1	28.5	29.1	27.2

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

U.S. PURCHASERS

Purchasers reported that their main customers are in the automotive and construction industries. Purchasers also reported selling to stampers/fabricators, other distributors and steel service centers, and agricultural end users. Two purchasers, *** reported purchasing corrosion-resistant steel, selling it to stampers, and repurchasing the product for use in their *** production plants. Twelve purchasers indicated that they competed with their suppliers for sales to their customers, and 13 purchasers reported that they compete with imports of corrosion-resistant steel from Germany and Korea for sales to their customers. Two purchasers indicated that competition occurs most frequently with large customers where the manufacturer or importer will sell directly to the customer. One purchaser also reported that some of their suppliers also own distribution centers.

Purchasers that identified themselves as automotive end users (***) reported purchasing from the United States, Germany, Korea, and nonsubject sources.[3] Automotive purchasers reported that 97.2 percent of their 2011 purchases, by quantity, were from the United States, 1.4 percent from nonsubject sources, 1.0 percent from Korea, and 0.3 percent from Germany. Purchases from U.S. producers increased during 2006-11, while purchases of imports from Korea and nonsubject sources declined. Purchases of imports from Germany were only reported during 2011 and January-June 2012. Two purchasers, ***, reported purchasing from ThyssenKrupp in Germany,[4] and two purchasers, ***, reported purchasing from Korea.[5]

Thirty-one purchasers indicated they had marketing/pricing knowledge of domestic corrosion-resistant steel, 20 of corrosion-resistant steel from Korea, 8 from Germany, and 17 of nonsubject sources.[6]

GEOGRAPHIC DISTRIBUTION

Corrosion-resistant steel produced in the United States and imported from all sources is sold nationwide, with a particular focus on the Midwest and Southeast (table II-2).[7] Nine of the 16 responding U.S. producers and eight of 25 responding importers reported selling corrosion-resistant steel throughout the continental United States.[8] Including producers and importers that sell corrosion-resistant steel throughout the continental United States, 15 producers and 14 importers reported selling to the Northeast, 15 producers and 21 importers reported selling to the Midwest, 15 producers and 22 importers reported selling to the Southeast, 14 producers and 19 importers reported selling to the Central Southwest, 13 producers and 13 importers reported selling in the Mountain region, and 12 producers and 18 importers reported selling in the Pacific Coast region.

Corrosion-resistant steel imported from Germany is sold primarily in the Midwest and Southeast. Some importers of product from Germany also reported selling corrosion-resistant steel to the Northeast and Central Southwest.[9] Corrosion-resistant steel imported from Korea is sold throughout the continental United States, with a focus on the Southeast and Pacific Coast. A number of importers of product from Korea also reported selling corrosion-resistant steel to the Central Southwest and the Midwest.[10]

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[3] Nonsubject sources included Canada (identified by 4 firms), France (2 firms), and China, Sweden, and the Netherlands (each identified by 1 firm).

[4] These purchases accounted *** percent or less of total 2011 purchases for each firm.

[5] *** reported purchasing from HYSCO and POSCO, and *** reported purchasing *** short tons in 2010, but did not specify the foreign producer.

[6] Nonsubject sources identified include: China (identified by 12 firms); Japan (7 firms); India (6 firms); Canada (5 firms); Mexico and Taiwan (3 firms each); Brazil, France, and Spain (2 firms each); and Belgium, Netherlands, Sweden, Thailand, and the United Kingdom (1 firm each).

[7] *** submitted both a U.S. producer and an importer questionnaire. Attachment 2A to *** importer questionnaire stated that since *** submitted a U.S. producer questionnaire, *** did not respond to the duplicated questions in its importer questionnaire response. For purposes of Part II of this report, responses from *** U.S. producer questionnaire were also counted for its importer questionnaire response. *** submitted an importer questionnaire. *** submitted data for both its stainless steel imports from Korea, which are not subject product, and corrosion-resistant steel imports from nonsubject sources. For purposes of Part II of this report, responses from *** importer questionnaire are included unless the question pertained to imports of corrosion-resistant steel specifically from Germany and/or Korea.

[8] Three producers and three importers reported selling corrosion-resistant steel nationally.

[9] Two firms reporting imports of corrosion-resistant steel from Germany also reported imports from nonsubject sources.

[10] Three firms reporting imports of corrosion-resistant steel from Korea reported that a majority of their imports are from nonsubject sources.

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

Region	U.S. producers	Importers
	Number of firms	
Northeast	15	14
Midwest	15	21
Southeast	15	22
Central Southwest	14	19
Mountain	13	13
Pacific Coast	12	18
Other[1]	3	4

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

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

U.S. producers and importers reported that at least 70 percent of their 2011 U.S. commercial shipments were shipped 101 to 1,000 miles from their facilities. U.S. producers reported that approximately 20 percent of their 2011 U.S. commercial shipments were delivered less than 100 miles from their facilities, and importers reported that about 30 percent of their 2011 U.S. commercial shipments were delivered less than 100 miles from their facilities.

U.S. SUPPLY AND DEMAND CONSIDERATIONS

U.S. Supply

Domestic Production

Based on available information, U.S. corrosion-resistant steel producers have the ability to respond to changes in demand with moderate changes in the quantity of shipments of U.S.-produced corrosion-resistant steel to the U.S. market. The main contributing factors to the moderate degree of responsiveness of supply are the availability of unused capacity, some ability to use inventories to increase shipments, and the ability to ship to alternate markets.

Ten of 15 U.S. producers anticipate no change in the availability of U.S.-produced corrosion-resistant steel in the U.S. market. U.S. producer *** indicated that if the orders are revoked, some U.S. corrosion-resistant steel capacity could be at risk of closure, citing several recent closure and sell-off events (e.g., bankruptcy of RG Steel and (pending) sale of ThyssenKrupp's Alabama facility).[11] Five U.S. producers anticipate that availability of domestically produced corrosion-resistant steel in the U.S. market will increase in the future. Most of these firms attributed the anticipated increase in availability to capacity increases at ***.[12]

Industry capacity

U.S. producers have unused capacity with which they could increase production of corrosion-resistant steel in the event of a price change. U.S. producers' capacity utilization decreased from 87.3

[11] *** U.S. producer questionnaire response, section IV-21.

[12] *** reported that the supply increase as *** comes fully online will offset the decrease in supply from the closure of RG Steel.

percent in 2006 to 76.3 percent in 2011. During 2006-11, production of corrosion-resistant steel fluctuated, but decreased overall by 10.5 percent from 20.5 million short tons in 2006 to 18.3 million short tons in 2011. Capacity increased nominally by 2.4 percent during 2006-11.[13]

Alternative markets

U.S. producers have some ability to divert shipments to or from alternative markets in response to changes in the price of corrosion-resistant steel. Exports by U.S. producers, as a share of total shipments, increased from 5.6 percent in 2006 to 7.2 percent in 2011. Twelve of 14 responding U.S. producers reported, however, that it would be very difficult for them to export corrosion-resistant steel to other countries due to high shipping costs. Most U.S. producers reported serving local markets, and due to high shipping costs, there is little inclination for them to switch to export markets. Three of 14 U.S. producers reported that their exports are subject to tariff or non-tariff barriers to trade in other countries. Firms identified currency and exchange rates and competition with dumped and subsidized corrosion-resistant steel in other markets as barriers to trade.[14] One U.S. producer, ***, reported that it does very little exporting and would not shift any of their sales.

Inventory levels

U.S. producers have some ability to use inventories as a means of increasing shipments of corrosion-resistant steel to the U.S. market. The ratio of end-of-period inventories to total shipments for U.S. producers increased from 8.0 percent in 2006 to 12.3 percent in 2011.

Production alternatives

All sixteen responding U.S. producers reported that they are not able to switch production between corrosion-resistant steel and other products in response to a relative change in the price of corrosion-resistant steel. Eleven of 16 responding U.S. producers indicated that since 2006, only corrosion-resistant steel has been produced on the machinery and equipment used in production of corrosion-resistant steel, and that they do not anticipate producing other products with this equipment in the future. Several integrated producers reported shared production of upstream products such as hot-rolled and cold-rolled steel. In addition, *** reported producing chrome plate on the same equipment used in production of corrosion-resistant steel during 2006-10, and *** reported production of an aluminized alloy product.[15]

Product and marketing trends

Nine of 15 U.S. producers reported that there have been changes in the product range, product mix, or marketing of corrosion-resistant steel since 2006. *** noted a shift to more advanced high strength steels. *** reported that the galvanizing line in its *** mill has allowed it to produce a more diverse product range, including higher quality product; and indicated that the *** that is expected to come online in the fourth quarter of 2012 will increase diversity and allow *** to expand its customer base and target market. *** reported that its *** line has been upgraded to produce Trip, Bake Hardened, and AAHS type steels. Seven U.S. producers anticipate future changes. *** reported having new

[13] As discussed in Part III, domestic industry capacity does not include Sharon Coating's 2006 capacity nor the Ohio operations closed and sold by RG Steel, suggesting a decline in overall capacity.

[14] No specific countries were cited.

[15] U.S. producer *** indicated anticipated production of a nonsubject micro-alloy corrosion-resistant steel, but was not able to forecast an allocation of capacity.

facilities and the capability to produce increasingly advanced corrosion-resistant product. *** also indicated that as long as market conditions permit, *** plan to continue investing capital and developing new products.

Subject Imports from Germany

Based on available information, German producers have the ability to respond to changes in demand with moderate-to-high changes in the quantity of shipments of corrosion-resistant steel to the U.S. market. Supply responsiveness is increased by the existence of alternate markets and some ability to use inventories, but is constrained by the limited availability of unused capacity and by potentially limited production alternatives.

One of three German producers (***) reported that it anticipates a decrease in the availability of subject import supply in the U.S. market. *** reported that it has increased imports of corrosion-resistant steel from Germany to *** and indicated that it expects these imports to decrease as ***.[16] German producers (***) indicated that they do not expect availability of subject import supply to change.

Industry capacity

German producers have limited unused capacity with which they could increase production of corrosion-resistant steel in the event of a price change. German producers' capacity utilization decreased from 99.0 percent in 2006 to 92.3 percent in 2011, and was 96.2 percent and 94.8 percent in interim 2011 and 2012, respectively. The decrease in capacity utilization was driven by decreases in production beyond decreases in capacity. *** reported reducing the number shifts during the first seven months of 2009, and *** reported taking equipment offline in 2008 and 2009. In addition, *** stated that one blast furnace has been out of operation since 2008.

Alternative markets

German producers may have the ability to divert shipments to or from their home market and alternative markets in response to changes in the price of corrosion-resistant steel. Nearly all (more than *** percent) shipments of corrosion-resistant steel from Germany were to markets other than the United States (including exports to alternative markets, shipments to the home market, and internal consumption and transfers). Shipments to the home market accounted for *** percent of German total shipments in 2011, and shipments to the European Union accounted for *** percent of German total shipments in 2011.[17] *** reported that it has not shipped corrosion-resistant steel to the United States in over 10 years and does not have plans to ship to the United States. *** stated that logistical and transportation costs to switch markets can be substantial, and thus switching markets to follow temporary price decreases is not practical.[18] *** reported that sales can be shifted between countries depending on market demand.

[16] *** foreign producer questionnaire response, section III-11, and ***.

[17] Internal consumption accounted for *** percent of German total shipments in 2011.

[18] TKSE reported that transportation costs (about $90 per ton) across the Atlantic from Germany are significant. Hearing transcript, p. 205 (Grunhage). Counsel for Korean respondents stated that in addition to paying for ocean freight, the product must also be transported over land once it arrives at port. Hearing transcript, p. 327 (Cameron). U.S. Steel argued that corrosion-resistant steel produced in Germany can be shipped from a northern European port to southern Texas for lower freight costs than shipping product from the upper Midwest to the southern United States. Hearing transcript, p. 116 (Kopf).

Inventory levels

The ratio of end-of-period inventories to total shipments for German producers fluctuated during 2006-11, and decreased overall from 14.7 percent in 2006 to 14.2 percent in 2011.

Production alternatives

Two of three responding German producers indicated that they are not able to switch production between corrosion-resistant steel and other products in response to a relative change in price of corrosion-resistant steel.[19] On the other hand, *** reported that one of its galvanization lines can switch to production of pickled and oiled product, but indicated that the production switch is only done in the case of prolonged stoppages of the true production line for pickled product and is not initiated by price changes. Although, *** reported that they are not able to switch production between subject and nonsubject products in response to a change in the price of corrosion-resistant steel, these two firms reported having produced various nonsubject alloy and stainless steel corrosion-resistant steel on the same equipment. Total nonsubject production ranged from *** to *** short tons during 2006-11.

Product and marketing trends

*** reported that the corrosion-resistant steel in Germany is not exceedingly different from product exported to third country markets. On the other hand, *** indicated that there are significant physical differences in the corrosion-resistant steel sold to the automotive industry in Germany from product that is sold to the U.S. automotive industry. For example, *** reported that the automotive industry in Germany is using a type of ultra-high strength steel, which uses ***.

Two German producers reported that there have been changes in the product range, product mix, or marketing of corrosion-resistant steel in their home market, for export to the United States, or for export to third-country markets since 2006. *** reported the increased use of *** coating, which allows thinner coatings and still maintains corrosion-resistant properties, and *** reported that the use of hot-forming steels has grown significantly in the European car industry. Most German producers do not anticipate changes in the product range, product mix, or marketing of corrosion-resistant steel in their home market, for export to the United States, or for export to third-country markets in the future. *** indicated that automotive customers will continue to switch to more nonsubject micro-alloy corrosion-resistant steel.

Subject Imports from Korea

Based on available information, Korean producers have the ability to respond to changes in demand with moderate-to-large changes in the quantity of shipments of corrosion-resistant steel to the U.S. market. The main contributing factor to the moderate-to-large degree of responsiveness of supply is the existence of alternate markets; supply responsiveness is constrained by the limited ability to use inventories, the limited availability of unused capacity and the absence of alternate products.

One of five responding Korean producers (***) reported that it anticipates a decrease in the availability of subject import supply in the U.S. market. *** indicated that if the current raw material shortage continues and sales of subject product to the United States are not profitable enough compared to other markets, it will reduce the volume of its product sold in the U.S. market. The remaining four

[19] *** noted that production changes are constrained by material, machinery, equipment, and production process requirements and limitations and cited such reasons as: investment requirements in production of corrosion-resistant steel, constraints of contracts with customers, and logistical and transportation costs.

responding Korean producers reported that they do not expect availability of subject import supply to change.

Industry capacity

Korean producers have somewhat limited unused capacity with which they could increase production of corrosion-resistant steel in the event of a price change. Korean producers' capacity utilization decreased from 94.7 percent in 2006 to 93.5 percent in 2011, and was 94.5 percent and 95.7 percent in interim 2011 and 2012, respectively. The decrease in capacity utilization resulted from capacity increasing more rapidly than production.[20]

Alternative markets

Korean producers may have the ability to divert shipments to or from their home market and alternative markets in response to changes in the price of corrosion-resistant steel. Shipments of corrosion-resistant steel from Korea to markets other than the United States (including exports to alternative markets, shipments to the home market, and internal consumption and transfers) increased from 94.4 percent of total shipments in 2006 to 97.6 percent in 2011. Shipments to the home market accounted for *** percent of Korean total shipments in 2011, and shipments to Asia accounted for *** percent of Korean total shipments in 2011.[21]

Responding Korean producers reported that it would be difficult for them to switch sales between alternative markets and the United States. Korean respondents also stated that freight costs to ship corrosion-resistant steel from the factory in Korea to the United States are substantial.[22] *** reported that this may be difficult because of differing product specifications and standards and sales terms among various countries. *** reported that it currently serves *** automotive customers in the United States, which require a long-term stable supply of high quality corrosion-resistant steel, and stated that it would be difficult for *** to shift the focus of its sales of corrosion-resistant steel between the United States and other countries within a 12 month period.

Inventory levels

The ratio of end-of-period inventories to total shipments for Korean producers fluctuated during 2006-11, but decreased overall from 4.8 percent in 2006 to 4.1 percent in 2011.

Production alternatives

All five responding Korean producers indicated that they are not able to switch production between corrosion-resistant steel and other products in response to a relative change in price of corrosion-resistant steel. Only one Korean producer, *** on the same equipment used in the production of subject product. It reported ***.

Product and marketing trends

Most Korean producers reported that the product range, product mix, or marketing of corrosion-resistant steel in Korea is not different from that of corrosion-resistant steel for export to the United States. Most Korean producers reported that the product mix has not changed since 2006, and they do not

[20] Capacity increased by *** percent while production increased by *** percent.
[21] Internal consumption accounted for *** percent of Korean total shipments for 2011.
[22] Korean respondents' posthearing brief, p. 11.

anticipate changes in the future. One Korean producer (***) reported that it will shift its focus to high-quality coated steel products (used primarily in the automotive industry) as demand for those products increases.

Nonsubject Imports

Nine of 13 U.S. producers and 5 of 27 importers reported that the availability of nonsubject corrosion-resistant steel has changed since 2006. U.S. producers and importers cited increased availability of imports from Asia, specifically China, India, and Taiwan. Two firms attributed the increase to exchange rate trends, and one firm cited a decrease in global demand. In addition, U.S. producers *** noted a shift in global supply toward the United States following the financial crisis in 2008-09.

New Suppliers

Twenty-eight of 35 purchasers indicated that new suppliers had entered the U.S. market since 2006, and 13 expect additional entrants. Most purchasers cited ThyssenKrupp's new production facility in Alabama and Severstal's new facility in Mississippi. Other firms noted new production facilities in China, India, and Mexico (POSCO).

Supply Constraints

Nine of 15 responding U.S. producers indicated that they had not refused, declined, or been unable to supply corrosion-resistant steel since January 1, 2006. Among the six producers that reported supply constraints, *** reported short-term demand spikes in 2008-09 due to the curtailment of production, but stated that throughout most of the period, it did not experience constraints in supply of corrosion-resistant steel. *** experienced constraints in 2011-12 due to a ramp-up phase in production, however it noted that the situation has improved as production line start-up issues are resolved. *** noted experiencing periods of increased demand for its ***. *** indicated supply constraints in 2010 and 2011 due to operational problems from *** facilities that had ***, *** difficulties in its *** facility, and a shift in automotive producers demand from electro-galvanized steel to lighter grades of hot-dipped galvanized steel. *** indicated that due to these reasons, it was not able to make all shipments to automotive customers on time, and also had to decline orders from those customers. *** reported that demand exceeded production capacity from *** 2006, *** 2007, *** 2008, and *** 2009. *** reported that during ***, there was a brief time that some of its short term and spot customers were on allocation or controlled order entry.

Twenty-four of 29 responding U.S. importers reported that they had not refused, declined, or been unable to supply corrosion-resistant steel since January 1, 2006. Of the five importers who reported supply constraints, *** reported a decline in overall delivery performance citing missed deliveries from *** 2009 through *** 2010 and *** 2012. *** also indicated that certain mills have refused to provide certain widths of high strength steel without charging a premium for slit loss. *** reported refusing new orders from certain U.S. customers between 2006 and *** 2008 due to capacity constraints in ***; *** also indicated ceasing sales to non-automotive customers because of the need for flexible pricing due to the volatility of raw material costs. *** reported supply constraints due to the permanent closure of *** line in the ***. *** reported that during 2006-07, periodic supply constraints from suppliers caused it to ***.

Nine of 35 responding purchasers reported being refused, declined, or unable to purchase corrosion-resistant steel since January 1, 2006. Purchaser *** reported a shortage of hot-dipped galvanized steel with gauges less than 0.020 inches during second quarter 2008. *** stated that *** refused to supply increased volumes at current contract prices, and *** reported having to switch product specifications in order to obtain materials. *** reported that a spike in demand for corrosion-resistant

steel from the "Cash for Clunkers" program caused a shortage of supply, and other firms noted dramatic increases in demand as a cause for supply constraints.

Eighteen of 33 responding purchasers indicated that changes occurred to other factors that have affected the supply of corrosion-resistant steel. Firms reported increasing energy and transportation costs, fluctuations in raw material costs, and the entry and exit of suppliers (e.g., bankruptcies, mill closures, and construction of new mills) as affecting supply of corrosion-resistant steel. Several firms noted technological advancement, construction of new mills (ThyssenKrupp's facility in Alabama), and increased capacity as factors that have increased availability of corrosion-resistant steel. Other firms reported supply shortages due to idled mill capacity during the economic downturn.

U.S. Demand

Based on information available, overall U.S. demand for corrosion-resistant steel is likely to experience moderate changes in response to changes in price. There are a number of substitute products, but little reported effect of the prices for substitutes on the price of corrosion-resistant steel. Additionally, corrosion-resistant steel accounts for a moderate-to-large share of the cost of its end uses.

Apparent U.S. consumption of corrosion-resistant steel, by quantity, decreased in 2006-09 and increased in 2010-11.

End Uses

The largest end-use markets for corrosion-resistant steel as reported by U.S. producers, importers, and purchasers are automotive and construction.[23] [24] Reported automotive end uses included: body panels, door panels, hoods, chassis, body reinforcements, and brake and fuel line systems. Reported construction end uses include: framing, roofing, building panels/siding, trim, gutters/downspouts, culverts, decking, garage/entry doors, suspension ceiling grids, and engineered truss connector plates. Other applications include HVAC systems and appliance manufacturing.

Most foreign producers indicated that the end uses for corrosion-resistant steel sold in their home markets are similar to the end uses identified above for the U.S. market. One firm, ***, indicated that the steel it manufactures and sells to the U.S. or third country markets is primarily used for construction materials, and the steel it sells in its home market is used mainly for manufacturing automobile parts, electronic appliances, and construction materials.

Most producers (12 of 16), importers (24 of 26), and purchasers (22 of 27) and all 8 responding foreign producers reported no changes in the end uses of corrosion-resistant steel since 2006. Two U.S. producers (***) reported the use of corrosion-resistant steel in the construction of the framing and structural supports for solar panel fields as a new application for corrosion-resistant steel.

Most firms (11 of 14 producers, 22 of 23 importers, 25 of 27 purchasers, and 7 of 8 foreign producers) anticipate no changes in the end uses of corrosion-resistant steel. One purchaser (***) reported anticipating changes due to automotive users switching to aluminum for *** to achieve weight

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[23] Domestic and respondent interested parties both reported that corrosion-resistant steel sold to automotive end users is a higher quality than corrosion-resistant steel sold to construction end users. Hearing transcript, pp. 160-161 (Anderson), and ThyssenKrupp posthearing brief, exhibit 1, p. 3. ThyssenKrupp also added that while corrosion-resistant steel that is used in automotive applications could be used in construction applications, the higher cost would make it unfeasible to do so. ThyssenKrupp posthearing brief, exhibit 1, p. 3. See also Korean respondents' posthearing brief, p. 6.

[24] According to 2010 data from the American Iron and Steel Institute, the largest end use markets for hot-dipped galvanized corrosion-resistant steel were automotive, steel service centers and distributors, and construction. The largest end use markets for electrogalvanized corrosion-resistant steel was automotive, with a small amount of shipments to steel service centers and distributors. *AIS 16C 2010*, American Iron and Steel Institute.

savings. Producers and importers also noted this change and indicated that automotive manufacturers are switching to lighter-weight products, such as micro-alloy steels, in place of carbon steels.

Cost Share

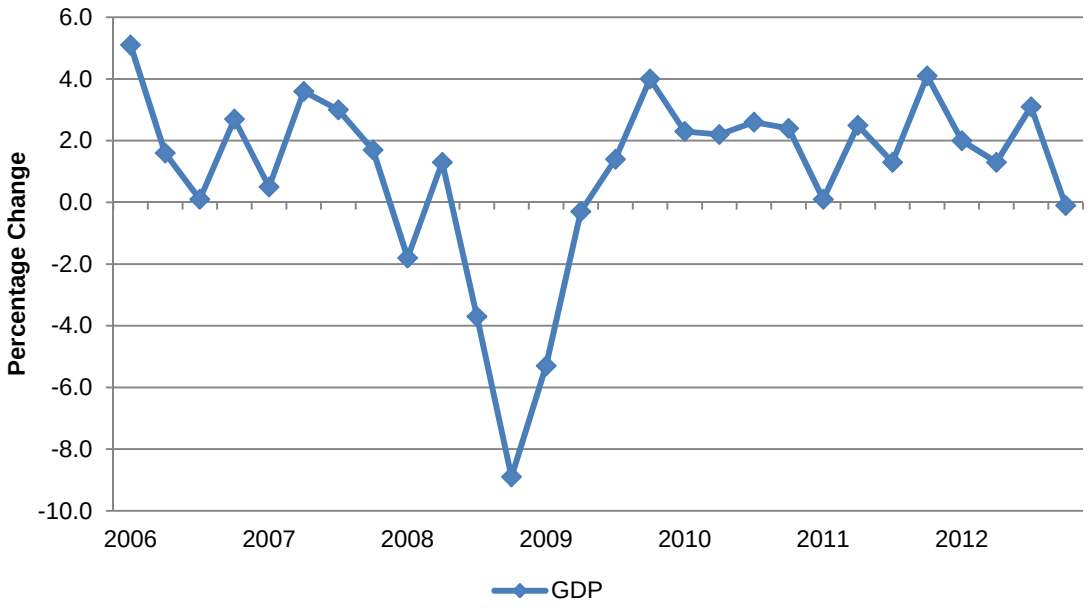
U.S. producers, importers and purchasers generally reported a moderate-to-large cost share for corrosion-resistant steel as a percentage of the price of end use products. Most U.S. producers and importers reported that corrosion-resistant steel accounted for 5 to 30 percent of the price of the end-use product in automotive end uses and at least 40 percent of the price in construction end uses. Most purchasers reported that corrosion-resistant steel accounted for 50 percent or more of the price of the end-use product in automotive end uses and at least 80 percent of the price in construction end uses.

Demand Characteristics

Corrosion-resistant steel demand is mainly driven by automotive and construction demand. Responding firms indicated that demand for these end use products follow general economic trends. In addition, firms noted that demand in the construction industry follows seasonal trends as construction activity slows in winter months.

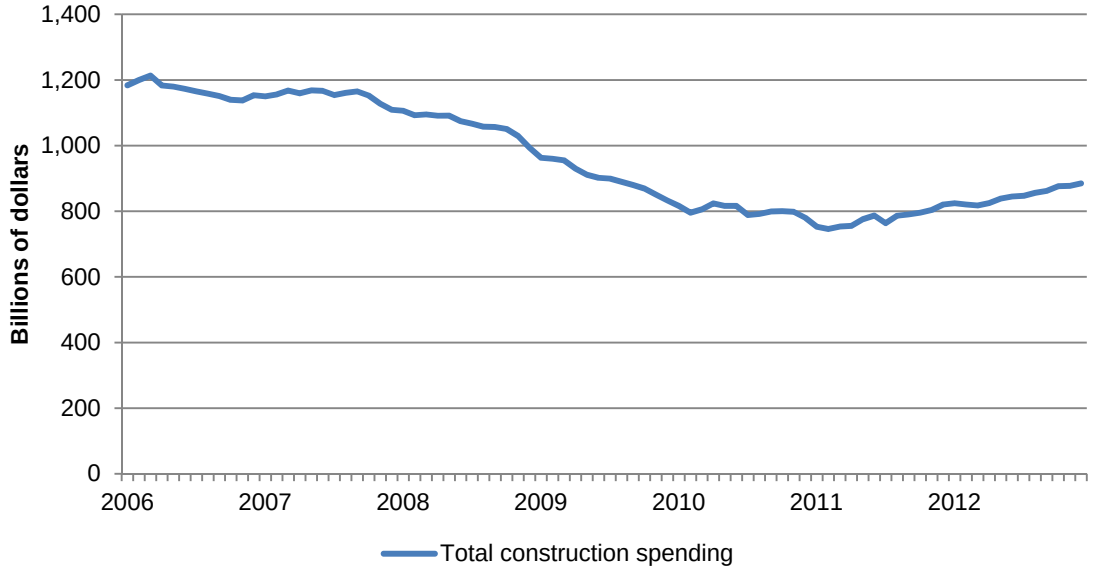
Real GDP growth in the United States fluctuated during January 2006 to December 2012. Real GDP growth was 5.1 percent in January-March 2006, fell to -8.9 percent in October-December 2008, and increased through 2009. After fluctuating during 2010-12, real GDP growth was -0.1 percent in October-December 2012 (figure II-1). In addition, total construction spending (residential and nonresidential) declined during 2006 to early 2011 before slowly increasing through 2012. Overall, total construction spending decreased by 25.2 percent from January 2006 to December 2012 (figure II-2). Total vehicle sales declined from 2006 to early 2009, spiked in mid-2009, then steadily increased during 2010 through 2012. Overall, total vehicle sales decreased overall by 13.1 percent from January 2006 to December 2012 (figure II-3).

Figure II-1
Real U.S. GDP growth: Percentage change, quarterly, January 2006-December 2012



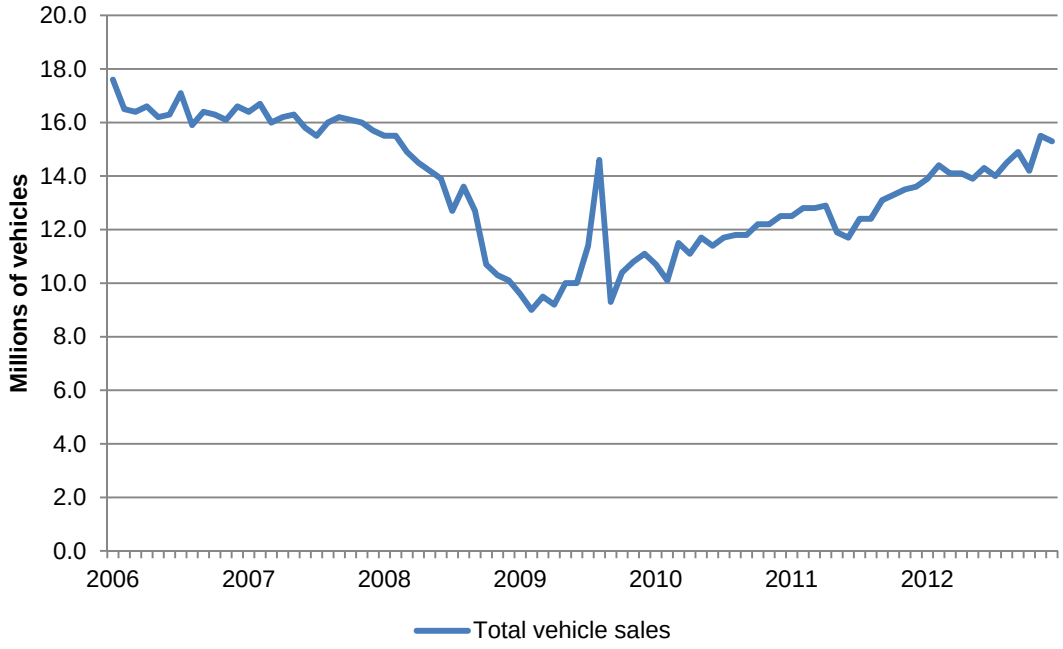
Source: National Income and Product Accounts-Table 1.1.1, Percent Change from Preceding Period in Real Gross Domestic Product, Bureau of Economic Analysis, http://www.bea.gov/iTable/index_nipa.cfm, retrieved January 31, 2013.

Figure II-2
U.S. construction activity: Total construction spending (residential and nonresidential), monthly, on a seasonally adjusted, annualized basis, January 2006-December 2012



Source: Construction Spending, United States Census Bureau, http://www.census.gov/, retrieved February 1, 2013.

Figure II-3
U.S. automotive sales: Automobile and light truck retail sales, monthly, on a seasonally adjusted, annualized basis, January 2006-December 2012



Source: Motor Vehicle Unit Retail Sales-Table 6, Light Vehicle and Total Vehicle Sales, www.bea.gov/national/xls/gap_hist.xls, retrieved January 11, 2013.

The Architecture Billings Index (ABI), a leading indicator of construction activity reported by American Institute of Architects (AIA), was 52.0 percent in December 2012, down slightly from 53.2 in November.[25] AIA notes that, "While it's not an across the board recovery, we are hearing a much more positive outlook in terms of demand for design services." The AIA expects this trend to continue through 2013 and for conditions to improve at a slow and steady rate.[26] [27] In its prehearing brief, Nucor provided an article that indicated that the U.S. construction industry may not recover in 2012, due to a lack of confidence in the economy as "many decision-makers have adopted a wait-and-see attitude."[28] According to ***, ***.[29] Industry sources have projected U.S. passenger vehicle sales of 14.9 to $15.4 million vehicles in 2013, and 15.2 to 16.3 million vehicles in 2014.[30] Blue Chip Economic Indicators forecasts that real GDP will *** percent in 2013 and *** percent in 2014.[31] Blue Chip also forecasts housing starts of *** and *** in 2013 and 2014, respectively, and *** in auto and light truck sales in 2013 and *** in 2014.[32] *** estimates steel demand to *** in 2013, and automotive demand to ***.[33]

Demand Trends

Firms' perceptions of changes in U.S. demand since 2006 were mixed, with most U.S. producers, importers, and purchasers reporting that it decreased or fluctuated (table II-3). Most firms attributed the decrease or fluctuations in demand to the overall condition of the economy, citing the decline in the construction industry over past three to four years. One purchaser also reported a decrease in availability of credit.

The majority of producers, importers, and purchasers expect demand for corrosion-resistant steel to increase or fluctuate through 2014. These firms reported anticipated growth in the housing and construction industries as well as in the automotive industry that will increase demand for corrosion-resistant steel. Other firms noted that demand for corrosion-resistant steel will continue to fluctuate in line with the overall economy as the economy recovers from the recession in 2008. Foreign producers responses were mixed with two firms each reporting that demand will either increase, fluctuate or not change through 2014.

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[25] November saw the fourth straight monthly increase in the Architecture Billings Index. "Latest ABI Reflects Strongest Growth in Nearly Five Years," AIA Architect, Vol. 20, January 11, 2013, and "Fifth Consecutive Month of Gains in Architecture Billings Index," January 23, 2013, Press Release, http://www.aia.org/press/releases/AIAB097358, retrieved January 24, 2013.

[26] "Fifth Consecutive Month of Gains in Architecture Billings Index," January 23, 2013, Press Release, http://www.aia.org/press/releases/AIAB097358, retrieved January 24, 2013.

[27] The AIA also forecasts nonresidential construction spending to rise by 5.0 percent in 2013 and 7.2 percent in 2014. "Steady Increase in U.S. Construction Activity Projected Through 2014," AIArchitect, Vol. 20, January 25, 2013.

[28] Nucor's prehearing brief, exhibit 1, "ABC Doubts Construction Industry Recovery in 2013; Cites lack of Confidence," Associated Builders and Contractors.

[29] ***.

[30] Binder, Alan K., Ed. Ward's Automotive Yearbooks, 2008-12; Automotive News, "U.S. Light Vehicle Sales by Nameplate, Dec. & 12 Months 2012, January 7, 2013; Polk & Co., "U.S. Light Vehicle Sales Forecast," January 10, 2013; McAlinden, Sean and Yen Chen, "After the Bailout: Future Prospects for the U.S. Auto Industry," December 2012, 20.

[31] Blue Chip Economic Indicators, Vol. 38, No. 1, January 10, 2013.

[32] Blue Chip Economic Indicators, Vol. 38, No. 1, January 10, 2013.

[33] Korean respondents' posthearing brief, exhibit 8, pp. 1 and 12.

Table II-3
Corrosion-resistant steel: Firms' perceptions regarding U.S. demand

Item	Number of firms reporting			
	Increase	No change	Decrease	Fluctuate
Demand since 2006[1]				
U.S. producers	3	1	7	5
Importers	1	1	13	14
Purchasers	3	8	9	14
Foreign producers	0	0	0	5
Demand for purchasers' final products since 2006				
U.S. purchasers	5	2	2	9
Anticipated demand through 2014				
U.S. producers	7	2	1	5
Importers	10	4	5	8
Purchasers	11	9	0	14
Foreign producers	2	2	0	2

[1] U.S. producer and importer *** selected both "decrease" and "fluctuate."

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

Most purchasers reported that demand for their end use products incorporating corrosion-resistant steel had increased or fluctuated since 2006. Fourteen of 17 purchasers reported that demand for their end use products affected their demand for corrosion-resistant steel. One purchaser noted that its products are steel intensive, and if demand for its product decreases, its demand for corrosion-resistant steel will also decrease. Auto manufacturers reported similar demand trends indicating that their demand for corrosion-resistant steel closely follows the demand for vehicles.

Business Cycles

Fourteen of 15 responding U.S. producers reported that the corrosion-resistant steel market is subject to business cycles or conditions of competition distinctive to corrosion-resistant steel. U.S. producers reported that corrosion-resistant steel consumption depends on construction and automotive demand and is impacted by the seasonal factors of the construction industry. On the other hand, the majority of importers (18 of 22) and purchasers (19 of 35) indicated that the corrosion-resistant steel market is not subject to business cycles or conditions of competition distinctive to corrosion-resistant steel.

Ten of 14 U.S. producers, 8 of 15 responding importers, and 12 of 17 responding purchasers indicated that these distinctive business cycles or conditions of competition for corrosion-resistant steel have changed since January 2006. Most firms reported the economic downturn of 2008-09 as a factor affecting business cycles of corrosion-resistant steel. Several firms noted a decrease in construction in the years following 2009, and continuing recovery in the automotive industry.

Substitute Products

While a number of market participants identified substitute products for corrosion-resistant steel, not as many firms indicated that the prices of these substitutes affected the price of corrosion-resistant steel.

Twelve of 14 responding U.S. producers, 7 of 26 importers, 9 of 35 purchasers, and 4 of 8 foreign producers indicated that there are substitutes for corrosion-resistant steel. These firms reported a variety

of substitutes for the various end uses of corrosion-resistant steel. For automotive end uses, firms reported that aluminum, plastics/resins, carbon fiber, and stainless steel are substitutes for corrosion-resistant steel. Substitutes reported for construction end uses included cold-rolled steel (and painted cold-rolled steel), aluminum, wood, plastic, acrylic, concrete, masonry, stone, and asphalt shingles.[34] One importer reported aluminized steel as a substitute for corrosion-resistant steel in industrial applications. Producers and importers also reported stainless steel as a substitute for corrosion-resistant steel in appliances. The majority of responding U.S. producers, importers, and foreign producers and all responding purchasers reported that there have been no changes in substitutes since 2006, and the majority of these firms also do not anticipate changes in the future.

Seven of 13 responding U.S producers, 5 of 6 importers, 8 of 9 purchasers, and 5 of 8 foreign producers indicated that changes in the prices of the identified substitute products had not affected the price for corrosion-resistant steel. Among those firms that did report that the price of the substitute product affected the price of corrosion-resistant steel, two U.S. producers reported that substitutes are becoming more cost competitive with corrosion-resistant steel, and two other producers indicated that substitutes are used when the prices of corrosion-resistant steel rise. U.S. producer and importer *** reported that their customers compare prices of corrosion-resistant steel to those of potential substitutes. Five U.S. producers and one importer that identified aluminum as a substitute product reported that aluminum prices affected the price of corrosion-resistant steel. However, 20 responding firms reported that the price of aluminum did not affect the price of corrosion-resistant steel. Purchaser *** indicated that the price of asphalt shingles affects the price of corrosion-resistant steel because as prices of asphalt shingles rise, they become more of a competitor for roofing material.

SUBSTITUTABILITY ISSUES

The degree of substitution between domestic and imported corrosion-resistant steel depends upon such factors as relative prices, quality (e.g., strength, reliability of supply, gauge control, coating consistency, etc.), and conditions of sale (e.g., price discounts/rebates, lead times between order and delivery dates, payment terms, product services, etc.). Based on available data, staff believes that there is a high degree of substitutability between domestically produced corrosion-resistant steel and corrosion-resistant steel imported from Germany and Korea.

Factors Affecting Purchasing Decisions

Purchasers were asked a variety of questions to determine which factors influence their corrosion-resistant steel purchasing decisions. Their responses indicate that quality, price, availability, and delivery are important purchasing factors.

As shown in table II-4, most purchasers “always” or “usually” make purchasing decisions based on the producer while the majority of their customers “sometimes” or “never” make purchasing decisions based on the producer. Most purchasers (and their customers) “sometimes” or “never” make purchasing decisions based on the country of origin.

[34] Firms also reported the use of nonsubject corrosion-resistant steel as a substitute product for automotive and construction applications. Foreign producer *** indicated that the price of nonsubject corrosion-resistant steel favorably influences the price of subject corrosion-resistant steel because the nonsubject product tends to be priced higher than subject product.

Table II-4
Corrosion-resistant steel: Purchasing decisions based on producer and country of origin

Purchaser / Customer Decision	Always	Usually	Sometimes	Never
Purchaser makes decision based on producer	12	10	7	6
Purchaser's customers make decision based on producer	1	9	10	13
Purchaser makes decision based on country	4	9	11	12
Purchaser's customers make decision based on country	1	4	13	13

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

Major Factors in Purchasing

Available information indicates that purchasers consider a variety of factors when purchasing corrosion-resistant steel. Quality was most frequently cited as the first-most important factor (18 firms), price was most frequently identified as the second-most important factor (13 firms), and delivery was listed most frequently as the third-most important factor (9 firms) (table II-5).

Table II-5
Corrosion-resistant steel: Ranking factors used in purchasing decisions, as reported by U.S. purchasers

Factor	Number of firms reporting			
	First	Second	Third	Total
Quality[1]	18	12	5	35
Price	13	13	8	34
Availability	1	4	6	11
Delivery	0	4	9	13
Other[2]	3	1	7	11

[1] Purchasers reported the following factors that determine the quality of corrosion-resistant steel: meets ASTM standards and individual company specifications; coating adhesion and consistency; thickness control/consistency; surface treatment/finish; strength (tensile, yield, and elongation); chemical tolerance; forming ability; and gauge control.

[2] Other factors include reliability of supplier, ***, and *** for the first factor; relationship with supplier for the second factor; and location of producing mill, extension of credit, international exchange rates, traditional supplier, and service for the third factor.

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

Eighteen of 35 purchasers reported that they "usually" purchase the lowest-priced corrosion-resistant steel, 11 reported "sometimes," and three reported "never." Twenty-four purchasers also reported purchasing higher-priced corrosion-resistant steel from one source although a comparable product was available at a lower price from another source. Purchasers identified quality, delivery reliability, lead times, service, coating strength, risk management, and minimum order quantities as reasons for choosing higher-priced corrosion-resistant steel.

Eight of 34 responding purchasers reported that certain grades/types/sizes of corrosion-resistant steel were available from only one source (either domestic or foreign). *** reported that some products are available from only one source domestically, (for example, *** is the only domestic producer of corrosion-resistant steel at widths over *** and *** is the only domestic supplier capable of producing some *** such as the *** grades). *** indicated that *** is available only from Germany at this time, but reported that a domestic source is actively developing the product. *** reported that it is currently sourcing *** grade steels only from *** as local suppliers are unable to produce these grades or have not yet obtained approvals. *** indicated that *** products are approved only from one U.S. mill; and that

most required purchases from the stamping suppliers are from *** mills.[35] *** stated that depending on the mill and the timing, some producers do not produce certain grades and sizes due to cost effectiveness.

Supplier certification

Twenty-nine of 35 purchasers require supplier qualification for corrosion-resistant steel.[36] [37] Ten purchasers indicated that they purchase steel with ASTM/ISO/TS certifications, and nine reported testing a supplier's material through trial orders and sample testing. Eleven purchasers reported that the time to qualify a new supplier was 180 days or longer, while nine firms reported that qualification takes 30 days or less.

Purchaser *** reported that it typically requires a metallurgical report demonstrating that each master coil meets its specifications, and then runs the master coil through the production process to examine performance of the product. *** reported testing material samples and reviewing the production facility for quality measures. *** approves a supplier once it demonstrates consistent coil quality. *** reported that it checks references for suppliers, reviews the suppliers ISO certifications, performs site visits and tests trial orders. *** reported that all of its suppliers must have and ISO/TS certification, and that a majority of its purchases were from suppliers that also satisfied *** material qualification process, which involved chemical, mechanical and physical consistency evaluations and testing of functional requirements (for example, formability and paint adhesion). *** indicated that it considers quality, formability, and supplier history when evaluating a supplier, and that samples are tested at *** in ***.

Generally, automotive purchasers reported certifying a supplier on a product level. *** reported certifying the material, and then the production process.[38] *** reported certifying a supplier for a particular product based the type of steel produced by the supplier and the application for which the product will be used in automotive production.[39] *** reported certifying each product to a specific production line. Materials submitted to *** for approval are defined by steelmaking facility, finishing mill and coating line (if applicable), chemical composition, and the applicable ***. Any deviation from the approved product or process must be reported and additional testing may occur.[40] *** reported qualifying a product based on a specific routing (details of each step of the steelmaking process) of the processes used to make steel. For example, for a galvanneal product, *** identifies the slab making, hot roll, galvanneal and finishing assets. Step one of ***'s process involves material testing samples on the specific routing, and step two includes a manufacturing review and check of each step for key attributes. If a supplier successfully completes both steps, it will be certified for that product.[41] Two purchasers,

[35] In recent correspondence, *** indicated that it is currently working on approving two mills in the United States for its *** product, and it expects at least one of the mills to be approved by June 2013. Email from ***, January 25, 2013.

[36] Twenty-seven purchasers indicated that they require suppliers to become certified for all purchases, one purchaser for 99 percent of purchases, and one purchaser for 10 percent of purchases.

[37] AK Steel stated that it was unknown whether the certification of corrosion-resistant steel produced in ThyssenKrupp's Calvert, AL plant (pending sale) would transfer with the sale of the facility, and added that U.S. auto producers would continue to certify corrosion-resistant steel manufactured by ThyssenKrupp in Germany regardless of the sale of the Calvert plant. AK Steel posthearing brief, exhibit 1, p. 7. ArcelorMittal added that qualification transfers are likely to depend on the customer, among other factors, as the qualification process for corrosion-resistant steel, particularly in the automotive sector, is unique to each purchaser. ArcelorMittal's posthearing brief, Responses to Commission Questions, p. 57, and hearing transcript, pp. 177-178 (Barlow). ThyssenKrupp stated that the certification of a mill producing corrosion-resistant steel for auto applications conveys when the mill is sold. ThyssenKrupp posthearing brief, exhibit 1, p. 27.

[38] Email from ***, January 24, 2013.

[39] Email from ***, January 25, 2013.

[40] Email from ***, January 30, 2013.

[41] Email from ***, January 25, 2013.

***, reported certifying suppliers on three levels. *** reported that it certifies a supplier based on the company as a whole and examines financial health and stability, reputation in the industry, and reliability of long term supply. Next, *** certifies each facility used to produce corrosion-resistant steel for ***, and if a supplier changes production facilities, it must notify ***, and *** must approve of the new or changed facility. Finally, on a product level, *** certifies each product based on specifications and requirements.[42] *** reported that it certifies the company, plant, and steel, and added that if a steelmaker wants to supply an already approved steel coil from another manufacturing location, that location must also be tested and approved.[43] On the other hand, construction purchaser *** reported certifying a supplier at the production facility level.[44] Construction purchaser *** reported that it does not certify or qualify the steel, but rely on its suppliers to obtain the certification,[45] and construction purchaser *** reported that it leaves certification up to its customers as each one has different procedures and policies to qualify suppliers.[46]

Only 3 of 35 purchasers reported that a supplier had failed to obtain certification. *** stated that *** was unable to meet material specifications, and another identified inconsistent process controls with the launch of a new mill from *** as why the supplier failed to qualify product. *** indicated that *** failed to qualify galvanization adhesion to corrosion-resistant steel.

Lead times

Most U.S. producers, importers, and foreign producers described their sales as produced-to-order, with somewhat longer reported lead times for importers and foreign producers. Eleven of 15 responding U.S. producers reported that 100 percent of sales were produced to order with lead times of 4 to 12 weeks. U.S. producer *** reported that *** percent of sales were from inventory with a lead time of 14 days, *** reported that *** percent of sales were from inventory with a lead time of 21 days, *** reported that *** percent of sales were from inventories with a lead time of 7 days, and *** reported that *** percent of sales were from inventories with a lead time of 8 days.

Nine of 12 responding U.S. importers of corrosion-resistant steel from Germany and Korea reported that 100 percent of sales were produced to order with lead times of 120 to 180 days.[47] U.S. importer *** reported that 99.5 percent of sales were produced to order, with lead times of 60 to 180 days, and *** reported that 90 percent of sales were produced to order with a lead time of 90 days. Importer *** reported that one-half of its sales were from U.S. inventories and one-half of its sales were from foreign inventories. *** reported lead times of 90 days on sales from U.S. inventories and lead times of 150 days on sales from foreign inventories.

Six responding foreign producers reported that 100 percent of their sales to U.S. customers were produced to order. These foreign producers reported lead times of 60 to 150 days.

Eleven of 15 responding U.S. producers and 14 of 27 importers reported offering just-in-time or similar inventory services for corrosion-resistant steel customers in the United States. U.S. producers and importers most often reported offering these services to automotive customers, and indicated that the product was held in off-site warehouses or local service centers, although U.S. producer (***) and importer (***) offer a "roll and hold" service instead of just-in-time inventory. This program allows for the holding of previously produced to order product to be rolled and held in a U.S. warehouse until it is

[42] Email from ***, January 24, 2013.
[43] Email from ***, January 29, 2013.
[44] Staff telephone interview with ***.
[45] Email from ***, January 28, 2013. In its questionnaire response, *** indicated that the quality of materials must be certified by known quality control agencies. *** purchaser questionnaire response, section III-21.
[46] Email from *** January 24, 2013.
[47] One importer, ***, reported a lead time of 360 days for sales produced to order, and producer and importer, ***, reported lead times of 35-84 days for sales produced to order.

delivered to the customer. U.S. producer *** reported offering ***, an inventory service where it ships on an expedited basis either from finished goods or partially processed inventory. Only one foreign producer, ***, reported offering just-in-time or similar inventory services.

Changes in purchasing patterns

Purchasers mostly reported that their purchases of domestic corrosion-resistant steel have fluctuated since 2006 and that purchases from nonsubject countries have fluctuated or decreased (table II-6). Reasons reported for fluctuations in domestic purchases included product demand changes, economic fluctuations, and the cyclical nature of the automotive industry. Changes in purchases from nonsubject countries were attributed to uncertain market conditions, switching to/from domestic suppliers, demand for end use products, and pricing fluctuations.

Table II-6
Corrosion-resistant steel: Changes in purchasing patterns from U.S., subject, and nonsubject countries

Source of purchases	Did not purchase	Decreased	Increased	Constant	Fluctuated
U.S.	3	5	6	4	16
Germany	24	3	2	1	0
Korea	12	7	4	2	8
Other	9	8	4	3	8

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

Twenty-one of 35 purchasers reported that they had changed suppliers since 2006, and identified a wide variety of reasons for these changes. A number of responding firms indicated that transportation costs were a factor in switching suppliers and several of them noted switching to a supplier that was closer to their facility to reduce transportation costs. Purchasers also reported supplier mergers, acquisitions, and closures as a reason for switching suppliers.

Fourteen purchasers reported that their purchases of corrosion-resistant steel are seasonal, with five of those purchasers indicating that winter months are usually slower than summer months in construction and agricultural industries. Three purchasers indicate that their purchases fluctuate based on vehicle production schedules, and twelve purchasers reported that their purchases of corrosion-resistant steel are consistent throughout the year.

Importance of purchasing domestic product

Eighteen purchasers reported that purchasing U.S.-produced product was not an important factor in their purchasing decisions. Five purchasers reported that purchases of domestic product were required by law (for 5 to 20 percent of purchases), and six purchasers reported that purchases of domestic product was required by their customers (for 5 to 95 percent of purchases). Twelve purchasers indicated other preferences for domestic product (for 45 to 100 percent of purchases). These firms noted that they prefer the shorter lead times and availability of local technical support from domestic suppliers. One purchaser also identified price volatility and the associated risks of purchasing from foreign suppliers months ahead of time as a reason for preferring to purchase domestic product.

Importance of Specified Purchase Factors

Purchasers were asked to rate the importance of 22 factors when making their purchasing decisions (table II-7). The responding 35 purchasers most often listed product consistency, quality meets

industry standards,[48] ability to meet purchaser qualification standards, price, and reliability of supply as "very important" factors.

Table II-7
Corrosion-resistant steel: Importance of purchasing factors, as reported by purchasers

Factor	Number of firms responding		
	Very important	Somewhat important	Not important
Ability to meet purchaser qualification standards	33	2	0
Availability	28	7	0
Availability of price adjustments during contract term	5	13	16
Contract with supplier	21	10	4
Currency exchange rate fluctuations	5	10	20
Delivery terms	27	6	2
Delivery time	29	5	1
Discounts offered	8	19	8
Extension of credit	11	10	14
International transportation costs	10	16	9
Local service availability (pre- and post-sale)	12	17	6
Minimum quantity requirements	7	19	9
Packaging	12	17	6
Price	33	1	1
Product consistency	34	1	0
Product range	8	23	4
Proximity of supplier	4	23	8
Quality exceeds industry standards	17	13	5
Quality meets industry standards	34	1	0
Reliability of supply	32	3	0
Technical support/service	19	15	1
U.S. transportation costs	19	14	2

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

Comparison of U.S.-Produced and Imported Corrosion-Resistant Steel

Purchasers were asked for a country-by-country comparison on the same 22 factors (table II-8) for which they rated the importance.[49] A majority of responding purchasers rated the U.S. and subject products as comparable on most factors including, ability to meet purchaser qualification standards, discounts offered, minimum quantity requirements, product consistency, and quality meets industry standards, among other factors. However, purchasers rated U.S.-produced corrosion-resistant steel as superior to product from Germany and Korea on delivery time and proximity of supplier.

[48] While 34 purchasers characterized quality that meets industry standards as "very important," only 17 characterized quality that exceeds industry standards as "very important."

[49] Purchaser *** provided a response to this question; however, the data were not useable.

Purchasers reported that U.S. product was superior to product imported from subject countries on four factors: delivery time, local service availability, proximity of supplier, and reliability of supply.[50] In comparing corrosion-resistant steel from Germany to that from Korea, a majority of responding purchasers rated them as comparable on most factors. Most purchasers reported that U.S. and nonsubject corrosion-resistant steel were comparable on all factors except delivery time, local service availability, proximity of supplier, reliability of supply, and technical support/service (for which a majority of purchasers reported that U.S. product was superior to nonsubject product). In comparing subject and nonsubject products, most purchasers rated them as comparable on all factors.

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

Factor	U.S. vs. Germany			U.S. vs. Korea			Germany vs. Korea		
	S	C	I	S	C	I	S	C	I
Ability to meet purchaser qualification standards	0	10	1	4	18	1	2	6	0
Availability	3	8	0	9	12	2	1	7	0
Availability of price adjustments during contract term	2	9	0	6	14	3	1	7	0
Contract with supplier	3	9	0	5	14	4	1	7	0
Currency exchange rate fluctuations	5	6	0	9	11	2	2	6	1
Delivery terms	4	7	0	7	14	2	1	7	0
Delivery time	8	3	0	15	5	3	3	5	0
Discounts offered	2	9	0	3	16	4	1	5	2
Extension of credit	4	7	0	4	14	5	2	5	1
International transportation costs	5	6	0	9	11	3	2	6	0
Local service availability (pre- and post-sale)	5	6	0	14	6	3	2	6	0
Minimum quantity requirements	2	9	0	8	14	1	1	7	0
Packaging	1	10	0	3	15	5	1	7	0
Price	5	6	2	6	15	4	3	5	2
Product consistency	1	9	1	5	17	1	3	6	0
Product range	1	8	2	5	16	2	2	6	0
Proximity of supplier	10	1	0	18	2	3	1	7	0
Quality exceeds industry standards	2	8	1	4	17	2	2	6	0
Quality meets industry standards	1	10	0	5	18	0	2	6	0
Reliability of supply	4	7	0	11	10	2	1	7	0
Technical support/service	4	7	0	9	12	2	3	5	0
U.S. transportation costs	5	6	0	10	12	1	2	6	0

Table continued on the following page.

[50] Purchasers reported that U.S. product was superior to product imported from Germany on two factors (delivery time and proximity of supplier), and purchasers reported that U.S. product was superior to product imported from Korea on four factors (delivery time, local service availability, proximity of supplier, and reliability of supply).

Table II-8--*Continued*
Corrosion-resistant steel: Purchasers' comparisons between U.S.-produced and imported product

Factor	U.S. vs. nonsubject			Germany vs. nonsubject			Korea vs. nonsubject		
	S	C	I	S	C	I	S	C	I
Ability to meet purchaser qualification standards	3	19	2	2	7	0	7	12	1
Availability	7	14	3	2	7	0	3	17	0
Availability of price adjustments during contract term	6	14	4	2	7	0	2	17	1
Contract with supplier	4	16	3	1	8	0	5	15	0
Currency exchange rate fluctuations	8	13	1	4	5	1	3	17	1
Delivery terms	6	16	2	1	8	0	3	17	0
Delivery time	14	7	3	2	7	0	2	17	1
Discounts offered	3	20	1	1	7	2	1	18	2
Extension of credit	5	16	3	2	6	1	3	17	0
International transportation costs	7	14	2	4	6	1	2	18	2
Local service availability (pre- and post-sale)	13	9	2	2	7	0	6	13	1
Minimum quantity requirements	7	17	0	1	8	0	2	17	0
Packaging	1	22	1	1	8	0	3	17	0
Price	8	15	3	3	7	1	1	18	3
Product consistency	4	18	2	2	7	0	5	14	1
Product range	4	18	2	3	7	0	6	14	1
Proximity of supplier	19	3	2	2	8	0	3	17	1
Quality exceeds industry standards	5	16	2	3	7	0	5	14	2
Quality meets industry standards	4	19	1	2	7	0	6	14	1
Reliability of supply	11	11	2	3	7	0	7	14	0
Technical support/service	12	11	1	4	6	0	7	13	1
U.S. transportation costs	11	12	1	3	7	0	1	19	1

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

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

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

The large majority of purchasers reported that both domestic and subject product "always" or "usually" met their minimum quality standards (table II-9). Most firms also reported that nonsubject sources "always" or "usually" met minimum quantity standards.[51]

[51] Purchasers identified the following nonsubject countries: Canada, China, France, India, Japan, Mexico, Netherlands, and Taiwan.

Table II-9
Corrosion-resistant steel: Purchasers' responses regarding minimum quality specifications

Source	Always	Usually	Sometimes	Rarely or never
United States	14	14	1	0
Germany	7	3	0	0
Korea	15	5	2	1

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

As shown in table II-10, two-thirds or more of the responding U.S. producers, importers, and purchasers indicated that corrosion-resistant steel produced in the United States and imported from Germany, Korea, and nonsubject countries are "always" or "frequently" used interchangeably.

Table II-10
Corrosion-resistant steel: Perceived interchangeability between corrosion-resistant steel produced in the United States and in other countries, by county pairs

Country pair	Number of U.S. producers reporting				Number of U.S. importers reporting				Number of purchasers reporting			
	A	F	S	N	A	F	S	N	A	F	S	N
U.S. vs. other countries:												
U.S. vs. Germany	8	3	2	0	3	8	3	0	7	7	5	0
U.S. vs. Korea	8	3	1	0	5	10	1	1	9	12	7	0
U.S. vs. other nonsubject	7	3	2	0	4	11	4	0	8	10	8	0
Subject countries comparisons:												
Germany vs. Korea	6	4	1	0	3	7	1	1	5	5	6	0
Nonsubject countries comparisons:												
Germany vs. other nonsubject	6	2	2	0	3	5	2	1	4	6	4	0
Korea vs. other nonsubject	6	2	2	0	3	7	2	1	6	8	4	0

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

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

As indicated in table II-11, at least two-thirds of responding U.S. producers and importers reported that differences other than price between corrosion-resistant steel produced in the United States and imported from Germany, Korea, and nonsubject sources were "sometimes" or "never" a significant factor in their sales. About one-half of responding purchasers indicated that differences other than price between corrosion-resistant steel produced in the United States and imported from Germany and Korea are "sometimes" or "never" a significant factor in their purchases, and approximately two-thirds of responding purchasers indicated that differences other than price between corrosion-resistant steel produced in the United States and imported from nonsubject countries are "sometimes" or "never" a significant factor in their purchases. Three of seven foreign producers reported that the corrosion-resistant steel they manufacture and sell in their home market is interchangeable with their firm's corrosion-resistant steel sold in the United States or third country markets.[52]

[52] Four foreign producers indicated that corrosion-resistant steel sold in their home market is not interchangeable with product sold in the United States or third-country markets due to varying product specifications and standards across countries.

Table II-11
Corrosion-resistant steel: Perceived significant differences other than price between corrosion-resistant steel produced in the United States and in other countries, by county pairs

Country pair	Number of U.S. producers reporting				Number of U.S. importers reporting				Number of purchasers reporting			
	A	F	S	N	A	F	S	N	A	F	S	N
U.S. vs. other countries:												
U.S. vs. Germany	3	0	5	5	3	0	6	3	5	2	7	1
U.S. vs. Korea	2	0	4	6	2	2	6	5	7	4	11	2
U.S. vs. other nonsubject	2	0	4	6	3	1	9	4	6	3	14	1
Subject countries comparisons:												
Germany vs. Korea	2	0	4	4	1	0	3	4	4	2	5	0
Nonsubject countries comparisons:												
Germany vs. other nonsubject	2	0	4	3	1	0	2	4	2	2	7	0
Korea vs. other nonsubject	2	0	4	3	1	0	4	4	3	2	9	1

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

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

ELASTICITY ESTIMATES

U.S. Supply Elasticity

The domestic supply elasticity for corrosion-resistant steel measures the sensitivity of the quantity supplied by U.S. producers to a change in the U.S. market price of corrosion-resistant steel. 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 the production of other products, the existence of inventories, and the availability of alternative markets for U.S.-produced corrosion-resistant steel. Earlier analysis of these factors indicates that the U.S. industry has a moderate ability to increase or decrease shipments to the U.S. market given a price change. Staff estimates that the supply elasticity is between 2 and 4.

U.S. Demand Elasticity

The U.S. demand elasticity for corrosion-resistant steel measures the sensitivity of the overall quantity demanded to a change in the U.S. market price of corrosion-resistant steel. This estimate depends on factors discussed earlier such as the existence, availability, and commercial viability of substitute products, as well as the component share of corrosion-resistant steel in the production of downstream products. Based on available information, the demand elasticity for corrosion-resistant steel is likely to be in the range of -0.5 to -1.0.

Substitution Elasticity

The substitution elasticity measures how easily purchasers switch from the U.S. product to the subject product (or vice versa) when prices change. This elasticity depends upon the extent of product differentiation between the domestic and imported products and therefore such factors as quality and conditions of sale (e.g., service, availability, delivery). Based on this and other available information, the substitution elasticity between U.S.-produced corrosion-resistant steel and subject imported corrosion-resistant steel is likely to be in the range of 3 to 5.

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. Eighteen firms, which, as noted in Part I, are estimated to have accounted for more than 90 percent of the U.S. capacity to produce corrosion-resistant steel during 2011, supplied information on their operations.[1]

Background

Table III-1 summarizes important industry events that have taken place since January 2006.

Table III-1
Corrosion-resistant steel: Selected industry events since January 2006

Period	Company	Description of event (acquisition, bankruptcy, merger, shutdown)
April 2006	Mittal Steel USA	**Capacity increase**: Mittal Steel USA begins operation of a new hot-dip galvanizing line in Cleveland, OH.
June 2006	ArcelorMittal	**Merger**: An announcement is made that Mittal Steel (prior owner of the Sparrows Point, MD galvanizing mill) and Arcelor reached an agreement to merge the two companies and create a new entity - ArcelorMittal. The U.S. Department of Justice has concerns about the merger because it would lessen competition for tin mill products in the eastern United States and proposes a consent decree requiring divestiture of one of the three North American tin mills that Mittal will own following its acquisition of Arcelor--the Dofasco mill, currently owned by Arcelor, located in Hamilton, Ontario, Canada; Mittal's Sparrows Point facility located near Baltimore, Maryland; or Mittal's Weirton facility located in Weirton, West Virginia.[1]
January 2007	Steelscape	**Capacity increase:** Steelscape commissions new galvanizing line in Shreveport, LA; the company already owns galvanizing lines in Rancho Cucamonga, CA and Kalama, WA.

Table continued on following page.

[1] As discussed previously in Part I, three responding U.S. producers (ArcelorMittal USA, Tata Steel Plating, and ThyssenKrupp Steel USA), are related to foreign producers of the subject merchandise in Germany and to U.S. importers of the subject merchandise. Moreover, domestic producer USS-POSCO is a 50/50 joint venture owned by domestic producer U.S. Steel and Korean producer POSCO. In addition, as explained below, although there have been direct imports and domestic purchases of corrosion-resistant steel from nonsubject countries and domestic producers, no U.S. producer directly imported corrosion-resistant steel from the subject countries during the period examined in these third five-year reviews and *** reported domestic purchases of subject merchandise. Further information concerning *** purchases of subject merchandise imported from Korea is presented later in Part III (see table III-7).

Table III-1--*Continued*
Corrosion-resistant steel: Selected industry events since January 2006

Period	Company	Description of event (acquisition, bankruptcy, merger, shutdown)
June 2007	NLMK-Duferco JV	**Acquisition:** NLMK-Duferco, a joint venture between the Duferco Group and Russian-owned steelmaker Novolipetsk Steel, acquires Winner Steel. The company is renamed Sharon Coatings in December 2007.
April 2007	Tata Steel	**Acquisition:** Tata Steel completes the takeover of Corus Group Plc. The acquisition includes the Corus Special Strip operations which includes Apollo Metals and Thomas Steel Strip Corp.
August 2007	Ternium	**Acquisition:** Argentina-based Ternium purchases all of the U.S. holdings of Grupo IMSA, including Steelscape and its galvanizing lines at Shreveport, LA, Rancho Cucamonga, CA and Kalama, WA.
November 2007	Severstal	**Capacity increase**: Start up of galvanizing line is scheduled at SeverCorr LLC in Columbus, MS. SeverCorr is a joint venture created in 2005 between Severstal and a group of steel industry executives headed by John Correnti.
November 2007	Esmark Inc.	**Merger:** Esmark Inc. (owner of steel service centers) merges with Wheeling-Pittsburgh Corp. (owner of galvanizing mill in Martins Ferry, OH).
February 2008	Ternium	**Sale:** Ternium sells the recently acquired Steelscape to BlueScope Steel North America Corp. but retains ownership of the Shreveport, LA galvanizing operations.
April 2008	Severstal	**Buy out:** Severstal increases its ownership stake in SeverCorr to 85 percent and buys out the management team of John Correnti. The plant is renamed Severstal Columbus.
May 2008	Severstal	**Acquisition:** OAO Severstal acquires the Sparrows Point, MD mill divested by ArcelorMittal.
July 2008	Severstal	**Acquisition**: OAO Severstal acquires WCI Steel, Inc. including its galvanizing mill in Warren, OH, and the facility is renamed Severstal Warren, Inc.
August 2008	Severstal	**Acquisition**: OAO Severstal acquires Esmark Inc. including the former Wheeling-Pittsburgh operations (renamed Severstal Wheeling, Inc.) and Electric Coating Technologies.
February 2009	Severstal	**Shutdown:** Severstal idles its Warren, OH operations
	ArcelorMittal	**Shutdown:** ArcelorMittal ceases production at its galvanizing mill in Hennepin, IL.
April 2009	ArcelorMittal	**Shutdown:** ArcelorMittal's scheduled shutdown date for its Lackawanna, NY operation.
July 2009	Nucor	**Capacity increase**: Nucor begins operation of a new hot-dip galvanizing line in Decatur, Alabama.
April 2010	Severstal	**Production restart:** Severstal restarts production at its Warren, OH facility.

Table continued on following page.

Table III-1--*Continued*
Corrosion-resistant steel: Selected industry events since January 2006

Period	Company	Description of event (acquisition, bankruptcy, merger, shutdown)
May 2010	Electric Coating Technologies	**Acquisition:** An affiliate of Aurora Capital Group acquired Electric Coating Technology, from Northern Steel Group, a subsidiary of Severstal North America
March 2011	RG Steel	**Acquisition:** RG Steel acquires the Sparrows Point, MD, Warren, OH, and Martins Ferry, OH mills from OAO Severstal
April 2011	ThyssenKrupp Steel USA LLC	**Capacity increase:** ThyssenKrupp Steel's Alabama facility begins galvanized sheet production. There are four coating lines at this location but only one coating line is operating in April 2011.
July 2011	Sharon Coatings	**Acquisition:** Novolipetsk Steel acquires the Duferco Group's interest in Sharon Coatings and Sharon Coatings is now wholly owned by Novolipetsk Steel.
January 2012	Severstal	**Capacity increase:** Severstal announces the launch of a new hot dip galvanizing line at its Dearborn, MI mill and a second hot dip galvanizing line at its Columbus, MS mill.
February 2012	Galvstar LLC	**Capacity increase:** Galvstar LLC, a new company in Buffalo, NY, founded by operators of the closed ArcelorMittal mill in nearby Lackawanna, NY, begins shipments of steel sheet coated with Galfan ™ - a zinc alloy coating consisting of 95 percent zinc, almost five percent aluminum, and specific amounts of rare earth mischmetal.
May 2012	RG Steel	**Bankruptcy**: RG Steel files for Chapter 11 bankruptcy; production ceases at the Sparrows Point, MD, Warren, OH, and Martins Ferry, OH mills.
	ThyssenKrupp USA	**Possible sale:** ThyssenKrupp AG announces that it is mulling "strategic options" for its Alabama operations which could include either a sale or a partnership. Current economics no longer support its business of turning profits by shipping low-cost slab from Brazil to high-end markets in North America. That plan assumed low-cost slab production in Brazil and more robust demand in North America, but with production costs in Brazil rising and a slower-than-expected recovery in the United States, that strategy now leaves the company exposed to "considerable risks."
August 2012	RGSteel	**Sale:** The sale of RG Steel's Martins Ferry, OH operation to local businessmen W. Quay Mull II and Joseph N. Gompers is approved by bankruptcy judge.

Table continued on following page.

Table III-1--*Continued*
Corrosion-resistant steel: Selected industry events since January 2006

Period	Company	Description of event (acquisition, bankruptcy, merger, shutdown)
September 2012	RG Steel	**Sale**: RG Steel's operations in Warren, OH and Sparrows Point, MD are sold. The Warren, OH operations were sold to CJ Betters Enterprises and reportedly, the new owner is considering reopening the mill. The new owners of the Sparrows Point mill are joint venture partners Hilco SP LLC (an industrial liquidator) and Environmental Liability Transfer Inc.
December 2012	RG Steel	**Possible liquidation:** Nucor Corp. purchases parts of the cold mill at the Sparrows Point, MD facility and indicates that the acquired parts of the mill will be used as spare equipment at Nucor's facilities. This purchase reportedly could rule out operation of Sparrows Point as a steelmaking operation since few buyers would be interested in operating the facility without the state-of-the-art cold mill. A planned auction of the entire facility either as a whole or piecemeal, scheduled for January 3, 2013, has since been canceled; instead, the remaining Sparrows Point production assets (including the galvanizing lines) will be sold through a private treaty, or negotiated, sale process for immediate sale.
	ThyssenKrupp USA	**Accounting change:** ThyssenKrupp announces that its Steel Americas operation, including its Alabama plant, is classified in its accounting statements as a discontinued operation for fiscal year 2011/2012 due to the advanced status of its sale process.
January 2013	RG Steel	**Possible liquidation:** The new owner of the former RG Steel's Warren, OH facility intends to retain the hot-mill functions of the mill and sell all finishing equipment including the galvanizing lines.
		Idle: The former RG Steel facility in Martins Ferry, OH remains idle.
	ThyssenKrupp USA	**Capacity expansion**: ThyssenKrupp USA will increase the capacity at its Alabama mill from its current 1.1 million short tons to approximately 2.2 million short tons by 2014.

[1] Tin mill products are not included in the product scope. The Sparrows Point, MD facility produces galvanized steel sheet in addition to tinplated steel sheet. The consent decree requires the entire operation to be sold and not just the galvanizing mills.

Source: Compiled from various news articles, press releases, and statements at the Commission's CORE hearing on January 9, 2013.

Changes Experienced in the Industry

Fourteen responding domestic producers reported changes in their operations related to the production of corrosion-resistant steel since January 1, 2006.[2] Such changes are presented in table III-2.

Table III-2
Corrosion-resistant steel: Reported changes experienced by responding U.S. producers since January 1, 2006

* * * * * * *

Anticipated Changes in Operations

Five responding domestic producers (***) reported that they anticipate certain changes in the character of their operations related to the production of corrosion-resistant steel in the future. Eleven responding firms indicated that no such changes are anticipated and two firms did not respond to the question. Seven U.S. producers (***) provided business plans or internal documents that describe, discuss, or analyze expected market conditions for corrosion-resistant steel.[3]

Domestic producer *** reported that it anticipated a change in the character of its operations related to the production of corrosion-resistant steel in the future. Although *** reported that if the orders are revoked, it would expect a surge of dumped imports from subject countries, it did not supply the requested details as to the time, nature, and significance of such anticipated changes, nor did it provide the requested projection of its capacity to produce corrosion-resistant steel for 2012, 2013, and 2014.

*** reported in its questionnaire response that it anticipates additional corrosion-resistant steel production from its ***. It explained the anticipated change as follows:

"***."

The firm indicated that the continued ramp-up would result in an additional *** short tons of capacity at the *** facility.

*** reported in its questionnaire response that it anticipates additional corrosion-resistant steel production from its ***. It explained its reasoning for the anticipated change as follows:

"***."

The firm indicated that the continued ramp-up would result in an additional *** short tons of capacity at the *** facility.

ThyssenKrupp Steel USA reported that its domestic facility in Calvert, AL, which began production on its first line in March 2011, was built with the intention of operating four coating lines. The firm reported that its second line began production later in 2011 (***) and its third line is scheduled to begin production in *** 2013. The firm's fourth line, ***. *** is forecasted to be complete by 2014. The total capacity increase expected by ThyssenKrupp Steel USA during 2011-14 is *** short tons. ThyssenKrupp Steel also reported that its Alabama facility was built to roll slab from ThyssenKrupp's slab mill in Brazil. The company explained that its corporate strategy for the two facilities was based on certain basic economic expectations, such as access to low cost slab from ThyssenKrupp CSA in Brazil coupled with price premiums for corrosion-resistant steel in the U.S. market. However, Thyssen Krupp explained that, in May 2012, it initiated the sale of facilities in both Alabama and Brazil because "the

[2] Two firms (***) reported no changes to their operations since January 1, 2006, and two firms (***) did not respond to the question.

[3] Nine U.S. producers indicated that they did not have a business plan or any internal documents that describe, discuss, or analyze expected market conditions for corrosion-resistant steel and two U.S. producers did not respond to that particular Commission request.

integrated tandem of the two plants is economically unsustainable." In its questionnaire response, ThyssenKrupp reported that, although the timing is "wholly speculative" at this point, it anticipates the possible sale of some ownership of ThyssenKrupp Steel USA, Inc. within ***. At the hearing, the company testified that it "is determined to find a new perspective for both plants in the course of fiscal year 2012-2013." The firm indicated that it ***.[4]

*** reported that it expects to add production of a new product to ***. This product addition is anticipated by the company to help fill current capacity at its facility.

U.S. CAPACITY, PRODUCTION, AND CAPACITY UTILIZATION

U.S. producers' capacity, production, and capacity utilization data for corrosion-resistant steel are presented in table III-3. Domestic producers' aggregate capacity increased by 4.3 percent from 2006 to 2008, fell by 3.5 percent in 2009, and increased thereafter to a level in 2011 that was 2.4 percent higher than reported in 2006. The increase in reported capacity from 2006 to 2008 partially reflects ***.[5] The decline in reported capacity from 2008 to 2009 is largely explained by ***, as well as the ***. Declining production, particularly from 2008 to 2009, was generally an industry-wide trend. The increase in capacity from 2009 to 2011 largely reflects ***. The main constraints on production capacity reported by domestic producers include: physical plant capacity of the production equipment (e.g., coating/galvanizing lines), lack of orders, and scheduling constraints among multiple products.

Table III-3
Corrosion-resistant steel: U.S. capacity, production, and capacity utilization, 2006-11, January-June 2011, and January-June 2012[1]

Item	Calendar year						January-June	
	2006	2007	2008	2009	2010	2011	2011	2012
Capacity (*short tons*)	23,472,040	24,164,040	24,470,863	23,612,015	23,720,936	24,044,200	11,868,385	12,732,220
Production (*short tons*)	20,501,724	19,467,661	17,689,915	12,948,787	16,949,461	18,339,457	9,218,063	9,733,034
Capacity utilization (*percent*)	87.3	80.6	72.3	54.8	71.5	76.3	77.7	76.4

[1] ***.

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

[4] Hearing transcript, pp. 208-11 (Dohr); and questionnaire response of ThyssenKrupp Steel USA.

[5] Date for 2006 are slightly understated as they do not include the corrosion-resistant steel operations of ***. ***. In addition, the data for the period do not include the now-closed Ohio mills formerly owned by RG Steel.

Alternative Products

A majority of responding firms reported that they do not produce alternative products on the same equipment or using the same employees. *** reported that it also produces chrome plate on the same equipment and *** reported that it also produces stainless steel on the same equipment. *** reported that although it does not currently produce alternative products on the same equipment as the subject corrosion-resistant steel at its U.S. facility, it plans to produce micro-alloy steel on the same equipment at that facility during the 2012-13 time frame.

As shown in table III-4, the majority of product produced by U.S. mills is subject corrosion-resistant steel, primarily hot-dip galvanized steel. Production of hot-dip galvanized steel accounted for *** percent of total production of all subject corrosion-resistant steel during 2011, whereas electrolytic galvanized accounted for *** percent of the total. Only one U.S. mill (***) reported minor amounts of production of specifically excluded nonsubject corrosion-resistant steel (***) and another U.S. producer (***) reported a slightly greater amount of production of other nonsubject merchandise (***) on the same equipment used to produce subject corrosion-resistant steel. According to data reported in producer questionnaire responses, nonsubject corrosion-resistant steel accounted for *** percent of total corrosion-resistant steel production by the domestic producers during 2011.

U.S. PRODUCERS' SHIPMENTS

Data on U.S. producers' shipments of corrosion-resistant steel are presented in table III-5.[6] These data show that the quantity of U.S. producers' U.S. shipments and exports fell from 2006 to 2009, reflecting an industry-wide economic downturn, but recovered somewhat during 2010 and 2011. Likewise, total shipments were higher during the first half of 2012 than they were in the comparable period of 2011. As U.S. producers' shipment quantities fell, the average unit values increased to the highest reported level in 2008. Substantial declines in average unit values were reported during 2009, after which an increase was reported during 2010 and 2011. Average unit values of U.S. shipments were slightly lower during the first half of 2012 as compared with the first half of 2011, whereas the average unit values of export shipments were noticeably higher. Domestic producers reported that a majority of U.S. shipments were destined for the automotive market and steel service centers.

*** of domestic producers' total shipments of corrosion-resistant steel were reported to be shipments to the U.S. commercial market. Domestic producers *** accounted for all reported internal consumption, whereas the following nine domestic producers reported domestic transfers to related companies: ***. All responding domestic producers except *** reported export shipments of the corrosion-resistant steel they produced. *** accounted for *** percent of domestic producers' U.S. exports during 2011. Exports as a share of the quantity of total shipments ranged between 5.0 and 7.4 percent during 2006-11, and was 7.6 percent during January-June 2011.

[6] Data for 2006 are slightly understated as they do not include the corrosion-resistant steel operations of ***. ***.

Table III-4
Corrosion-resistant steel: U.S. producers' overall capacity and production, by type of steel, 2006-11, January-June 2011, and January-June 2012

Item	Calendar year						January-June	
	2006	2007	2008	2009	2010	2011	2011	2012
Capacity quantity (*short tons*)								
Overall plant capacity	24,776,040	25,848,040	25,840,040	24,852,040	24,960,961	25,284,225	13,402,471	14,229,822
Production quantity (*short tons*)								
Subject corrosion- resistant steel:								
Electrolytic galvanized[1]	2,358,599	2,103,616	1,633,619	1,006,419	1,622,210	1,783,547	896,589	918,322
Hot-dip galvanized (including galvannealed)[2]	16,597,645	15,831,971	14,359,496	10,436,760	13,715,791	14,878,678	7,493,139	7,943,189
Other subject corrosion-resistant steel[3]	1,545,480	1,532,075	1,422,865	1,062,154	1,313,702	1,474,007	766,260	726,177
Subtotal, subject	20,501,724	19,467,662	17,415,980	12,505,333	16,651,703	18,136,232	9,155,988	9,587,688
Nonsubject corrosion-resistant steel:								
Specifically excluded corrosion-resistant steel[4]	***	***	***	***	***	***	***	***
Other nonsubject alloy and stainless steel corrosion-resistant steel[5]	***	***	***	***	***	***	***	***
Subtotal, nonsubject	***	***	***	***	***	***	***	***
Total, corrosion-resistant steel	***	***	***	***	***	***	***	***
Ratio (*percent*)								
Overall plant capacity utilization	***	***	***	***	***	***	***	***

[1] Includes data from ***.
[2] Includes data from ***.
[3] Includes data from ***.
[4] Includes data from ***.
[5] Includes data from ***.

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

Table III-5
Corrosion-resistant steel: U.S. producers' shipments, by types, 2006-11, January-June 2011, and January-June 2012

Item	Calendar year						January-June	
	2006	2007	2008	2009	2010	2011	2011	2012
Quantity (*short tons*)								
U.S. shipments	19,338,579	18,101,176	17,202,118	12,224,500	15,604,618	16,586,146	8,332,004	9,138,935
Export shipments	1,150,973	1,052,608	914,307	776,574	1,243,797	1,281,659	681,217	661,746
Total shipments	20,489,552	19,153,784	18,116,425	13,001,074	16,848,415	17,867,805	9,013,221	9,800,680
Value (*1,000 dollars*)								
U.S. shipments	14,554,347	14,213,082	16,250,714	7,747,127	13,014,024	15,408,807	7,732,941	8,407,302
Export shipments	820,476	857,567	804,512	599,173	1,084,747	1,215,113	628,883	657,269
Total shipments	15,374,823	15,070,649	17,055,225	8,346,300	14,098,771	16,623,920	8,361,824	9,064,570
Unit value (*dollars per short ton*)								
U.S. shipments	753	785	945	634	834	929	928	920
Export shipments	713	815	880	772	872	948	923	993
Total shipments	750	787	941	642	837	930	928	925
Share of quantity (*percent*)								
U.S. shipments	94.4	94.5	95.0	94.0	92.6	92.8	92.4	93.2
Export shipments	5.6	5.5	5.0	6.0	7.4	7.2	7.6	6.8
Total shipments	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Share of value (*percent*)								
U.S. shipments	94.7	94.3	95.3	92.8	92.3	92.7	92.5	92.7
Export shipments	5.3	5.7	4.7	7.2	7.7	7.3	7.5	7.3
Total shipments	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note.–Because of rounding, figures may not add to the totals shown.

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

U.S. PRODUCERS' INVENTORIES

Table III-6 presents U.S. producers' end-of-period inventories for corrosion-resistant steel. These data show that inventories fluctuated throughout the period examined in these reviews, but were higher at year end 2011 than reported at year end 2006. U.S. producers' inventories were equivalent to 8.0 to 12.4 percent of U.S. producers' total shipments during the period examined, peaking in 2009. All domestic producers reported holding end-of-period inventories of corrosion-resistant steel. *** accounted for the largest share of the increase in inventories from 2006 to 2011.

Table III-6
Corrosion-resistant steel: U.S. producers' end-of-period inventories, 2006-11, January-June 2011, and January-June 2012

Item	Calendar year						January-June	
	2006	2007	2008	2009	2010	2011	2011	2012
Inventories (*short tons*)	1,645,919	2,026,363	1,636,171	1,616,872	1,724,176	2,191,408	1,939,849	2,207,094
Ratio to production (*percent*)	8.0	10.4	9.2	12.5	10.2	11.9	10.5	11.3
Ratio to U.S. shipments (*percent*)	8.5	11.2	9.5	13.2	11.0	13.2	11.6	12.1
Ratio to total shipments (*percent*)	8.0	10.6	9.0	12.4	10.2	12.3	10.8	11.3

Note.–Partial-year ratios are based on annualized production and shipments.

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

U.S. PRODUCERS' IMPORTS AND PURCHASES

Two U.S. producers (***) reported direct imports of corrosion-resistant steel during the period examined in these reviews; however, the source of the imports by these two U.S. producers were from nonsubject countries. Five U.S. producers (***) reported purchases of corrosion-resistant steel from domestic producers or other nonsubject sources. No U.S. producers reported domestic purchases of subject corrosion-resistant steel imported from Germany. *** indicated that it domestically purchased subject corrosion-resistant steel imported from Korea during the period examined in these five-year reviews. ***. Information concerning *** purchases of such merchandise is presented in table III-7.

Table III-7
Corrosion-resistant steel: *** purchases of imports from Korea, 2006-11, January-June 2011, and January-June 2012

* * * * * * *

U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

The U.S. producers' aggregate employment data for corrosion-resistant steel are presented in table III-8.[7] Over the period for which data were collected, employment measured by PRWs increased from 2006 to 2007, fell from 2007 to 2009, and increased thereafter. Although the number of PRWs was slightly lower during the first half of 2012 compared with the first half of 2011, other employment indicators were higher. *** accounted for the majority of the decline in employment during 2006-08, whereas *** accounted for a majority of the decline in employment in 2009. *** accounted for a majority of the increase during the following time periods examined in these reviews. Total hours worked, wages paid, and productivity followed the same general employment trend, falling from 2006 to 2009 and increasing during the remaining periods examined. Hourly wages fluctuated throughout the period examined, but were higher during 2011 at $36.55 compared with $34.64 in 2006. Unit labor costs, on the other hand, exhibited a different trend-- increasing from 2006 to 2009 and generally falling slightly thereafter, though remaining at a level higher than that reported in 2006.

Table III-8
Corrosion-resistant steel: U.S. producers' employment-related data, 2006-11, January-June 2011, and January-June 2012

Item	Calendar year						January-June	
	2006	2007	2008	2009	2010	2011	2011	2012
Production and related workers (PRWs)	12,170	12,575	12,330	9,980	11,112	11,866	11,644	11,582
Hours worked by PRWs (*1,000 hours*)	27,358	27,281	26,441	20,421	24,468	26,201	13,094	13,414
Hours worked per PRW	2,248	2,170	2,145	2,046	2,202	2,208	1,125	1,158
Wages paid to PRWs (*1,000 dollars*)	947,621	932,141	921,049	700,474	893,276	957,760	480,801	515,523
Hourly wages	$34.64	$34.17	$34.83	$34.30	$36.51	$36.55	$36.72	$38.43
Productivity (*short tons produced per 1,000 hours*)	749.4	713.6	669.0	634.1	692.7	700.0	704.0	725.6
Unit labor costs (*per short ton*)	$46.22	$47.88	$52.07	$54.10	$52.70	$52.22	$52.16	$52.97

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

[7] Data for 2006 are slightly understated as they do not include the corrosion-resistant steel operations of ***. ***.

U.S. PRODUCERS' FINANCIAL CONDITION AND EXPERIENCE

Background

The financial results of seventeen U.S. producers of corrosion-resistant steel are presented in this section of the report.[8] The majority of overall operations is made up of U.S. producers that manufacture and further process their own steel, while a smaller share reflects operations in which the underlying steel was purchased from related and/or unrelated sources.[9] Revenue primarily reflects commercial sales, but also includes transfers and a small volume of internal consumption.[10] [11]

Producers' Operations on Corrosion-Resistant Steel

Table III-9 presents the overall financial results of the U.S. industry's operations on corrosion-resistant carbon steel flat products. Corresponding company-specific financial information for selected items is presented in table III-10. A variance analysis of the U.S. industry's financial results is presented in table III-11.[12]

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[8] With the exception of ThyssenKrupp, which reported on the basis of International Financial Reporting Standards ("IFRS"), U.S. producers reported their financial results on the basis of generally accepted accounting principles ("GAAP"). The majority of annual financial results were also reported on a calendar-year ("CY") basis. The exceptions were as follows: ***. U.S. producer *** did not report any financial information to the Commission.

[9] Purchased/transferred steel appears to reflect primarily cold-rolled steel but also includes other forms of steel; e.g., ***.

[10] ***. August 21, 2012 e-mail with attachments from SDI to USITC auditor.

[11] As noted in Parts I and III of this report, larger volume U.S. producers differ in terms of their underlying steel-making process (basic/integrated or electric arc furnace (EAF)) and the corresponding level/type of raw material input integration. While the composition of company-specific raw material costs has not changed substantially during the period examined, larger volume producers broadened, or are in the process of broadening, the level/extent of their raw material input integration (see Cost of Goods Sold and Gross Profit or (Loss) section). With respect to the larger volume U.S. producers, the primary raw materials which represent raw material integration and/or prospective raw material integration are as follows: AK Steel (iron ore and coking coal); ArcelorMittal (iron ore mining and coking coal); Nucor (scrap and DRI); SDI (scrap and iron making); and U.S. Steel (iron ore pellets and coke).

[12] The Commission's variance analysis is calculated in three parts: sales variance, cost of goods sold ("COGS") variance, and sales, general and administrative ("SG&A") expenses 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 variances) and a volume (quantity) variance. The sales or cost variance is calculated as the change in unit price/cost times the new volume, while the volume variance is calculated as the change in volume times the old unit price/cost. Summarized at the bottom of table III-11, the price variance is from sales, the cost/expense variance is the sum of those items from COGS and SG&A, respectively, and the net volume variance is the sum of the price, COGS, and SG&A volume variances. All things being equal, a stable overall product mix generally enhances the utility of the Commission's variance analysis.

Table III-9
Corrosion-resistant steel: Results of U.S. producers' operations, fiscal years 2006-11, January-June 2011, and January-June 2012

	Fiscal year						January-June	
	2006	2007	2008	2009	2010	2011	2011	2012
	Quantity (*short tons*)							
Total net sales	19,925,800	18,824,214	17,532,045	12,721,073	16,424,898	17,317,411	8,779,125	9,577,658
	Value (*$1,000*)							
Total net sales	14,824,170	14,654,683	16,373,449	9,417,466	13,643,398	16,014,791	8,088,190	8,785,457
Cost of goods sold:								
Raw materials[1]	8,574,901	9,007,431	10,355,511	6,853,294	9,194,344	11,202,623	5,598,301	6,252,538
Direct labor[1]	972,297	894,479	881,471	658,359	835,575	895,503	442,795	477,720
Other factory costs[1]	4,439,162	3,799,768	4,063,655	2,141,455	2,864,200	2,897,311	1,319,149	1,322,732
Total cost of goods sold	13,986,360	13,701,678	15,300,637	9,653,108	12,894,119	14,995,437	7,360,245	8,052,990
Gross profit or (loss)	837,810	953,005	1,072,812	(235,642)	749,279	1,019,354	727,945	732,467
Total SG&A expenses	422,974	426,511	391,644	310,523	339,030	360,266	192,352	197,444
Operating income or (loss)	414,836	526,494	681,168	(546,165)	410,249	659,088	535,593	535,023
Interest expense	154,110	128,590	134,064	120,377	95,647	98,920	49,814	80,699
Other expenses	1,827	48,785	67,388	87,370	25,626	33,665	17,624	13,743
Other income items	22,711	24,593	15,006	17,126	20,011	17,844	8,262	7,050
Net income or (loss)	281,610	373,712	494,722	(736,786)	308,987	544,347	476,417	447,631
Depr. and amortization (incl. above)	306,798	323,262	334,097	345,554	341,607	420,762	165,694	179,897
Est. cash flow from operations	588,408	696,974	828,819	(391,232)	650,594	965,109	642,111	627,528
	Ratio to net sales (*percent*)							
Raw materials[1]	57.8	61.5	63.2	72.8	67.4	70.0	69.2	71.2
Direct labor[1]	6.6	6.1	5.4	7.0	6.1	5.6	5.5	5.4
Other factory costs[1]	29.9	25.9	24.8	22.7	21.0	18.1	16.3	15.1
Total cost of goods sold	94.3	93.5	93.4	102.5	94.5	93.6	91.0	91.7
Gross profit or (loss)	5.7	6.5	6.6	(2.5)	5.5	6.4	9.0	8.3
Total SG&A expenses	2.9	2.9	2.4	3.3	2.5	2.2	2.4	2.2
Operating income or (loss)	2.8	3.6	4.2	(5.8)	3.0	4.1	6.6	6.1
Net income or (loss)	1.9	2.6	3.0	(7.8)	2.3	3.4	5.9	5.1
	Ratio to cost of goods sold (*percent*)							
Raw materials	61.3	65.7	67.7	71.0	71.3	74.7	76.1	77.6
Direct labor	7.0	6.5	5.8	6.8	6.5	6.0	6.0	5.9
Other factory costs	31.7	27.7	26.6	22.2	22.2	19.3	17.9	16.4

Table continued on next page.

Table III-9--*Continued*
Corrosion-resistant steel: Results of U.S. producers' operations, fiscal years 2006-11, January-June 2011, and January-June 2012

	Fiscal year						January-June	
	2006	2007	2008	2009	2010	2011	2011	2012
Unit value (*dollars per short ton*)								
Net sales	744	779	934	740	831	925	921	917
Cost of goods sold:								
Raw materials[1]	430	479	591	539	560	647	638	653
Direct labor[1]	49	48	50	52	51	52	50	50
Other factory costs[1]	223	202	232	168	174	167	150	138
Total cost of goods sold	702	728	873	759	785	866	838	841
Gross profit or (loss)	42	51	61	(19)	46	59	83	76
SG&A expenses	21	23	22	24	21	21	22	21
Operating income or (loss)	21	28	39	(43)	25	38	61	56
Number of companies reporting								
Data	13	15	16	16	16	17	17	17
Operating losses	2	7	6	10	7	7	5	5

[1] While the majority of U.S. producers reported raw materials, direct labor, other factory costs, and the sum of these items, total COGS, RG Steel only reported total COGS. Accordingly, RG Steel's total reported COGS was allocated by staff to raw materials, direct labor, and other factory costs using the overall cost profile of the U.S. producers that reported these items separately. While this method in effect preserves the share of total COGS that these items collectively represent, as reported by the majority of U.S. producers, the average values for raw material, direct labor, and other factory costs, as well as the corresponding ratio to sales for these items, are marginally different compared to the average values/ratios calculated without RG Steel and the above-referenced allocation.

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

Table III-10
Corrosion-resistant steel: Selected financial information of U.S. producers' operations, fiscal years 2006-11, January-June 2011, and January-June 2012

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Table III-11
Corrosion-resistant steel: Variance analysis of the financial results of U.S. producers' operations, fiscal years 2006-11, January-June 2011, and January-June 2012

Item	Fiscal year						Jan.-June
	2006-11	2006-07	2007-08	2008-09	2009-10	2010-11	2010-11
	Value (*$1,000*)						
Total net sales:							
Price variance	3,131,181	650,058	2,724,722	(2,462,942)	1,483,974	1,630,024	(38,420)
Volume variance	(1,940,560)	(819,545)	(1,005,956)	(4,493,041)	2,741,958	741,369	735,687
Total net sales variance	1,190,621	(169,487)	1,718,766	(6,955,983)	4,225,932	2,371,393	697,267
Cost of goods sold:							
Raw material:							
Cost variance	(3,750,221)	(906,588)	(1,966,386)	660,559	(345,668)	(1,508,667)	(145,026)
Volume variance	1,122,498	474,058	618,306	2,841,658	(1,995,382)	(499,612)	(509,211)
Net raw material variance	(2,627,722)	(432,530)	(1,348,080)	3,502,216	(2,341,050)	(2,008,279)	(654,237)
Direct labor:							
Cost variance	(50,485)	24,065	(48,393)	(18,773)	14,470	(14,524)	5,351
Volume variance	127,279	53,753	61,401	241,885	(191,686)	(45,404)	(40,276)
Net direct labor variance	76,794	77,818	13,008	223,112	(177,216)	(59,928)	(34,925)
Other factory costs:							
Cost variance	960,742	393,978	(524,718)	807,092	(99,247)	122,527	116,404
Volume variance	581,109	245,416	260,831	1,115,108	(623,499)	(155,638)	(119,987)
Net other factory cost variance	1,541,851	639,394	(263,887)	1,922,200	(722,746)	(33,111)	(3,583)
Net cost of goods sold:							
Cost variance	(2,839,963)	(488,546)	(2,539,497)	1,448,878	(430,444)	(1,400,664)	(23,271)
Volume variance	1,830,886	773,228	940,538	4,198,651	(2,810,567)	(700,654)	(669,474)
Total net cost of goods sold variance	(1,009,077)	284,682	(1,598,959)	5,647,529	(3,241,011)	(2,101,318)	(692,745)
Gross profit variance	181,544	115,195	119,807	(1,308,454)	984,921	270,075	4,522
SG&A expenses:							
Expense variance	7,339	(26,921)	5,590	(26,350)	61,904	(2,813)	12,404
Volume variance	55,369	23,384	29,277	107,471	(90,411)	(18,423)	(17,496)
Total SG&A variance	62,708	(3,537)	34,867	81,121	(28,507)	(21,236)	(5,092)
Operating income variance	244,252	111,658	154,674	(1,227,333)	956,414	248,839	(570)
Summarized as:							
Price variance	3,131,181	650,058	2,724,722	(2,462,942)	1,483,974	1,630,024	(38,420)
Net cost/expense variance	(2,832,624)	(515,466)	(2,533,907)	1,422,528	(368,541)	(1,403,478)	(10,867)
Net volume variance	(54,304)	(22,934)	(36,141)	(186,919)	(159,020)	22,293	48,717

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

Net Sales Quantity and Value

Overall sales volume declined throughout 2006-09 after which it increased. The pattern of total revenue followed the same basic pattern as volume except that it increased somewhat in 2008 before declining, like volume, sharply in 2009.[13]

With some exceptions, as shown in table III-10, the pattern of company-specific sales volume and value followed the same directional trend for much of the period. While company-specific average sales value also generally followed the same directional trend, table III-10 shows a range of average sales values which is consistent with differences in company-specific product mix.[14]

Cost of Goods Sold and Gross Profit or (Loss)

The total cost of raw materials, which primarily reflects the cost of steel making inputs, ranged from a low of 61.3 percent of total COGS in 2006 to a high of 77.6 percent in interim 2012. Average raw material cost followed a similar pattern, peaking first in 2008, followed by a decline in 2009, and then a subsequent resumption of increases in 2010, 2011, and the first half of 2012. As producers using the same basic steel making process, AK Steel, ArcelorMittal, Severstal Dearborn, and U.S. Steel generally reported that their raw material costs reflect the same primary inputs: iron ore, coke, coal, and scrap, along with aluminum and zinc galvanizing inputs.[15] In contrast, and while identifying scrap and zinc as primary raw material inputs, EAF steel producers Nucor and SDI also specifically identified several raw material inputs which did not overlap: Nucor (alternative metallic units such as DRI, hot briquetted iron, and pig iron); SDI (uncoated coils).[16] As noted above, the other producers, whose U.S. operations do not reflect steel production, reported primary raw material costs which ranged from steel slab to cold-rolled steel coil.[17]

By the end of the period examined, while steel producers (basic and EAF) were are all integrated with respect to at least some primary raw materials, the type of inputs and extent to which these inputs were actually consumed during the period examined varied: AK Steel's consumption of iron ore and/or coal from integrated sources at the end of the period appears to have been ***;[18] ArcelorMittal's U.S.

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[13] With regard to the overall decline in sales and subsequent increase, much of this pattern was reportedly due to the weakness of the North American automotive sector during the recession and its subsequent improvement; i.e., the automotive market is the single largest market for galvanized steel. Construction and steel service centers reportedly account for the next two largest markets, while appliances and the electric industry account for a substantially smaller share of consumption. *Galvanized steel sector gains economic strength*, American Metal Market, April 2012, Vol. 121, Issue 3.

[14] ***. August 21, 2012 e-mail with attachment from Tata to USITC auditor.

[15] September 7, 2012 ArcelorMittal response to USITC auditor follow-up questions. As described by AK Steel, ***. September 5, 2012 AK Steel response to USITC auditor follow-up questions. ***. August 28, 2012 e-mail with attachments from Severstal to USITC auditor. ***. August 28, 2012 U.S. Steel response to USITC auditor follow-up questions.

[16] ***. August 24, 2012 Nucor response to USITC auditor follow-up questions. August 23, 2012 e-mail with attachments from SDI to USITC auditor.

[17] ***. August 24, 2012 e-mail with attachment from California Steel to USITC auditor.

[18] As described in AK Steel's 2011 10-K, "{o}n October 4, 2011, the Company acquired a 49.9% equity interest in Magnetation JV, a joint venture that produces iron ore concentrate headquartered in Grand Rapids, Minnesota and which intends to construct and operate additional concentrate plants and a pelletizing plant to produce iron ore pellets to be consumed by the Company. In a separate transaction on the same day, the Company also acquired all of the stock of a company now known as AK Coal, which controls, through ownership or lease, the rights to significant (continued...)

operations consumed iron ore ***;[19] Nucor consumed DRI from its Trinidad facility, which became operational in 2007, and scrap from its ferrous scrap operation (DJJ) which was acquired in 2008;[20] the Techs, purchased by SDI in 2008, *** with SDI's scrap and iron making operations supplying the ferrous metals used by its steel mills;[21] U.S. Steel consumed iron ore pellets and coke in large part from internal sources.[22]

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[18] (...continued)
reserves of low-volatile metallurgical coal in Somerset County, Pennsylvania. These investments represent significant steps toward achieving the Company's top strategic initiative of vertically integrating the business through increased ownership of some of its key steelmaking raw materials. These investments provide a clear path to increasing the Company's raw material self-sufficiency. They are intended both to provide a financial hedge against global market price increases and to enable the Company to acquire key raw materials at a net cost to AK Steel representing a substantial discount to the market price. Although the full benefit of these investments likely will not be realized until 2015 or later, the Company expects to begin to see the benefit this year." AK Steel 2011 10-K, p. 24. ***. September 5, 2012 AK Steel response to USITC auditor follow-up questions. In its posthearing brief, AK Steel confirmed that these investments are not fully-operational and that it will take 2-3 more years in order to reach anticipated production levels. AK Steel's posthearing brief, p. 7.

[19] ArcelorMittal's 2011 Annual Report, with respect to its operations in general, states "{o}ur upstream integration, through our investment in iron ore and coal mining assets, gives us a major competitive advantage, provides a measure of security of supply and is an important natural hedge against raw material price volatility." ArcelorMittal 2011 Annual Report, p. 16. In response to a staff follow-up question, ArcelorMittal stated that ***. September 7, 2012 ArcelorMittal response to USITC auditor follow-up question.

[20] ***. USITC auditor notes. According to Nucor's 2011 10-K, "{t}he primary raw materials for our steel mills segment are ferrous scrap and scrap substitutes such as pig iron, DRI and HBI . . . {a}s of December 31, 2011, DJJ {acquired by Nucor in 2008} operated over 60 scrap yards, and the Company's annual scrap processing capability was approaching five million tons. DJJ acquires ferrous scrap from numerous sources including manufacturers of products made from steel, industrial plants, scrap dealers, peddlers, auto wreckers and demolition firms. We purchase pig iron as needed from a variety of sources. Nucor operates a DRI plant in Trinidad with a capacity of 1,800,000 metric tons of DRI annually. An expansion project has now increased the capacity to 2,000,000 metric tons annually. The primary raw material for our DRI facility in Trinidad is iron ore, which we purchase from various international suppliers. A second DRI facility in Louisiana with an annual capacity of 2,500,000 tons is under construction. This Louisiana DRI facility is the first phase of a multi-phase plan that may include an additional DRI facility, a coke plant, a blast furnace, a pellet plant and a steel mill. In 2010, Nucor entered into an agreement with a natural gas exploration and production firm that involves drilling and completing onshore natural gas wells in U.S.-based proven reserves over a seven-year period that began in June 2010. Natural gas generated by this working interest drilling program is being sold to offset our exposure to the volatility of the price of gas consumed by our Louisiana DRI facility. Revenues from natural gas generated by this working interest drilling program are a small but increasing amount, and all natural gas is being sold to outside parties." Nucor 2011 10-K, p. 4.

[21] As described in SDI's 2011 10-K, "{m}etals recycling and ferrous resources operations include OmniSource Corporation (OmniSource), the company's metals recycling, steel scrap procurement, and processing locations, and our two ironmaking initiatives: Iron Dynamics (IDI), a liquid pig iron production facility; and our Minnesota iron operations, an iron nugget production facility and planned operations to supply the nugget facility with its primary raw material, iron concentrate. IDI primarily produces liquid pig iron, which is used as a scrap substitute raw material input exclusively at our Flat Roll Division." SDI 2011 10–K, p. 69.

[22] U.S. Steel's 2011 10-K states that "{t}hrough our wholly owned operations and our share of joint ventures, we have adequate iron ore pellet production to cover a significant portion of our North American needs and have secured the remaining iron ore pellets for our North American operations through contracts. With our own coke production facilities and a long-term coke supply agreement with Gateway Energy & Coke Company, LLC (Gateway), we have the capability to be nearly self sufficient for coke in North America at normal operating levels. We also have multi-year contracts for some of our North American coking coal requirements. Our relatively
(continued...)

Follow-up information indicates that most of the large volume U.S. producers (i.e., individually accounting for 10 percent or more of total sales volume) *** is not applicable.[23] In contrast, smaller volume producers, ***.[24]

Table III-10 shows that, notwithstanding cost structure as well as differences in the level and type of raw material input integration, U.S. producers generally reported the same directional trend of average raw material costs during much of the full-year period.[25] On an overall basis (see table III-9), raw material costs as a share of COGS generally increased during the period examined.

While direct labor, as a share of total COGS, remained within a relatively narrow range (between 5.8 percent (2008) and 7.0 percent (2006)), other factory cost declined notably from a high of 31.7 percent in 2006 to a low of 16.4 percent in interim 2012. As shown in table III-10, the relative level ofcompany-specific average other factory costs appears to be consistent with differences in their underlying operations; e.g., ***.

As shown in table III-10 and similar to the pattern of average raw material costs, the majority of U.S. producers shared the same period-to-period directional trend of increasing average other factory costs between 2006-08 which in turn appears to be consistent with the declines in sales volume reported by most producers during that period. In contrast and notwithstanding the even more substantial decline in sales volume in 2009, a number of producers reported lower average other factory costs in 2009 compared to 2008. Among the larger volume producers, the pattern of ***.[26] Also with respect to the

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[22] (...continued)
balanced raw materials position in North America and limited dependence on purchased steel scrap have helped mitigate the volatility of our production costs." U.S. Steel 2011 10-K, p. 15.

[23] September 5, 2012 AK Steel response to USITC auditor follow-up questions. September 7, 2012 AreclorMittal response to USITC follow-up questions. September 7, 2012 U.S. Steel response to USITC auditor follow-up questions. ***. August 29, 2012 e-mail with attachment from SDI to USITC auditor. ***. September 28, 2012 Nucor response to USITC auditor revision request.

[24] September 6, 2012 e-mail with attachments from Tata to USITC auditor. September 18, 2012 e-mail from CSN to USITC auditor. USITC auditor notes. September 14, 2012 e-mail from Sharon Coating to USITC auditor. Appendix III-7, ThyssenKrupp U.S. producer questionnaire response. ***. September 4, 2012 e-mail from California Steel to USITC auditor. Under U.S. GAAP formal consolidation and elimination of intercompany profit would generally be required when ownership exceeds 50 percent; i.e., as interpreted by staff, ***. Wiley GAAP 2012, pp. 527-528, p. 547.

[25] ***. August 24, 2012 e-mail with attachment from California Steel to USITC auditor. ***.

[26] As described by ArcelorMittal, ***. September 7, 2012 ArcelorMittal response to USITC auditor follow-up questions. ***. After acquisition from ArecelorMittal, Severstal operated the Sparrows Point, MD plant from March 2008 through March 2011 after which the plant was acquired and operated by RG Steel for the remainder of the period examined; i.e., the majority of the financial results reported by RG Steel reflect the operations of the Sparrows Point, MD plant when it was operated by Severstal. As shown in table III-10, the financial results reported by RG Steel reflect ***. RG Steel, as indicated in a previous section of this report, declared bankruptcy in May 2012 and the Sparrows Point, MD facility was purchased by a plant liquidator in August 2012.

larger volume producers, ***.[27] As described in footnote 27, this pattern in large part reflects ***. *** in their other factory costs which, at least in part, explains the pattern shown in table III-10.[28]

While the overall pattern of gross profit was incrementally positive between 2006-08 on an absolute and relative basis, table III-10 shows that the pattern of company-specific gross profit was not uniform in terms of directional trend; e.g., ***.[29] Consistent with the overall poor economic conditions at that time, 2009 was the only year when the majority of U.S. producers reported gross losses.[30] [31]

SG&A Expenses and Operating Income or (Loss)

As shown in table III-9, the industry's SG&A expense ratios (i.e., total SG&A expenses divided by total revenue) moved within a relatively narrow range during the period examined: 2.2 percent (full-year 2011 and interim 2012) to 3.3 percent (2009). This trend indicates that, while changes in the relativelevel of SG&A expense ratios did play a role in terms of explaining some of the variability in operating income or (loss), the overall pattern of the industry's operating results is largely explained at the gross level; i.e., as presented in the table III-11 variance analysis, the magnitudes of the gross profit variances are generally more substantial compared to corresponding SG&A expense variances.

On a company-specific basis, the larger volume producers, along with a number of smaller volume producers, generally reported their highest SG&A expense ratios in 2009 which is consistent with the lower level of sales volume in that year (see table III-10).[32] [33] ***.[34] As indicated in the note to table III-10, ***.

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[27] ***. September 5, 2012 AK Steel response to USITC auditor follow-up questions. ***. Revised U.S. producer questionnaire table III-9 as submitted in September 5, 2012 AK Steel response to USITC auditor follow-up questions. *** are consistent with information reported in AK Steel's SEC filings. AK Steel 2009 10-K, p. 13. AK Steel 2011 10-K, p. 13. *** is technically part of pension expense and reflects what is termed "Pension and other postretirement benefits corridor charge" in the company's 10-K. As described by AK Steel "{t}he Company recognizes into its results of operations, as a non-cash "corridor" adjustment, any unrecognized actuarial net gains or losses that exceed 10% of the larger of projected benefit obligations or plan assets. Amounts inside this 10% corridor are amortized over the plan participants' life expectancy. Actuarial net gains and losses occur when actual experience differs from any of the many assumptions used to value the benefit plans, or when the assumptions change, as they may each year when a valuation is performed." AK Steel 2011 10-K, p. 16.

[28] ***. August 21, 2012 e-mail with attachment from Tata to USITC auditor. August 28, 2012 e-mail with attachment from Severstal to USITC auditor.

[29] ***. ***. September 5, 2012 AK Steel response to USITC auditor follow-up questions.

[30] Table III-10 shows that, with some exceptions, the majority of companies in 2009 reported declines in average sales value which were only partially offset by corresponding declines in average raw material costs. Similarly, the table III-11 variance analysis indicates that the gross loss in 2009 was largely a function of an overall negative price variance which was only partially offset by corresponding positive cost variances.

[31] ***. *Russian owner renovates Rouge Steel plant,* Automotive News, January 10, 2011, Vol. 85, Issue 6446. *Betting on America*, Forbes, June 25, 2012, pp. 46-48. ***. As an entirely new entrant to the U.S. industry, ThyssenKrupp, ***. August 24, 2012 e-mail with attachments from ThyssenKrupp to USITC auditor. ***. Ibid.

[32] ***. September 26, 2012 Sharon Coating e-mail to USITC auditor. ***.

[33] ***.

[34] ***.

Non-Recurring Items

As indicated above and with some exceptions, the important non-recurring items identified by U.S. producers which directly impacted the industry's operating results were primarily included in other factory costs (see footnotes 27, 28, and 31). As shown in table III-9, however, "other expenses" between 2007-09 were also relatively large and reflect non-recurring items.[35] By definition items classified at this level in the income statement only affect net income or (loss).

CAPITAL EXPENDITURES AND RESEARCH AND DEVELOPMENT EXPENSES

Data on capital expenditures and research and development ("R&D") expenses related to operations on corrosion-resistant carbon steel flat products are presented in table III-12.[36]

During the period examined capital expenditures exceeded reported depreciation by increasingly large amounts through 2010, were essentially the same as corresponding depreciation in 2011, and then returned to a level substantially higher compared to depreciation in interim 2012. Table III-12 shows that ***.[37] ***.[38] As described previously, ***.[39] ***.[40] ***.[41] [42]

As shown in table III-12 ***.[43] Relatively smaller shares of total R&D expenses were accounted for by the other U.S. producers and reflect a mix of activities (directly or indirectly) supporting operations on corrosion-resistant carbon steel flat products.[44]

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[35] ***. ***. August 7, 2012 e-mail with attachment from Sharon Coating to USITC auditor.

[36] As reported by the U.S. industry, total assets increased from $7.6 billion in 2006 to $9.6 billion in 2011. With respect to a company's overall operations, staff notes that a total asset value (i.e., the bottom line number on the asset side of a company's balance sheet) reflects an aggregation of a number assets which for the most part are not product specific. Accordingly, high-level allocation factors were required in order to report a total asset value for corrosion-resistant carbon steel flat products. ***.

[37] According to a public article describing Severstal Dearborn's investments, "{t}he launch of the PLTCM {in August 2011} is complemented by the construction and impending start-up of a modern $285 million hot-dipped galvanizing line in the same production complex in Dearborn. The new coating line {launched in December 2011} will target critical applications for automotive customers and other cold-roll-consuming manufactures." *Severstal Opens New Cold Mill in Dearborn,* Metal Center News, September 2011, p. 46.

[38] As described by U.S. Steel, ***. August 28, 2012 U.S. Steel response to USITC auditor follow-up questions. ***. Ibid.

[39] ArcelorMittal stated that ***. September 7, 2012 ArcelorMittal response to USITC auditor follow-up questions.

[40] As described by Nucor, ***. August 24, 2012 Nucor response to USITC auditor follow-up questions.

[41] According to SDI, ***. August 23, 2012 e-mail with attachments from SDI to USITC auditor.

[42] AK Steel stated that ***. September 5, 2012 AK Steel response to USITC auditor follow-up questions.

[43] September 7, 2012 ArcelorMittal response to USITC auditor follow-up questions.

[44] AK Steel stated that ***. September 5, 2012 AK Steel response to USITC auditor follow-up questions.
As reported by Tata, ***. August 21, 2012 e-mail with attachment from Tata to USITC auditor.
U.S. Steel stated that ***. August 28, 2012 U.S. Steel response to USITC auditor follow-up questions.
According to Pro-Tec, ***. September 19, 2012 e-mail with attachments from Pro-Tec to USITC auditor.
Severstal Dearborn stated that ***. August 30, 2012 e-mail from Severstal to USITC auditor.

Table III-12
Corrosion-resistant steel: Value of capital expenditures and research and development expenses of U.S. producers, fiscal years 2006-11, January-June 2011, and January-June 2012[1] [2] [3]

Item	Fiscal year						January-June	
	2006	2007	2008	2009	2010	2011	2011	2012
	Value (*$1,000*)							
		*	*	*	*	*	*	*	
Total capital expenditures	442,031	623,900	916,708	659,655	1,180,534	450,690	183,211	274,782
		*	*	*	*	*	*	*	
Total R&D expenses	14,043	12,966	13,005	12,740	15,184	16,100	7,330	7,214

[1] The financial results and related information, as applicable, of the Sparrows Point, MD operations are included in the full-year 2006 and 2007 financial information reported by ArcelorMittal. While RG Steel reported 2008 through interim 2012 financial results for the Sparrows Point, MD operations, the company did not report other requested financial information such as assets, capital expenditures, and/or R&D expenses.

[2] The operations which represent Sharon Coating were acquired by NLMK in 2007. Sharon Coating was reportedly unable to report relevant financial information for 2006 prior to the NLMK acquisition.

[3] ThyssenKrupp began U.S. commercial operations at its Calvert, AL facility in 2011.

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

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

U.S. IMPORTS

Overview

The Commission issued questionnaires to 64 firms believed to have imported corrosion-resistant steel between January 2006 and June 2012. Twenty-nine firms provided data and information in response to the questionnaires, while ten firms indicated that they had not imported corrosion-resistant steel during the period for which data were collected.[1] Importers' questionnaire data are believed to have accounted for virtually all U.S. imports from Germany and Korea, and more than 60 percent of total U.S. imports from nonsubject countries. In light of the less-than-complete coverage of data from nonsubject countries provided in Commission questionnaires and in the interest of the presentation of public consumption and market share data,[2] import data in this report are based on official Commerce statistics for corrosion-resistant steel.[3]

Imports from Subject and Nonsubject Countries

Table IV-1 presents data for U.S. imports of corrosion-resistant steel from Germany, Korea, leading nonsubject sources, and all other nonsubject sources combined. Imports of corrosion-resistant steel from Germany and Korea fell overall from 2006 to 2011. Imports from Germany during the first half of 2012 compared with the first half of 2011 were slightly lower, while imports from Korea were

[1] Twenty-five firms did not respond to the Commission's importer questionnaire. One of the firms (Iron Man Steel & Supply, Houston, TX) was known not to have received the Commission's questionnaire because the buildings at the available address for the company were permanently closed and a "For Sale" sign had been posted on the property.

[2] Aggregate data reported in questionnaire responses by U.S. importers of subject merchandise from Germany are largely confidential and cannot be publicly disclosed.

[3] The HTS statistical reporting numbers used to generate the import data presented in this report are as follows: 7210.30.0030, 7210.30.0060, 7210.41.0000, 7210.49.0030, 7210.49.0090, 7210.49.0091, 7210.49.0095, 7210.61.0000, 7210.69.0000, 7210.70.6030, 7210.70.6060, 7210.70.6090, 7210.90.6000, 7210.90.9000, 7212.20.0000, 7212.30.1030, 7212.30.1090, 7212.30.3000, 7212.30.5000, and 7212.50.0000. Official Commerce statistics presented for Germany include nonsubject merchandise that has been excluded from the scope of the order by Commerce (e.g., Granocoat). Based on data submitted in questionnaire responses concerning subject U.S. imports from Germany, nonsubject merchandise is believed to account for the following shares of official Commerce statistics for U.S. imports from Germany: *** percent in 2006, *** percent in 2007, *** percent in 2008, *** percent in 2009, *** percent in 2010, *** percent in 2011, *** percent in January-June 2011, and *** percent in January-June 2012. Subtracting nonsubject U.S. imports from the German data presented in this report results in the following subject U.S. import volumes from Germany and shares of total U.S. imports accounted for by estimated subject U.S. imports from Germany: *** short tons and *** percent in 2006, *** short tons and *** percent in 2007, *** short tons and *** percent in 2008, *** short tons and *** percent in 2009, *** short tons and *** percent in 2010, *** short tons and *** percent in 2011, *** short tons and *** percent in January-June 2011, and *** short tons and *** percent in January-June 2012.

Table IV-1
Corrosion-resistant steel: U.S. imports, by sources, 2006-11, January-June 2011, and January-June 2012

Source	Calendar year						January-June	
	2006	2007	2008	2009	2010	2011	2011	2012
Quantity (*short tons*)								
Germany	45,297	64,201	46,629	10,532	14,768	38,813	22,154	22,045
Korea	541,056	366,307	318,011	201,312	169,528	225,518	105,854	160,186
Subtotal, subject	586,354	430,508	364,641	211,843	184,296	264,330	128,008	182,231
Canada	511,953	450,120	394,294	288,937	437,010	378,666	185,079	250,783
China	774,306	442,072	548,911	96,696	215,055	276,750	138,054	198,827
India	775,174	221,969	264,628	132,340	139,615	183,173	79,637	139,176
Mexico	209,540	136,079	167,990	129,668	188,379	217,214	112,930	114,776
Taiwan	597,115	338,330	278,557	211,686	281,740	314,220	172,898	259,279
Other sources	731,931	530,071	188,964	160,781	155,130	205,115	90,570	111,274
Subtotal, nonsubject	3,600,019	2,118,640	1,843,343	1,020,108	1,416,929	1,575,138	779,168	1,074,115
Total	4,186,373	2,549,149	2,207,984	1,231,952	1,601,224	1,839,468	907,176	1,256,346
Value (*1,000 dollars*)[1]								
Germany	32,465	54,825	57,287	13,361	18,643	41,299	23,375	23,703
Korea	430,800	317,530	332,283	170,728	153,257	231,242	106,601	157,088
Subtotal, subject	463,265	372,355	389,570	184,088	171,900	272,542	129,976	180,791
Canada	402,328	373,705	351,681	276,466	400,285	375,642	183,010	249,732
China	524,891	335,088	530,936	80,092	179,571	261,797	125,926	179,659
India	574,028	184,924	294,481	98,819	118,972	176,201	76,520	126,046
Mexico	194,383	127,024	187,039	93,444	154,474	204,583	103,551	103,978
Taiwan	471,710	322,270	329,564	193,598	270,987	323,291	171,178	266,994
Other sources	543,361	441,396	221,063	158,894	164,824	247,957	112,016	120,464
Subtotal, nonsubject	2,710,700	1,784,407	1,914,764	901,313	1,289,113	1,589,472	772,202	1,046,874
Total	3,173,965	2,156,763	2,304,334	1,085,401	1,461,013	1,862,014	902,178	1,227,665

Table continued on following page.

Table IV-1--*Continued*
Corrosion-resistant steel: U.S. imports, by sources, 2006-11, January-June 2011, and January-June 2012

Source	Calendar year						January-June	
	2006	2007	2008	2009	2010	2011	2011	2012
Unit value (*dollars per short ton*)								
Germany	717	854	1,229	1,269	1,262	1,064	1,055	1,075
Korea	796	867	1,045	848	904	1,025	1,007	981
Subtotal, subject	790	865	1,068	869	933	1,031	1,015	992
Canada	786	830	892	957	916	992	989	996
China	678	758	967	828	835	946	912	904
India	741	833	1,113	747	852	962	961	906
Mexico	928	933	1,113	721	820	942	917	906
Taiwan	790	953	1,183	915	962	1,029	990	1,030
Other sources	742	833	1,170	988	1,062	1,209	1,237	1,083
Subtotal, nonsubject	753	842	1,039	884	910	1,009	991	975
Average	758	846	1,044	881	912	1,012	994	977
Share of quantity (*percent*)								
Germany	1.1	2.5	2.1	0.9	0.9	2.1	2.4	1.8
Korea	12.9	14.4	14.4	16.3	10.6	12.3	11.7	12.8
Subtotal, subject	14.0	16.9	16.5	17.2	11.5	14.4	14.1	14.5
Canada	12.2	17.7	17.9	23.5	27.3	20.6	20.4	20.0
China	18.5	17.3	24.9	7.8	13.4	15.0	15.2	15.8
India	18.5	8.7	12.0	10.7	8.7	10.0	8.8	11.1
Mexico	5.0	5.3	7.6	10.5	11.8	11.8	12.4	9.1
Taiwan	14.3	13.3	12.6	17.2	17.6	17.1	19.1	20.6
Other sources	17.5	20.8	8.6	13.1	9.7	11.2	10.0	8.9
Subtotal, nonsubject	86.0	83.1	83.5	82.8	88.5	85.6	85.9	85.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table continued on following page.

Table IV-1--*Continued*
Corrosion-resistant steel: U.S. imports, by sources, 2006-11, January-June 2011, and January-June 2012

Source	Calendar year						January-June	
	2006	2007	2008	2009	2010	2011	2011	2012
Share of value (*percent*)								
Germany	1.0	2.5	2.5	1.2	1.3	2.2	2.6	1.9
Korea	13.6	14.7	14.4	15.7	10.5	12.4	11.8	12.8
Subtotal, subject	14.6	17.3	16.9	17.0	11.8	14.6	14.4	14.7
Canada	12.7	17.3	15.3	25.5	27.4	20.2	20.3	20.3
China	16.5	15.5	23.0	7.4	12.3	14.1	14.0	14.6
India	18.1	8.6	12.8	9.1	8.1	9.5	8.5	10.3
Mexico	6.1	5.9	8.1	8.6	10.6	11.0	11.5	8.5
Taiwan	14.9	14.9	14.3	17.8	18.5	17.4	19.0	21.7
Other sources	17.1	20.5	9.6	14.6	11.3	13.3	12.4	9.8
Subtotal, nonsubject	85.4	82.7	83.1	83.0	88.2	85.4	85.6	85.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Ratio of import quantity to U.S. production (*percent*)								
Germany	0.2	0.3	0.3	0.1	0.1	0.2	0.3	0.2
Korea	2.8	2.0	1.9	1.7	1.1	1.3	1.2	1.8
Subtotal, subject	3.0	2.3	2.2	1.8	1.2	1.6	1.5	2.0
Canada	2.6	2.4	2.4	2.4	2.8	2.2	2.2	2.8
China	4.0	2.4	3.3	0.8	1.4	1.6	1.6	2.2
India	4.0	1.2	1.6	1.1	0.9	1.1	0.9	1.5
Mexico	1.1	0.7	1.0	1.1	1.2	1.3	1.3	1.3
Taiwan	3.1	1.8	1.7	1.8	1.8	1.8	2.0	2.9
Other sources	3.8	2.9	1.1	1.4	1.0	1.2	1.1	1.2
Subtotal, nonsubject	18.5	11.5	11.2	8.6	9.0	9.3	9.1	12.0
Total	21.6	13.9	13.4	10.4	10.2	10.8	10.7	14.0

Table footnotes continued on following page.

[1] Landed, duty-paid.

Note.--U.S. import data presented for Germany are from official Commerce statistics, which include nonsubject merchandise that has been excluded from the scope of the order by Commerce (e.g., Granocoat). Based on data submitted in U.S. importer questionnaire responses, nonsubject merchandise is believed to account for the following shares of U.S. import data presented in this table for Germany: *** percent in 2006, *** percent in 2007, *** percent in 2008, *** percent in 2009, *** percent in 2010, *** percent in 2011, *** percent in January-June 2011, and *** percent in January-June 2012. Subtracting nonsubject U.S. imports from the German data presented results in the following U.S. import volumes and shares of apparent U.S. consumption (based on quantity) for the German imports: *** short tons and *** percent in 2006, *** short tons and *** percent in 2007, *** short tons and *** percent in 2008, *** short tons and *** percent in 2009, *** short tons and *** percent in 2010, *** short tons and *** percent in 2011, *** short tons and *** percent in January-June 2011, and *** short tons and *** percent in January-June 2012.

Source: Compiled from data submitted in response to Commission questionnaires and from official Commerce statistics (HTS statistical numbers 7210.30.0030, 7210.30.0060, 7210.41.0000, 7210.49.0030, 7210.49.0090, 7210.49.0091, 7210.49.0095, 7210.61.0000, 7210.69.0000, 7210.70.6030, 7210.70.6060, 7210.70.6090, 7210.90.6000, 7210.90.9000, 7212.20.0000, 7212.30.1030, 7212.30.1090, 7212.30.3000, 7212.30.5000, and 7212.50.0000).

higher.[4] As a share of total imports, subject imports fluctuated during the period examined in these reviews, ranging from 0.9 to 2.5 percent of total U.S. imports for Germany and 10.6 to 16.3 percent for Korea.[5] The average unit values of subject imports, which were higher than those reported for nonsubject imports during most of the periods examined in these reviews, fluctuated throughout, but were higher in 2011 and during the first half of 2012 than in calendar year 2006. The ratio of subject import quantity to U.S. production remained at or below 0.3 percent for Germany[6] and at or below 2.8 percent for Korea during the period examined in these reviews.

Canada, China, India, Mexico, and Taiwan were the largest sources for U.S. imports from nonsubject countries, together accounting for 74.5 percent of the quantity of total U.S. imports of corrosion-resistant steel in 2011. U.S. imports from all nonsubject countries combined fell overall from 2006 to 2011 and were higher during the first half of 2012 than in the comparable period of 2011. As indicated in Part I of this report (see table I-4), the Commission examined antidumping and/or countervailing duty orders concerning corrosion-resistant steel imported from six countries in its first and second five-year reviews, of which orders concerning only two countries (Germany and Korea) currently remain in effect.[7] The Commission issued negative determinations in its second five-year reviews with respect to U.S. imports of corrosion-resistant steel from Australia, Canada, France, and Japan, and

[4] The general trend in the U.S. import data reported in Commission questionnaire responses for subject merchandise imported from Germany and Korea is similar to the trend reported in official Commerce import statistics. Subtracting nonsubject U.S. imports from the official import statistics for German data presented in the tables in this report results in the following subject U.S. import volumes from Germany: *** short tons in 2006, *** short tons in 2007, *** short tons in 2008, *** short tons in 2009, *** short tons in 2010, *** short tons and in 2011, *** short tons in January-June 2011, and *** short tons in January-June 2012.

[5] After excluding nonsubject U.S. imports from the German data presented in this report, subject imports from Germany ranged from *** percent to *** percent of total U.S. imports.

[6] Excluding nonsubject U.S. imports from the German data presented in this report results in ratios of subject import quantities to U.S. production at or below *** percent for Germany.

[7] *Certain Carbon Steel Products From Australia, Belgium, Brazil, Canada, Finland, France, Germany, Japan, Korea, Mexico, Poland, Romania, Spain, Sweden, Taiwan, and the United Kingdom, Inv. Nos. AA1921-197 (Second Review); 701-TA-319, 320, 325-327, 348, and 350 (Second Review); and 731-TA-573, 574, 576, 578, 582-587, 612, and 614-618 (Second Review), VOLUME I: Determination and Views of the Commission,* USITC Publication 3899 (January 2007), p. 1; and *Continuation Pursuant to Second Five-Year ("Sunset") Reviews of Antidumping and Countervailing Duty Orders: Certain Corrosion-Resistant Carbon Steel Flat Products from Germany and Korea,* 72 FR 7009, February 14, 2007.

Commerce revoked those orders effective December 15, 2005.[8] Corrosion-resistant steel imports from the four previously subject countries are discussed separately below.

U.S. imports from Australia increased irregularly from 324 short tons in 2006 to 40,190 short tons in 2011. Imports from Australia were lower during the first half of 2012 at 9,172 short tons as compared with 15,686 short tons during the comparable period in 2011. The share of total U.S. imports held by U.S. imports from Australia increased irregularly from 0.008 percent during 2006 to 2.2 percent during 2011, and was 0.7 percent during the first half of 2012.

Corrosion-resistant steel imports from Canada fell irregularly from 511,953 short tons in 2006 to 378,666 short tons in 2011. Imports from Canada were higher during the first half of 2012 at 250,783 short tons as compared with 185,079 short tons during the comparable period in 2011. The share of total U.S. imports held by U.S. imports from Canada increased irregularly from 12.2 percent during 2006 to 20.6 percent during 2011, and was 20.0 percent during the first half of 2012.

U.S. imports from France increased from 720 short tons in 2006 to 7,377 short tons in 2007, before falling to 469 short tons in 2008 and further to 230 short tons in 2009. U.S. imports from France increased again to 1,062 short tons in 2010 before again falling to 419 short tons during 2011. Imports from France were higher during the first half of 2012 at 1,139 short tons as compared with 360 short tons during the comparable period in 2011. The share of total U.S. imports held by U.S. imports from France remained at less than 0.3 percent during the entire period examined in these reviews.

Corrosion-resistant steel imports from Japan increased irregularly from 26,292 short tons in 2006 to 62,685 short tons in 2008. U.S. imports from Japan fell to 44,882 short tons in 2009 before increasing to 54,899 short tons during 2011. Imports from Japan were lower during the first half of 2012 at 19,593 short tons as compared with 27,049 short tons during the comparable period in 2011. The share of total U.S. imports held by U.S. imports from Japan increased from 0.6 percent during 2006 to 3.6 percent during 2009 before falling to 3.0 percent in 2011, and was 1.6 percent during the first half of 2012.

[8] *Revocation Pursuant to Second Five-Year ("Sunset") Reviews of Antidumping and Countervailing Duty Orders: Certain Corrosion-Resistant Carbon Steel Flat Products from Australia, Canada, Japan, and France,* 72 FR 7010, February 14, 2007.

U.S. IMPORTERS' IMPORTS SUBSEQUENT TO JUNE 30, 2012

The Commission requested importers to indicate whether they had imported or arranged for the importation of corrosion-resistant steel from Germany, Korea, or nonsubject countries for delivery after June 30, 2012. Thirteen firms reported data concerning such imports or arrangements of imports, as follows: two U.S. importers of German corrosion-resistant steel (***), five U.S. importers of Korean corrosion-resistant steel (***), and six U.S. importers of corrosion-resistant steel from nonsubject countries (***). The requested data provided by these 13 importers combined (as well as actual U.S. import statistics) are presented in table IV-2.

Table IV-2
Corrosion-resistant steel: U.S. imports subsequent to June 30, 2012

Country	July-Sept. 2012	Oct.-Dec. 2012	Total, July-Dec. 2012	Jan.-March 2013	April-June 2013	July-Sept. 2013	Oct.-Dec. 2013	Total, 2013
Questionnaire data (Quantity in *short tons*)								
Germany	***	***	***	***	***	***	***	***
Korea	***	***	***	***	***	***	***	***
Subtotal	84,569	68,115	152,684	61,997	63,099	66,406	61,997	253,499
Other sources	29,303	29,402	58,705	16,004	18,099	15,000	15,000	64,103
Total	113,872	97,517	211,389	78,001	81,198	81,406	76,997	317,602
U.S. import statistics (Quantity in *short tons*)								
Germany	8,675	9,320	8,997	([1])	([1])	([1])	([1])	([1])
Korea	47,384	50,637	38,657	([1])	([1])	([1])	([1])	([1])
Subtotal	56,059	59,957	47,654	([1])	([1])	([1])	([1])	([1])
Other sources	248,391	306,035	238,537	([1])	([1])	([1])	([1])	([1])
Total	304,450	365,993	286,191	([1])	([1])	([1])	([1])	([1])

[1] Not available.

Source: Compiled from data submitted in response to Commission questionnaires and from official Commerce statistics (HTS statistical numbers 7210.30.0030, 7210.30.0060, 7210.41.0000, 7210.49.0030, 7210.49.0090, 7210.49.0091, 7210.49.0095, 7210.61.0000, 7210.69.0000, 7210.70.6030, 7210.70.6060, 7210.70.6090, 7210.90.6000, 7210.90.9000, 7212.20.0000, 7212.30.1030, 7212.30.1090, 7212.30.3000, 7212.30.5000, and 7212.50.0000).

U.S. IMPORTERS' INVENTORIES

Table IV-3 presents data for inventories of U.S. imports of corrosion-resistant steel from Germany, Korea, and all other sources held in the United States. Two U.S. importers of the subject merchandise from Germany (***) held inventories of the subject merchandise in the United States during the period examined in these five-year reviews. Four U.S. importers of the subject merchandise from Korea (***) held inventories of the subject merchandise in the United States.

Table IV-3
Corrosion-resistant steel: U.S. importers' end-of-period inventories of imports, by source, 2006-11, January-June 2011, and January-June 2012

Item	Calendar year						January-June	
	2006	2007	2008	2009	2010	2011	2011	2012
Imports from Germany:								
Inventories (*short tons*)	***	***	***	***	***	***	***	***
Ratio to U.S. imports (*percent*)	***	***	***	***	***	***	***	***
Ratio to total shipments of imports (*percent*)	***	***	***	***	***	***	***	***
Imports from Korea:								
Inventories (*short tons*)	***	***	***	***	***	***	***	***
Ratio to U.S. imports (*percent*)	***	***	***	***	***	***	***	***
Ratio to total shipments of imports (*percent*)	***	***	***	***	***	***	***	***
Subtotal:								
Inventories (*short tons*)	68,709	65,044	41,670	19,696	19,840	27,408	43,445	26,336
Ratio to U.S. imports (*percent*)	11.6	15.1	12.4	9.6	9.1	9.1	14.6	7.1
Ratio to total shipments of imports (*percent*)	11.7	14.9	11.7	8.7	9.1	9.4	17.4	7.2
Imports from all other sources:								
Inventories (*short tons*)	147,660	97,224	78,658	55,993	68,751	66,967	74,371	84,447
Ratio to U.S. imports (*percent*)	8.9	8.7	7.1	8.7	7.8	7.0	7.9	7.4
Ratio to total shipments of imports (*percent*)	9.2	8.3	7.1	8.4	8.0	7.0	8.0	7.6
Imports from all sources:								
Inventories (*short tons*)	216,369	162,268	120,328	75,689	88,591	94,375	117,816	110,783
Ratio to U.S. imports (*percent*)	9.6	10.5	8.3	8.9	8.1	7.5	9.5	7.3
Ratio to total shipments of imports (*percent*)	9.9	10.1	8.1	8.5	8.2	7.5	10.0	7.5

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

CUMULATION CONSIDERATIONS

In assessing whether subject imports are likely to compete with each other and with the domestic like product with respect to cumulation, the Commission generally has considered the following four factors: (1) the degree of fungibility, including specific customer requirements and other quality-related questions; (2) presence of sales or offers to sell in the same geographic markets; (3) common channels of distribution; and (4) simultaneous presence in the market. Channels of distribution and fungibility (interchangeability) are discussed in Part II of this report. Additional information concerning geographical markets and simultaneous presence in the market is presented below.

Geographic Markets

As noted previously, corrosion-resistant steel production occurs throughout the United States and corrosion-resistant steel is shipped nationwide. Information summarizing national and regional markets and the shipment of corrosion-resistant steel is presented in Part II. As illustrated in table IV-4, the Mobile, AL, Customs district accounted for more than one-half of the imports of corrosion-resistant steel from the subject countries during 2011.[9] Of the corrosion-resistant steel imported into the United States from Germany during 2011, more than 90 percent entered through the following four Customs districts: Mobile, AL (50.8 percent), Detroit, MI (17.5 percent), Philadelphia, PA (13.4 percent), and Savannah, GA (9.0 percent). Almost three-fourths of U.S. imports of subject merchandise from Korea during 2011 entered through two Customs districts: Mobile, AL (54.7 percent) and Houston, TX (18.4 percent).

Presence in the Market

Table IV-5 presents information on the monthly presence of U.S. imports from Germany, Korea, and all other sources combined in the United States during the period examined in these third five-year reviews. These data show that imports of corrosion-resistant steel from the subject countries were present in the U.S. market in every month during the period examined from January 2006 to June 2012.

[9] Official Commerce statistics measure imports at the port of entry. Material imported into one district, however, may be shipped to another geographic region.

Table IV-4
Corrosion-resistant steel: U.S. imports from Germany and Korea, by Customs districts, 2006-11

Customs district	2006	2007	2008	2009	2010	2011
	Quantity of imports from Germany (*short tons*)					
Baltimore, MD	0	10	53	19	38	0
Boston, MA	0	569	3,125	367	445	892
Buffalo, NY	0	0	817	0	0	0
Charleston, SC	4	15	3	55	13	209
Charlotte, NC	34	4	0	0	1,207	405
Chicago, IL	313	7	118	22	195	40
Cleveland, OH	350	81	558	393	1,067	384
Columbia-Snake, OR	0	0	25	0	0	0
Detroit, MI	11,394	16,252	8,271	1,081	2,246	6,776
Houston-Galveston, TX	400	0	477	7	604	8
Laredo, TX	304	0	0	1,347	8	0
Milwaukee, WI	0	0	0	328	0	0
Minneapolis, MN	0	0	53	0	0	0
Mobile, AL	21,201	26,533	24,790	4,213	4,143	19,721
New Orleans, LA	0	449	21	9	0	65
New York, NY	251	501	339	299	499	496
Norfolk, VA	215	102	290	37	723	1,026
Philadelphia, PA	5,033	10,668	4,162	710	3,102	5,216
San Francisco, CA	0	22	0	9	0	0
San Juan, PR	0	0	0	1,224	0	4
Savannah, GA	5,554	8,922	3,392	325	353	3,501
Seattle, WA	0	0	33	0	0	0
St. Albans, VT	0	0	0	18	0	0
St. Louis, MO	128	66	103	67	107	64
Tampa, FL	115	0	0	0	0	0
Washington, DC	0	0	0	0	15	5

Table continued on following page.

Table IV-4--*Continued*
Corrosion-resistant steel: U.S. imports from Germany and Korea, by Customs districts, 2006-11

Customs district	2006	2007	2008	2009	2010	2011
	Quantity of imports from Korea (*short tons*)					
Anchorage, AK	0	4	0	0	0	0
Baltimore, MD	0	0	0	63	0	1,541
Buffalo, NY	34	30	0	5	34	40
Charleston, SC	0	0	6,469	9,132	0	0
Charlotte, NC	11,227	9,164	1,942	717	49	897
Chicago, IL	0	1,077	47	316	210	22
Cleveland, OH	0	12	0	12	7	0
Columbia-Snake, OR	16,538	21,725	18,897	6,983	6,413	6,347
Dallas-Fort Worth, TX	0	11	7	4	355	0
Detroit, MI	12	320	82	54	176	21
Great Falls, MT	0	0	15	0	0	48
Honolulu, HI	90	131	42	129	85	111
Houston-Galveston, TX	119,119	76,822	83,648	35,780	24,319	41,486
Laredo, TX	15	953	383	190	254	30
Los Angeles, CA	71,751	40,813	45,189	35,403	17,627	11,858
Miami, FL	0	0	0	0	0	9
Minneapolis, MN	0	0	0	44	0	0
Mobile, AL	149,449	127,712	85,999	56,004	91,030	123,415
New Orleans, LA	95,761	38,837	30,791	23,344	11,473	12,779
New York, NY	561	190	59	470	147	832
Pembina, ND	25	0	198	0	0	5
Philadelphia, PA	8,576	7,124	3,496	4,025	4,555	3,796
San Diego, CA	7	301	67	0	0	5
San Francisco, CA	4,635	5,277	5,295	4,473	376	1,447
San Juan, PR	530	516	3,488	2,627	1,660	0
Savannah, GA	37,133	17,379	13,318	8,196	5,468	11,388
Seattle, WA	7,151	1,998	1,436	411	779	771
Tampa, FL	18,442	15,909	17,142	12,930	4,510	8,668

Source: Compiled from official Commerce statistics (HTS statistical numbers 7210.30.0030, 7210.30.0060, 7210.41.0000, 7210.49.0030, 7210.49.0090, 7210.49.0091, 7210.49.0095, 7210.61.0000, 7210.69.0000, 7210.70.6030, 7210.70.6060, 7210.70.6090, 7210.90.6000, 7210.90.9000, 7212.20.0000, 7212.30.1030, 7212.30.1090, 7212.30.3000, 7212.30.5000, and 7212.50.0000).

Table IV-5
Corrosion-resistant steel: U.S. imports, by source and by month, January 2006 - June 2012

Source	Quantity (*short tons*)											
	Month											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
2006												
Germany	2,042	7,687	3,772	2,787	3,740	911	4,143	2,372	5,926	3,824	2,942	5,152
Korea	44,686	46,143	44,677	35,138	32,080	69,868	58,680	45,146	49,543	53,467	22,142	39,485
Subtotal	46,727	53,830	48,450	37,925	35,820	70,778	62,823	47,518	55,470	57,291	25,084	44,637
Other	239,275	221,247	316,641	286,229	317,903	294,227	356,868	315,551	337,543	370,040	301,702	242,794
Total	286,002	275,078	365,090	324,154	353,724	365,005	419,691	363,069	393,013	427,331	326,786	287,430
2007												
Germany	2,356	5,747	7,126	3,264	5,345	3,876	1,512	7,902	10,281	3,609	8,034	5,150
Korea	29,302	36,749	34,721	29,117	47,953	22,401	42,964	18,686	38,728	29,965	27,545	8,177
Subtotal	31,658	42,496	41,847	32,381	53,298	26,277	44,476	26,587	49,009	33,573	35,578	13,328
Other	209,009	212,848	216,331	210,180	213,177	185,822	179,689	151,953	185,915	154,982	102,516	96,219
Total	240,667	255,343	258,178	242,561	266,475	212,099	224,165	178,540	234,924	188,555	138,094	109,547
2008												
Germany	4,145	4,160	3,560	5,644	4,290	4,724	4,518	1,881	3,850	4,965	3,313	1,580
Korea	40,801	26,736	13,202	26,384	33,851	19,344	41,649	23,291	35,552	24,228	28,219	4,756
Subtotal	44,946	30,896	16,762	32,028	38,140	24,067	46,167	25,172	39,402	29,193	31,532	6,336
Other	148,276	100,910	169,513	100,016	194,450	136,519	154,336	161,877	232,046	186,896	128,084	130,419
Total	193,223	131,806	186,275	132,044	232,590	160,586	200,503	187,049	271,448	216,089	159,616	136,755
2009												
Germany	1,492	822	549	1,533	186	222	229	384	1,423	1,983	993	717
Korea	32,965	17,383	14,882	13,501	22,837	4,013	21,714	16,889	11,668	20,711	10,765	13,985
Subtotal	34,457	18,205	15,430	15,035	23,023	4,234	21,943	17,273	13,091	22,693	11,757	14,702
Other	109,824	98,210	124,820	119,735	74,741	56,880	62,839	57,045	89,082	75,359	69,480	82,094
Total	144,280	116,415	140,250	134,770	97,764	61,114	84,782	74,318	102,172	98,052	81,238	96,796

Table continued on following page.

Table IV-5--*Continued*
Corrosion-resistant steel: U.S. imports, by source and by month, January 2006 - June 2012

Source	Quantity (*short tons*)											
	Month											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
2010												
Germany	706	567	1,453	461	1,222	1,371	1,406	868	567	1,936	1,539	2,673
Korea	23,392	13,110	16,824	23,133	15,444	10,072	11,369	6,772	9,570	7,633	20,075	12,133
Subtotal	24,098	13,677	18,277	23,593	16,666	11,443	12,775	7,640	10,136	9,569	21,615	14,806
Other	96,538	96,437	135,327	126,857	144,095	149,367	122,652	148,650	102,199	123,170	90,192	81,445
Total	120,636	110,114	153,604	150,450	160,761	160,810	135,427	156,290	112,335	132,739	111,807	96,251
2011												
Germany	1,095	2,686	4,249	4,897	5,808	3,419	3,567	1,295	1,661	3,183	2,326	4,627
Korea	10,066	11,795	23,278	28,144	13,380	19,190	30,521	15,231	21,547	15,054	20,478	16,834
Subtotal	11,161	14,482	27,526	33,041	19,188	22,609	34,087	16,526	23,208	18,237	22,804	21,461
Other	107,595	87,315	120,352	161,331	130,504	172,071	179,223	123,342	116,684	147,544	113,501	115,676
Total	118,757	101,796	147,879	194,372	149,692	194,680	213,310	139,868	139,892	165,781	136,305	137,137
2012												
Germany	4,346	3,366	3,121	3,926	3,666	3,621						
Korea	21,283	33,109	16,299	20,604	47,835	21,056						
Subtotal	25,629	36,475	19,420	24,529	51,501	24,677						
Other	149,601	172,180	152,232	238,799	195,550	165,752						
Total	175,230	208,655	171,652	263,329	247,051	190,429						

Source: Compiled from official Commerce statistics (HTS statistical numbers 7210.30.0030, 7210.30.0060, 7210.41.0000, 7210.49.0030, 7210.49.0090, 7210.49.0091, 7210.49.0095, 7210.61.0000, 7210.69.0000, 7210.70.6030, 7210.70.6060, 7210.70.6090, 7210.90.6000, 7210.90.9000, 7212.20.0000, 7212.30.1030, 7212.30.1090, 7212.30.3000, 7212.30.5000, and 7212.50.0000).

THE INDUSTRY IN GERMANY

Overview

According to *Global Trade Atlas*, the top 12 export markets for German corrosion-resistant steel are European countries, followed by China, Mexico, and the United States (table IV-6).[10] During 2011, Germany's top 12 export markets accounted for 82.1 percent of total German exports of corrosion-resistant steel. China, Mexico, and the United States accounted for 2.2 percent, 1.9 percent, and 1.5 percent of total German exports of corrosion-resistant steel, respectively, in that same year. During 2011, 85.2 percent of German exports were shipped to countries that are members of the European Union.

Table IV-6
Corrosion-resistant steel: German exports, by top export markets, 2006-11

Export market	2006	2007	2008	2009	2010	2011
	Quantity of German exports (*short tons*)					
Poland	499,820	569,205	602,802	535,506	666,771	688,525
France	640,894	476,512	385,591	355,923	381,086	328,772
Czech Republic	279,575	320,810	254,658	218,701	263,816	269,780
Sweden	217,587	237,176	199,416	98,985	193,478	215,819
United Kingdom	335,757	336,421	299,827	186,034	226,705	196,233
Netherlands	221,375	213,471	210,300	126,611	169,530	180,798
Austria	309,696	348,977	312,944	246,248	199,598	172,437
Spain	264,078	228,826	239,550	180,158	191,323	165,219
Belgium	282,030	241,384	202,609	119,583	131,914	129,646
Italy	326,287	223,614	183,015	97,880	127,005	95,207
Slovakia	60,598	89,767	73,693	55,683	93,265	89,965
Switzerland	60,561	68,172	71,498	56,502	74,089	73,151
China	49,641	35,555	42,753	42,049	63,330	71,171
Mexico	127,190	110,561	98,241	33,328	61,902	60,352
United States	81,501	68,986	44,371	6,121	12,614	46,893
Subtotal	3,756,590	3,569,437	3,221,268	2,359,312	2,856,426	2,783,968
All other export markets	505,775	425,306	402,801	370,946	444,829	391,718
Total, all exports	4,262,365	3,994,743	3,624,069	2,730,258	3,301,255	3,175,686

Source: *Global Trade Atlas* (HTS subheadings 7210.30, 7210.41, 7210.49, 7210.61, 7210.70, 7212.20, 7212.30, and 7212.50).

[10] Canada was not a top export market for German corrosion-resistant steel during 2006-11 and such data are not included in table IV-6. German exports of corrosion-resistant steel to Canada amounted to 25,784 short tons in 2006, 17,162 short tons in 2007, 6,810 short tons in 2008, 1,244 short tons in 2009, 1,659 short tons in 2010, and 1,220 short tons in 2011. Exports to Canada accounted for a declining share of total German exports of corrosion-resistant steel during 2006-11: 0.6 percent during 2006 and 2007, 0.2 percent in 2008, 0.05 percent in 2009 and 2010, and 0.04 percent during 2011.

According to *Global Trade Atlas*, the top import source of German imports of corrosion-resistant steel is Belgium (table IV-7). German imports from Belgium during 2011 amounted to 1.6 million short tons and accounted for 33.9 percent of total German imports. Other leading German import sources included the following five European countries: Austria, Netherlands, Italy, France, and Luxembourg. With the exception of 2006, Germany has been a net importer of corrosion-resistant steel during the period examined in these third five-year reviews (compare tables IV-6 and IV-7).

Table IV-7
Corrosion-resistant steel: German imports, by source, 2006-11

Source country	2006	2007	2008	2009	2010	2011
	Quantity of German imports (*short tons*)					
Belgium	1,618,674	1,685,520	1,511,012	1,141,956	1,450,046	1,620,329
Austria	731,544	784,791	812,608	569,529	762,811	783,714
Netherlands	576,977	636,687	619,225	601,084	677,668	683,763
Italy	273,895	389,260	395,857	276,143	458,595	649,894
France	501,504	573,487	588,315	408,669	450,268	501,121
Luxembourg	228,146	202,345	185,797	150,806	221,975	207,496
China	20,871	62,769	37,636	3,467	17,609	97,045
Slovakia	13,103	32,966	52,092	42,585	44,293	43,805
United Kingdom	31,848	26,010	41,056	21,177	39,056	38,657
Taiwan	31	2,534	2,752	3,112	7,470	25,162
Australia	0	853	0	1	11,782	23,343
Sweden	18,519	11,264	9,895	23,319	22,901	20,865
Korea	2,875	10,367	8,016	11,396	19,503	18,918
United States	5,462	5,803	5,053	6,515	8,209	16,582
Finland	12,889	1,603	1,165	1,206	3,315	16,439
Subtotal	4,036,338	4,426,259	4,270,479	3,260,965	4,195,501	4,747,133
All other import sources	80,228	83,402	76,207	50,521	38,024	34,509
Total, all imports	4,116,566	4,509,661	4,346,686	3,311,486	4,233,525	4,781,642

Source: *Global Trade Atlas* (HTS subheadings 7210.30, 7210.41, 7210.49, 7210.61, 7210.70, 7212.20, 7212.30, and 7212.50).

The Commission identified four German producers of corrosion-resistant steel (Hoesch, Krupp,[11] Preussag, and Thyssen) in the original investigations and four such producers (Bremen (owned by Arbed), EKO (owned by Usinor), Salzgitter (formerly known as Preussag), and ThyssenKrupp) in the first five-year reviews.[12] In the second five-year reviews, the Commission received questionnaire responses from the following four German producers: Arcelor (Germany),[13] Corus,[14] Salzgitter, and ThyssenKrupp. The Commission reported that the four responding German producers represented all of the corrosion-resistant steel capacity in Germany in 2005.[15]

The German interested parties that participated in the adequacy phase of these current third five-year reviews identified the following three major producers of corrosion-resistant steel in Germany: ThyssenKrupp Steel Europe AG ("ThyssenKrupp"); Salzgitter Flachstahl GmbH ("Salzgitter"); and ArcelorMittal FCE Germany GmbH (including Bremen and Eisenhuttenstadt facilities) ("ArcelorMittal").[16] They also reported that ThyssenKrupp accounted for *** percent of total exports to the United States of corrosion-resistant steel from Germany during 2011.[17] Foreign producer questionnaires were sent to the three German producers identified in the adequacy phase of these current third five-year reviews and all three firms provided complete responses.[18] These three responding German producers are estimated by *** to currently account for all German capacity to produce corrosion-resistant steel. The responding firms' shares of reported 2011 German production of corrosion-resistant steel and the share of their most recent fiscal year sales represented by corrosion-resistant steel are presented in table IV-8. Table IV-9 presents comparative information available from the original investigations, the first and second reviews, and these third five-year reviews.

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[11] Hoesch and Krupp merged in 1993 to form Krupp Hoesch Stahl, which then merged with Thyssen in 1997, to form ThyssenKrupp.

[12] *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, and the United Kingdom, Inv. Nos. 701-TA-319-332, 334, 336-342, 344, and 347-353 (Final) and Inv. Nos. 731-TA-573-579, 581-592, 594-597, 599-609, and 612-619 (Final),* USITC Publication 2664 (August 1993), p. I-106; *Certain Carbon Steel Products From Australia, Belgium, Brazil, Canada, Finland, France, Germany, Japan, Korea, Mexico, The Netherlands, Poland, Romania, Spain, Sweden, Taiwan, and The United Kingdom Investigations Nos. AA1921-197(Review), 701-TA-231, 319-320, 322, 325-328, 340, 342, and 348-350 (Review), and 731-TA-573-576, 578, 582-587, 604, 607-608, 612, and 614-618 (Review),* USITC Publication 3364 (November 2000), p. CORROSION-IV-5.

[13] Arcelor was created in February 2002 as a merger of three companies (Arbed, Acedia, and Usinor). Arcelor plants included Stahlwerke Bremen and EKO. In June 2006, Arcelor announced a merger with Mittal.

[14] Corus was created in October 1999, as a merger of Hoogovens and British Steel. Hoogovens owned the Hille & Muller group (including Trierer Walzwerk).

[15] *Investigation Nos. AA1921-197 (Second Review); 701-TA-319, 320, 325-327, 348, and 350 (Second Review); and 731-TA-573, 574, 576, 578, 582-587, 612, and 614-618 (Second Review): Certain Carbon Steel Products from Australia, Belgium, Brazil, Canada, Finland, France, Germany, Japan, Korea, Mexico, Poland, Romania, Spain, Sweden, Taiwan, and the United Kingdom - Staff Report, INV-DD-159*, November 22, 2006, p. CORE IV-46.

[16] *Response to Notice of Institution on behalf of ThyssenKrupp Steel Europe AG, ThyssenKrupp Steel USA, LLC, ThyssenKrupp Steel North America, Inc., and Salzgitter Flachstahl GmbH*, February 2, 2012, pp. 4-5.

[17] *Ibid*., p. 18.

[18] In addition, Corus, which accounted for *** percent of total 2005 German production of corrosion-resistant steel, provided a response to the Commission's questionnaire in the previous second five-year review. Tata Steel acquired the German corrosion-resistant steel operations formerly owned by Corus (Hille & Muller GmbH and Trierer Walzwerk GmbH). Hille & Muller and Trierer Walzwerk were identified as corrosion-resistant steel producers in Germany ***. No response to the foreign producer questionnaire was received from Hille & Muller and Trierer Walzwerk.

Table IV-8
Corrosion-resistant steel: German producers' share of reported 2011 production and share of firms' most recent fiscal year sales represented by corrosion-resistant steel

* * * * * * *

Table IV-9
Corrosion-resistant steel: Comparison of select German industry data, 1992, 1999, 2005, and 2011

Item	1992	1999	2005	2011
Capacity (*1,000 short tons*)	***	***	***	6,641
Production (*1,000 short tons*)	***	***	***	6,129
Capacity utilization (*percent*)	***	***	***	92.3
Exports/shipments (*percent*)	***	***	***	***
Inventories/shipments (*percent*)	***	***	***	14.2

Note.-Data for 1992 were provided by Hoesch, Krupp, Preussag, and Thyssen. Data for 1999 were provided by Bremen, EKO, Salzgitter, and ThyssenKrupp. Data for 2005 were provided by Arcelor (Germany), Corus, Salzgitter, and ThyssenKrupp. Data for 2011 were provided by ArcelorMittal, Salzgitter, and ThyssenKrupp.

Source: *Investigation Nos. AA1921-197 (Second Review); 701-TA-319, 320, 325-327, 348, and 350 (Second Review); and 731-TA-573, 574, 576, 578, 582-587, 612, and 614-618 (Second Review): Certain Carbon Steel Products from Australia, Belgium, Brazil, Canada, Finland, France, Germany, Japan, Korea, Mexico, Poland, Romania, Spain, Sweden, Taiwan, and the United Kingdom - Staff Report*, INV-DD-159, November 22, 2006, table CORE IV-36; and compiled from data submitted in response to Commission questionnaires.

As noted above, the composition of the German industry producing corrosion-resistant steel has changed over time. In addition, as presented in table IV-10, German producers reported in their questionnaire responses several operational or organizational changes since January 1, 2006.

Table IV-10
Corrosion-resistant steel: Reported operational or organizational changes by German producers since January 1, 2006

* * * * * * *

Corrosion-Resistant Steel Operations

Table IV-11 presents the German industry's capacity, production, shipments, and inventories of corrosion-resistant steel for 2006-11, as well as for interim (January-June) 2011 and 2012.

Table IV-11
Corrosion-resistant steel: German capacity, production, shipments, and inventories, 2006-11, January-June 2011, and January-June 2012

Item	Calendar year						January-June	
	2006	2007	2008	2009	2010	2011	2011	2012
	Quantity (*short tons*)							
Capacity	7,530,399	7,466,234	7,304,461	6,262,569	7,169,185	6,641,471	3,436,444	3,247,829
Production	7,452,724	7,239,974	6,746,216	5,179,748	6,629,954	6,129,470	3,305,686	3,079,986
Ending inventories	1,079,404	1,247,063	1,230,332	988,314	981,833	881,592	774,001	717,560
Shipments: Internal consumption	***	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***	***
Exports: United States	***	***	***	***	***	***	***	***
European Union	***	***	***	***	***	***	***	***
Asia	***	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***	***
Total shipments	7,322,587	7,072,316	6,762,948	5,421,767	6,636,433	6,229,711	3,418,846	3,226,414
	Ratios and shares (*percent*)							
Capacity utilization	99.0	97.0	92.4	82.7	92.5	92.3	96.2	94.8
Inventories to production	14.5	17.2	18.2	19.1	14.8	14.4	11.7	11.6
Inventories to total shipments	14.7	17.6	18.2	18.2	14.8	14.2	11.3	11.1
Share of total quantity: Internal consumption	***	***	***	***	***	***	***	***
Home market	***	***	***	***	***	***	***	***
Exports to-- United States	***	***	***	***	***	***	***	***
European Union	***	***	***	***	***	***	***	***
Asia	***	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***	***

Table continued on following page.

Table IV-11--*Continued*
Corrosion-resistant steel: German capacity, production, shipments, and inventories, 2006-11, January-June 2011, and January-June 2012

Item	Calendar year						January-June	
	2006	2007	2008	2009	2010	2011	2011	2012
Value (*$1,000*)								
Commercial shipments: Home market	***	***	***	***	***	***	***	***
Exports to-- United States	***	***	***	***	***	***	***	***
European Union	***	***	***	***	***	***	***	***
Asia	***	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***	***
Total shipments	4,297,676	5,113,820	5,799,056	3,921,705	4,625,303	5,221,550	2,866,537	2,456,809
Average unit value (*dollars per short ton*)								
Commercial shipments: Home market	***	***	***	***	***	***	***	***
Exports to-- United States	***	***	***	***	***	***	***	***
European Union	***	***	***	***	***	***	***	***
Asia	***	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***	***
Total shipments	664	816	966	807	766	929	933	835

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

German capacity, production, capacity utilization and total shipments fell from 2006 to 2009, increased in 2010, but fell thereafter. The German mills' inventories of corrosion-resistant steel increased from 2006 to 2007, but declined thereafter.[19]

Home market sales accounted for the largest share of total shipments made by the German producers, ranging from *** percent to *** percent throughout the period examined in these reviews, whereas exports to the European Union accounted for the next largest share of total shipments, ranging from *** percent to *** percent. German producers ArcelorMittal and ThyssenKrupp reported exports to the United States during the entire period for which data were collected in these third five-year reviews. Exports to the United States, which accounted for *** percent of total shipments by German producers, fell from 2006 to 2009, but increased in 2011 to a level greater than that reported in 2006. German exports to the United States during the first half of 2012 were higher than such exports reported during

[19] *** reported maintaining inventories of corrosion-resistant steel in the United States.

the comparable period of 2011. ThyssenKrupp is *** exporter of German subject product to the United States, and the majority of its shipments consist of corrosion-resistant steel for automotive applications. ThyssenKrupp explained that the 2011 increase in exports to the United States is "temporary" and is "a result of an increase in prep tons shipments to facilitate U.S. production and sales by ThyssenKrupp Steel USA as it ramps up domestic like product production."[20] German producers' exports to Asia, which accounted for *** of total German shipments in each of the periods examined, were shipped to the following *** destinations in Asia: ***. Other export markets identified by the German producers, which accounted for *** percent of total shipments in each of the periods examined, include ***.

Alternative Products

As shown in table IV-12, the majority of corrosion-resistant steel production by German mills is subject merchandise, primarily hot-dip galvanized steel. Nonetheless, German mills reported production of micro-alloy steel and other forms of nonsubject merchandise. ***. *** reported producing nonsubject micro-alloy steel that is specifically excluded from the scope, whereas *** reported producing various nonsubject alloy and stainless steel corrosion-resistant steel on the same equipment.

Table IV-12
Corrosion-resistant steel: German overall capacity and production, by type of steel, 2006-11, January-June 2011, and January-June 2012

* * * * * * *

THE INDUSTRY IN KOREA

Overview

According to *Global Trade Atlas*, 10 of the top 15 export markets for Korean corrosion-resistant steel are Asian countries (table IV-13).[21] The top export market for Korean corrosion-resistant steel is China. Korean exports to China during 2011 and 2012 amounted to 1.053 million short tons and 1.079 million short tons, respectively, and such exports accounted for 20.4 percent and 18.6 percent of total Korean exports during 2011 and 2012, respectively. Other leading Korean export markets included the following four countries: Japan, Thailand, Mexico, and the United States. The share of total Korean exports of corrosion-resistant steel held by the United States fell from 14.2 percent during 2006 to 3.4 percent during 2010, before rising to 5.4 percent during 2011 and further to 5.9 percent during 2012. Asian countries accounted for 64.0 percent of total Korean exports during 2012.

[20] Hearing transcript, pp. 196-197 (Pierce); pp. 201-202 (Grunhage); and questionnaire response of ThyssenKrupp Steel Europe AG.

[21] Canada was not one of the top 15 export markets for Korean corrosion-resistant steel based on 2012 export quantities. Therefore, data for Korean exports to Canada are not included in table IV-13. Korean exports of corrosion-resistant steel to Canada amounted to 97,934 short tons in 2006, 49,833 short tons in 2007, 41,096 short tons in 2008, 48,107 short tons in 2009, 46,304 short tons in 2010, 44,676 short tons in 2011, and 72,585 short tons in 2012. Exports to Canada accounted for a fluctuating share of total Korean exports of corrosion-resistant steel during 2006-12: 2.6 percent during 2006, 1.1 percent in 2007, 0.9 percent in 2008, 1.2 percent in 2009, 0.9 percent in 2010, 0.9 percent in 2011, and 1.2 percent in 2012.

Table IV-13
Corrosion-resistant steel: Korean exports, by export market, 2006-12

Export market	2006	2007	2008	2009	2010	2011	2012
	Quantity of Korean exports (*short tons*)						
China	692,826	827,554	741,111	754,496	1,104,977	1,053,266	1,079,431
Japan	367,584	393,316	398,532	253,561	445,107	567,633	552,745
Thailand	196,722	234,141	272,855	218,328	309,866	320,530	370,168
Mexico	169,818	259,115	341,508	232,201	375,809	360,645	343,794
United States	529,554	367,975	290,616	187,812	174,280	280,738	341,366
India	87,917	113,604	169,610	168,380	211,517	229,703	262,445
Russia	17,579	34,414	41,741	34,838	60,310	96,000	188,876
Slovenia	1,019	80,693	140,186	106,682	144,164	167,487	176,110
Indonesia	74,875	111,338	118,206	80,760	104,329	112,979	168,147
Belgium	132,261	232,933	256,347	120,539	128,798	166,955	164,375
Hong Kong	311,766	289,365	200,834	223,676	234,229	136,613	153,470
Iran	58,005	92,496	86,478	131,326	111,006	176,580	135,846
Saudi Arabia	82,064	77,361	72,044	75,945	71,706	85,172	117,766
Poland	8,806	47,751	68,974	109,049	74,890	88,529	117,466
Malaysia	127,284	121,699	124,132	76,010	80,053	79,670	109,378
Subtotal	2,858,080	3,283,755	3,323,174	2,773,603	3,631,041	3,922,500	4,281,383
All other export markets	867,020	1,245,159	1,390,823	1,210,595	1,470,388	1,251,130	1,529,152
Total, all export markets	3,725,100	4,528,914	4,713,997	3,984,198	5,101,429	5,173,630	5,810,535

Source: *Global Trade Atlas* (HTS subheadings 7210.30, 7210.41, 7210.49, 7210.61, 7210.70, 7212.20, 7212.30, and 7212.50).

According to *Global Trade Atlas*, Korea is a substantial net exporter of corrosion-resistant steel, with smaller volumes of corrosion-resistant steel being imported into Korea from a number of countries (compare tables IV-13 and IV-14). China and Japan are the top two sources of corrosion-resistant steel imported by Korea. Korean imports from China during 2011 and 2012 accounted for 53.5 percent and 58.5 percent of total Korean imports, respectively. Korean imports from Japan during 2011 and 2012 accounted for 43.3 percent and 38.9 percent of total Korean imports, respectively. The share of total Korean imports of corrosion-resistant steel held by the United States accounted for less than 0.003 percent during 2006-12.

Table IV-14
Corrosion-resistant steel: Korean imports, by source, 2006-11

Source country	2006	2007	2008	2009	2010	2011	2012
	Quantity of Korean imports (*short tons*)						
China	192,963	206,668	196,446	117,515	428,375	846,599	815,128
Japan	371,365	338,415	281,096	195,421	431,309	685,515	542,798
France	117	0	150	1,495	6,065	4,695	14,919
Taiwan	8,295	211	1,066	15,948	6,164	32,647	10,615
Russia	0	0	128	18	9	208	5,825
Sweden	45	43	484	2,682	3,336	3,092	1,548
Germany	196	206	529	320	1,073	1,603	1,297
United States	1,217	1,144	1,131	1,031	1,258	2,024	864
Italy	16	124	168	166	174	426	247
Belgium	5	8	59	643	2,034	691	197
Spain	0	12	119	33	139	243	183
Mexico	102	1	7	965	3,029	23	137
Thailand	17	68	118	229	89	289	136
Hong Kong	139	581	535	0	0	1,000	127
Czech Republic	92	24	33	47	39	49	117
Subtotal	574,569	547,505	482,069	336,513	883,093	1,579,104	1,394,138
All other import sources	902	3,528	3,282	5,637	1,180	3,201	402
Total, all import sources	575,471	551,033	485,351	342,150	884,273	1,582,305	1,394,540

Source: *Global Trade Atlas* (HTS subheadings 7210.30, 7210.41, 7210.49, 7210.61, 7210.70, 7212.20, 7212.30, and 7212.50).

The Commission identified five Korean producers of corrosion-resistant steel in the original investigations (Dongbu, POCOS, POSCO, PSI, and Union). During 1999, prior to completion of the Commission's first five-year reviews, Hyundai began production of corrosion-resistant steel, Pohang (PSI) and POCOS merged, and SeAH began production of corrosion-resistant steel. In the first five-year review of the orders completed in 2000, the Commission identified six producers of corrosion-resistant steel (Dongbu, Hyundai, Pohang (PSI)/POCOS, POSCO, SeAH, and Union Steel). After the first five-year reviews, TCC began production of nondiffusion annealed nickel-plated corrosion-resistant steel in 2001 and diffusion annealed nickel-plated corrosion-resistant steel in 2005. In the second five-year reviews completed in 2007, the Commission received questionnaire responses from the following seven Korean producers of corrosion-resistant steel: Dongbu, Hyundai, POCOS, POSCO, SeAH, TCC, and Union. The seven responding Korean producers were believed to have represented *** percent of the corrosion-resistant steel capacity in Korea at that time.[22]

The Korean interested parties that participated in the adequacy phase of these current third five-year reviews identified the following five Korean producers of corrosion-resistant steel: Dongbu, Hyundai HYSCO, POSCO, SeAH, and Union.[23] The domestic interested parties also identified Jinbang Steel Korea Co., Ltd. ("Jinbang") and Seil Steel Co., Ltd. ("Seil") as producers of corrosion-resistant steel in Korea.[24] Foreign producer questionnaires were sent to all Korean producers identified in the adequacy phase of these current third five-year reviews and complete responses were received from the following five producers: Dongbu Steel Co., Ltd.; Hyundai HYSCO; POSCO; Posco Coated & Color Steel Co., Ltd. (POSCO C&C); and Union Steel. No responses were received from SeAH, Jinbang, and Seil. The five responding Korean producers are estimated by *** to account for *** percent of total capacity of the subject merchandise in Korea. The five responding firms' shares of reported 2011 Korean production of corrosion-resistant steel and the share of their most recent fiscal year sales represented by corrosion-resistant steel are presented in table IV-15. Table IV-16 presents comparative information available from the original investigations, the first and second reviews, and these third five-year reviews.

Table IV-15
Corrosion-resistant steel: Korean producers' share of reported 2011 production and share of firms' most recent fiscal year sales represented by corrosion-resistant steel

* * * * * * *

[22] *Investigation Nos. AA1921-197 (Second Review); 701-TA-319, 320, 325-327, 348, and 350 (Second Review); and 731-TA-573, 574, 576, 578, 582-587, 612, and 614-618 (Second Review): Certain Carbon Steel Products from Australia, Belgium, Brazil, Canada, Finland, France, Germany, Japan, Korea, Mexico, Poland, Romania, Spain, Sweden, Taiwan, and the United Kingdom - Staff Report, INV-DD-159*, November 22, 2006, p. CORE IV-73.

[23] *Response to Notice of Institution on behalf of POSCO, Dongbu, Union, and Hyundai HYSCO*, February 2, 2012, p. 6.

[24] *Response to Notice of Institution on behalf of AK Steel, ArcelorMittal USA, Nucor, SDI, and U.S. Steel*, February 2, 2012, exh. 14.

Table IV-16
Corrosion-resistant steel: Comparison of select Korean industry data, 1992, 1999, 2005, and 2011

Item	1992	1999	2005	2011
Capacity (*1,000 short tons*)	3,139	***	8,441	11,776
Production (*1,000 short tons*)	2,944	***	7,344	11,006
Capacity utilization (*percent*)	93.8	***	87.0	93.5
Exports/shipments (*percent*)	46.0	***	33.6	42.4
Inventories/shipments (*percent*)	5.2	***	4.6	4.1

Note.--Data for 1992 were provided by Dongbu and Union, as well as POSCO and its related companies POCOS and PSI. Data for 1999 were provided by Dongbu, Hyundai, Pohang, Pohang-Coated, and Union Steel. Data for 2005 were provided by Dongbu, Hyundai, POCOS, POSCO, SeAH, TCC, and Union. Data for 2011 were provided by Dongbu, Hyundai HYSCO, POSCO, POSCO C&C, and Union.

Source: *Investigation Nos. AA1921-197 (Second Review); 701-TA-319, 320, 325-327, 348, and 350 (Second Review); and 731-TA-573, 574, 576, 578, 582-587, 612, and 614-618 (Second Review): Certain Carbon Steel Products from Australia, Belgium, Brazil, Canada, Finland, France, Germany, Japan, Korea, Mexico, Poland, Romania, Spain, Sweden, Taiwan, and the United Kingdom - Staff Report*, INV-DD-159, November 22, 2006, table CORE IV-54; and compiled from data submitted in response to Commission questionnaires.

As noted above, the composition of the Korean industry producing corrosion-resistant steel has changed over time. In addition, as presented in table IV-17, four Korean producers reported in their questionnaire responses several operational or organizational changes since January 1, 2006. ***.

Table IV-17
Corrosion-resistant steel: Reported operational or organizational changes by Korean producers since January 1, 2006

* * * * * * *

Corrosion-Resistant Steel Operations

Table IV-18 presents the Korean industry's capacity, production, shipments, and inventories of corrosion-resistant steel for 2006-11, as well as for interim (January-June) 2011 and 2012.

Table IV-18
Corrosion-resistant steel: Korean capacity, production, shipments, and inventories, 2006-11, January-June 2011, and January-June 2012

Item	Calendar year						January-June	
	2006	2007	2008	2009	2010	2011	2011	2012
	Quantity (*short tons*)							
Capacity	9,829,599	11,191,345	11,200,828	10,962,816	11,694,347	11,776,272	5,873,673	6,147,228
Production	9,307,289	10,626,852	10,585,711	8,886,926	11,342,209	11,006,275	5,549,297	5,880,285
Ending inventories	444,628	543,253	489,824	263,398	408,080	452,292	458,115	462,026
Shipments: Internal consumption	***	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***	***
Exports: United States	511,807	393,352	330,950	189,320	147,729	262,488	123,547	158,922
European Union	335,347	751,482	866,536	564,805	582,646	685,510	333,081	398,291
Asia	1,816,433	2,049,565	1,944,373	1,788,197	2,343,953	2,469,612	1,117,776	1,318,802
All other markets	654,008	831,012	1,056,959	893,367	1,276,406	1,225,326	576,895	643,899
Total exports	3,317,595	4,025,411	4,198,818	3,435,689	4,350,734	4,642,936	2,151,299	2,519,914
Total shipments	9,218,455	10,528,228	10,639,139	9,113,351	11,197,524	10,962,064	5,499,263	5,870,551
	Ratios and shares (*percent*)							
Capacity utilization	94.7	95.0	94.5	81.1	97.0	93.5	94.5	95.7
Inventories to production	4.8	5.1	4.6	3.0	3.6	4.1	4.1	3.9
Inventories to total shipments	4.8	5.2	4.6	2.9	3.6	4.1	4.2	3.9
Share of total quantity: Internal consumption	***	***	***	***	***	***	***	***
Home market	***	***	***	***	***	***	***	***
Exports to-- United States	5.6	3.7	3.1	2.1	1.3	2.4	2.2	2.7
European Union	3.6	7.1	8.1	6.2	5.2	6.3	6.1	6.8
Asia	19.7	19.5	18.3	19.6	20.9	22.5	20.3	22.5
All other markets	7.1	7.9	9.9	9.8	11.4	11.2	10.5	11.0
Total exports	36.0	38.2	39.5	37.7	38.9	42.4	39.1	42.9

Table continued on following page.

Table IV-18--*Continued*
Corrosion-resistant steel: Korean capacity, production, shipments, and inventories, 2006-11, January-June 2011, and January-June 2012

Item	Calendar year						January-June	
	2006	2007	2008	2009	2010	2011	2011	2012
	Value (*$1,000*)							
Commercial shipments: Home market	***	***	***	***	***	***	***	***
Exports to-- United States	395,634	314,886	323,689	142,963	130,051	256,534	118,882	147,337
European Union	228,869	595,455	826,641	399,994	476,574	634,229	310,562	345,658
Asia	1,207,541	1,454,859	1,698,349	1,264,215	1,959,772	2,310,541	989,740	1,159,149
All other markets	461,316	634,206	969,289	655,175	1,071,541	1,169,894	566,996	561,752
Total exports	2,293,360	2,999,406	3,817,968	2,462,347	3,637,938	4,371,198	1,986,180	2,213,896
Total shipments	6,140,511	7,450,738	8,819,887	6,309,435	9,161,030	10,287,486	5,123,387	4,946,782
	Average unit value (*dollars per short ton*)							
Commercial shipments: Home market	***	***	***	***	***	***	***	***
Exports to-- United States	773	801	978	755	880	977	962	927
European Union	682	792	954	708	818	925	932	868
Asia	665	710	873	707	836	936	885	879
All other markets	705	763	917	733	839	955	983	872
Total exports	691	745	909	717	836	941	923	879
Total shipments	690	722	849	710	831	950	942	881

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

Korean capacity, production, capacity utilization, and total shipments fluctuated in a generally upward trend throughout the period examined in these third five-year reviews. Capacity increased from 2006 to 2008 and from 2009 to 2011 as four of the five responding Korean producers opened additional facilities and/or production lines during the period examined in these five-year reviews (tables IV-17 and IV-18). The decline in capacity from 2008 to 2009 is attributable to reported declines by ***. The firm explained that its reported capacity is based on its production plan and not the nominal capacity. It noted further that its "***." The Korean mills' inventories of corrosion-resistant steel also fluctuated, but were reported at higher levels in 2011 than in 2006.[25]

Home market sales accounted for the majority of total shipments made by the Korean producers, ranging from *** percent to *** percent throughout the period examined in these reviews, whereas exports to other countries throughout the Asian region (primarily ***) accounted for the next largest share of total shipments, ranging from 18.3 percent to 22.5 percent. Korean producers *** reported exports to the United States during the entire period for which data were collected in these third five-year reviews, whereas ***. Exports to the United States fell consistently from 2006 to 2010, but increased during 2011 both on the basis of quantity and as a share of total shipments. Korean exports to the United States were also higher during the first half of 2012 as compared with the first half of 2011. Korean producers' exports to the European Union, which accounted for between 3.6 and 8.1 percent of total Korean shipments in each of the periods examined, were shipped primarily to the following five destinations in the European Union: ***. Other export markets identified by the Korean producers, which accounted for between 7.1 percent and 11.4 percent of total shipments in each of the periods examined, include ***.

Alternative Products

As shown in table IV-19, the majority of corrosion-resistant steel production by Korean mills is subject merchandise, primarily hot-dip galvanized steel. Nonetheless, all responding Korean mills reported production of other forms of subject merchandise. *** on the same equipment used in the production of the subject merchandise.

Table IV-19
Corrosion-resistant steel: Korean overall capacity and production, by type of steel, 2006-11, January-June 2011, and January-June 2012

* * * * * * *

[25] *** reported maintaining inventories of corrosion-resistant steel in the United States.

THE COMBINED INDUSTRIES IN GERMANY AND KOREA

Table IV-20 presents aggregate data for the German and Korean industry's capacity, production, shipments, and inventories of corrosion-resistant steel for 2006-11, as well as for interim (January-June) 2011 and 2012.

Table IV-20
Corrosion-resistant steel: Aggregate German and Korean capacity, production, shipments, and inventories, 2006-11, January-June 2011, and January-June 2012

Item	Calendar year						January-June	
	2006	2007	2008	2009	2010	2011	2011	2012
Quantity (*short tons*)								
Capacity	17,359,998	18,657,579	18,505,289	17,225,385	18,863,532	18,417,743	9,310,117	9,395,057
Production	16,760,013	17,866,826	17,331,927	14,066,674	17,972,163	17,135,745	8,854,983	8,960,271
Ending inventories	1,524,032	1,790,316	1,720,156	1,251,712	1,389,913	1,333,884	1,232,116	1,179,586
Shipments:								
Internal consumption	1,172,929	1,008,848	1,006,760	786,400	769,720	743,852	405,647	541,044
Commercial home market shipments	8,983,567	9,613,186	9,515,345	8,201,037	10,105,441	9,281,443	4,997,206	4,695,056
Exports:								
United States	***	***	***	***	***	***	***	***
European Union	***	***	***	***	***	***	***	***
Asia	***	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***	***
Total shipments	16,541,042	17,600,544	17,402,087	14,535,118	17,833,957	17,191,775	8,918,109	9,096,965
Ratios and shares (*percent*)								
Capacity utilization	96.5	95.8	93.7	81.7	95.3	93.0	95.1	95.4
Inventories to production	9.1	10.0	9.9	8.9	7.7	7.8	7.0	6.6
Inventories to total shipments	9.2	10.2	9.9	8.6	7.8	7.8	6.9	6.5
Share of total quantity:								
Internal consumption	7.1	5.7	5.8	5.4	4.3	4.3	4.5	5.9
Home market	54.3	54.6	54.7	56.4	56.7	54.0	56.0	51.6
Exports to--								
United States	***	***	***	***	***	***	***	***
European Union	***	***	***	***	***	***	***	***
Asia	***	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***	***

Table continued on following page.

Table IV-20--*Continued*
Corrosion-resistant steel: Aggregate German and Korean capacity, production, shipments, and inventories, 2006-11, January-June 2011, and January-June 2012

Item	Calendar year						January-June	
	2006	2007	2008	2009	2010	2011	2011	2012
Value (*$1,000*)								
Commercial shipments: Home market	6,133,206	7,186,914	8,228,373	6,045,989	8,116,619	8,793,418	4,710,443	4,068,780
Exports to-- United States	***	***	***	***	***	***	***	***
European Union	***	***	***	***	***	***	***	***
Asia	***	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***	***
Total shipments	10,438,187	12,564,558	14,618,943	10,231,140	13,786,333	15,509,036	7,989,924	7,403,591
Average unit value (*dollars per short ton*)								
Commercial shipments: Home market	683	748	865	737	803	947	943	867
Exports to-- United States	***	***	***	***	***	***	***	***
European Union	***	***	***	***	***	***	***	***
Asia	***	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***	***
Total shipments	679	757	892	744	808	943	939	865

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

TARIFF OR NON-TARIFF BARRIERS TO TRADE

The Commission asked producers of corrosion-resistant steel in Korea to identify tariff or non-tariff barriers to trade (for example, antidumping or countervailing duty findings or remedies, tariffs, quotas, or regulatory barriers) concerning their exports of corrosion-resistant steel to countries other than the United States. Korean producer Dongbu reported that corrosion-resistant steel produced in Korea is currently subject to 4-8 percent tariffs by China, 5-10 percent tariffs by Indonesia, 4 percent by the Philippines, and 5 percent by Thailand.

The Commission also asked the subject foreign producers to identify ongoing investigations in countries other than the United States that could result in tariff or non-tariff barriers to trade for their exports of corrosion-resistant steel. The Korean producers reported that flat-rolled products of iron or non-alloy steel, more specifically coated or galvanized (prepainted) steel (except for Alcot), has been the focus of an ongoing investigation in Brazil since 2011. They also reported in their questionnaire responses that certain hot-dip plated or coated with aluminum zinc alloy products of cold-rolled steel and painted hot-dip galvanized products of cold-rolled steel, including galvalume, has been the focus of an ongoing investigation in Thailand since 2011. Effective January 10, 2013, Thailand imposed

antidumping duties on imports of pre-painted galvanized and zinc-aluminum coated steel, as well as unpainted zinc-aluminum coated steel from Korea for a five-year period. Thailand's antidumping duties on imports of pre-painted galvanized and zinc-aluminum coated steel from Korea were levied at the following rates: POSCO Coated & Color, DK Dongshin, and Hyundai Hysco (2.51 percent); Dongbu Steel (5.95 percent); Union Steel (zero duty); and all other Korean mills (10.25 percent). Thailand's antidumping duties on imports of unpainted zinc-aluminum coated steel from Korea were levied at the following rates: Dongbu Steel (16.25 percent); Union Steel (13.82 percent); POSCO Coated & Color and Hyundai Hysco (15.40 percent); all other Korean mills (22.55 percent).[26]

The German producers of corrosion-resistant steel indicated in their responses that they are not aware of such tariff or non-tariff barriers to trade concerning their exports of corrosion-resistant steel to countries other than the United States nor are they aware of any ongoing investigations in countries other than the United States that could result in tariff or non-tariff barriers to trade for their exports of corrosion-resistant steel.

GLOBAL MARKET

Production

Global production of coated steel sheet products has grown considerably in recent years. According to one published source,[27] global production of galvanized steel sheet increased by *** percent during 2009-12. In terms of quantity, *** of the growth was accounted for by Asia which constituted *** of the increase in global production during this period; in turn production growth in China accounted for about *** percent of the production increase in Asia. During 2009-12, the rate of production growth was *** during 2009-10, before ***, both globally and in most regions (table IV-21). Production is forecasted to *** during 2013-16, with Asia continuing to account for *** of global production and China accounting for *** of production in Asia (table IV-22).[28]

Table IV-21
Galvanized steel sheet: Production globally, by region, and by selected country, 2009-12

*	*	*	*	*	*	*

Table IV-22
Galvanized steel sheet: Forecast of production globally, by region, and by selected country, 2013-16

*	*	*	*	*	*	*

[26] "AD duties imposed on certain hot dip plated or coated with aluminum zinc alloys of cold rolled steel from China, South Korea and Taiwan," Iron and Steel Institute of Thailand, January 15, 2013, accessed on January 31, 2013 at http://www.isit.or.th/modules.php?mod=News&file=view&ID=5464.

[27] ***.

[28] Production data compiled by *** are for galvanized steel sheet which constitutes the great majority of corrosion-resistant steel products but does not include other products within the product scope for corrosion-resistant steel products such as steel coated with aluminum, nickel, copper, etc. so production is understated. The *** data do not include tinplated steel which is excluded from the product scope for corrosion-resistant steel products.

Consumption

Data compiled by *** on historical, current, and forecasted global consumption of galvanized steel sheet are presented in tables IV-23 through IV-24.[29] Worldwide consumption of galvanized steel sheet increased by *** percent during 2009-12, ***. Global consumption of galvanized steel sheet is forecasted to *** in the coming years, although *** rate than during 2009-12.

Table IV-23
Galvanized steel sheet: Consumption globally, by region, and by selected country, 2009-12

* * * * * * *

Table IV-24
Galvanized steel sheet: Forecast of consumption globally, by region, and by selected country, 2013-16

* * * * * * *

Prices

Producers and importers were asked to compare prices of corrosion-resistant steel in U.S. and foreign markets. U.S. producers reported that prices have been historically higher in the United States than in other markets. One U.S. producer (***) also noted that the United States has low barriers to entry, few administrative burdens, and well established channels of distribution. Importers reported that prices were sometimes higher in the United States than in other markets, but that prices fluctuated and, at times, have been higher in foreign markets. Several importers said they saw no price differences between the U.S. and other markets; some firms specifically compared the United States to Europe or Canada in these instances. Responses from foreign producers were mixed. Two foreign producers indicated that prices for corrosion-resistant steel in Korea have been higher than prices in the United States and other countries, and two foreign producers indicated that prices in their home market (Korea), the United States, and third country markets were comparable among markets. Two foreign producers noted that price differ by end use of corrosion-resistant steel rather than by region. These firms reported that product used in automotive and home appliance applications require more delicate processing and is generally more expensive than product used in construction applications.

Published price data are available from several reputable sources, although often such data are available by subscription only and cannot be reproduced without consent of their publisher. These data, however, are collected based on different product categories, timing, and commercial considerations, and so may not be directly comparable with each other. Moreover, such data are distinct from the pricing data presented in Part V of this report, which are collected directly from U.S. producers and U.S. importers according to precise product definitions.

[29] Consumption data compiled by *** are for galvanized steel sheet which constitutes the great majority of corrosion-resistant steel products but does not include other products within the product scope for corrosion-resistant steel such as steel coated with aluminum, nickel, copper, etc. so production is understated. The *** data do not include tinplated steel which is excluded from the product scope for corrosion-resistant steel products.

As reported by MEPS, world prices for hot-dip galvanized corrosion-resistant steel increased irregularly between January 2006 and January 2008, increasing from $626 per short ton to $798 per short ton, during that time.[30] Prices increased during the first half of 2008, rising to $1,189 per short ton in July 2008 before decreasing steadily for the rest of the year to $727 per short ton by December 2008. The price decline continued during 2009 with prices decreasing irregularly from $719 per short ton in January 2009 to $708 per short ton in December 2009. There was some recovery in prices which increased irregularly during 2010 from $719 per short ton in January to $783 per short ton in December.

Prices continued to increase during the first four months of 2011 from $858 per short ton in January to $982 per short ton in April before decreasing to $810 in December. The price decreases continued in 2012, decreasing irregularly from $819 in January to $768 per short ton in July before increasing to $778 per short ton in September.[31]

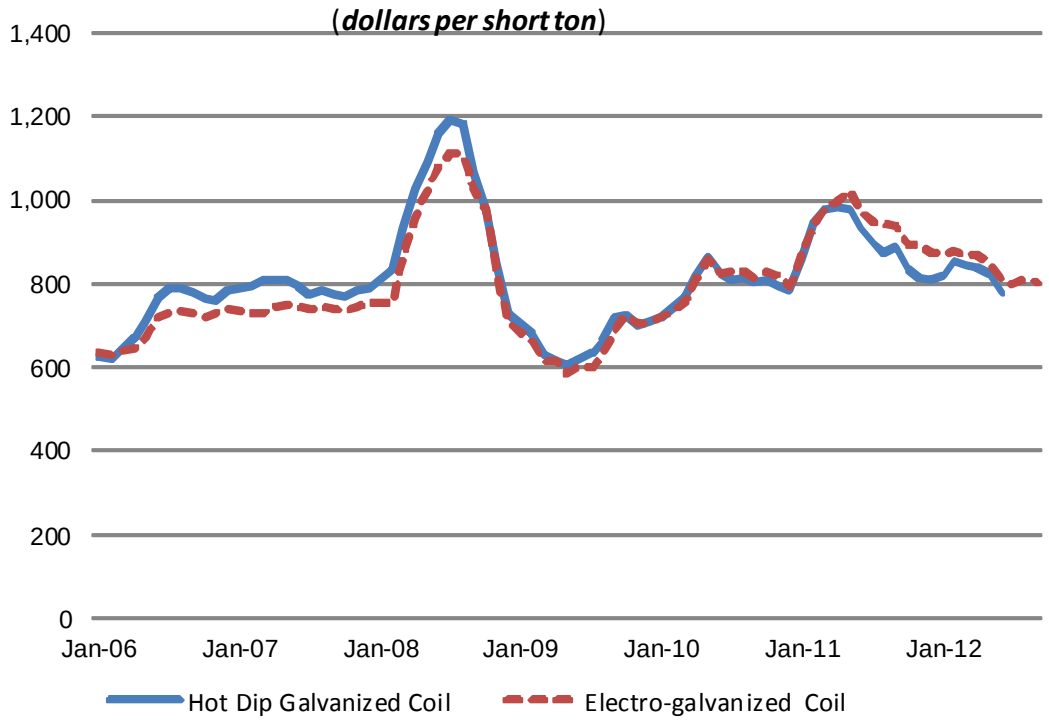
World prices for electro-zinc corrosion-resistant steel increased irregularly between January 2006 and December 2007, from $636 per short ton to $756 per short ton during that time. Prices continued to increase during January-August 2008 from $749 per short ton in January to $1,109 in August before steadily decreasing for the rest of the year to $703 in December. Prices increased irregularly during 2009 from $705 per short ton in January to $710 per short ton in December with a peak in November at $722 per short ton and a low of $584 per short ton in May. The increase in prices continued in 2010 with prices increasing irregularly from $720 per short ton in January 2010 to $795 per short ton in December. In 2011, prices increased steadily for the first five months of the year from $875 per short ton in January to $1,023 per short ton in May. Thereafter, prices decreased irregularly to $874 per short ton in December. The price decreased irregularly in 2012 from $867 in January to $804 in September (figure IV-1).[32]

[30] MEPS world prices are an arithmetic average of the low transaction values identified in the EU, Asia, and North America, converted into U.S. dollars.

[31] Original data are published in metric tons, and were converted to short tons using the following conversion factor: 1 metric ton = 1.102311 short tons. MEPS, *World Carbon Steel Product Prices*, found at http://www.meps.co.uk, retrieved January 23, 2013. This pricing series is available to the public and its use is unrestricted.

[32] Ibid.

Figure IV-1
Hot-dip galvanized and electro-galvanized steel coils: World prices, January 2006-September 2012



Source: MEPS, World Carbon Steel Product Prices, found at http://www.meps.co.uk.

Country-specific monthly transaction prices for certain galvanized steel sheets are also compiled by MEPS,[33] and show monthly price fluctuations across major producing countries. Table IV-25 and figure IV-2 present negotiated transaction prices for HDG corrosion-resistant steel ("hot-dip galvanized coils") in select subject markets for January 2006 through December 2012.

Table IV-25
Hot-dip galvanized (HD Galv) coils: Negotiated transaction prices (ex mill) for prime hot-dip galvanized steel, by selected countries and region and by month, January 2006-December 2012

* * * * * * *

Figure IV–2
Hot-dip galvanized coils: Prices by selected countries and region and by month, January 2006-December 2012

* * * * * * *

Table IV-26 and figure IV-3 present negotiated transaction prices for corrosion-resistant steel ("electro-zinc coated coils") in select subject markets. According to data compiled by MEPS for January 2006 through December 2012, price trends for electro-zinc coated coils were generally similar to trends for hot dip zinc coated coils.

Table IV-26
Electro-zinc coated coils (E Zinc): Negotiated transaction prices (ex mill) for prime electro-galvanized steel, by selected country and region and by month, January 2006-December 2012

* * * * * * *

Figure IV–3
Electro galvanized coils: Prices by selected countries and region and by month, January 2006-December 2012

* * * * * * *

In addition, *** compiles country- and region-specific monthly prices for galvanized steel, as presented in table IV-27 and figure IV-4. According to these data, U.S. prices increased during the first half of 2006, before declining during the remainder of the year. Reported U.S. prices continued to decrease irregularly through 2007, but then increased sharply during most of 2008. Reported U.S. prices decreased sharply by the end of 2008, at the time of the global financial crisis. Prices continued to decline irregularly during 2009; at their nadir they were below those during 2006-08. At the beginning of 2010, prices were higher than in the previous year; although prices fluctuated during 2010, they generally remained higher than prices in 2009. Reported prices increased sharply during the first quarter of 2011 before irregularly declining during the remainder of the year. Although reported U.S. prices were higher at the beginning of 2012 than at the end of 2011, they irregularly declined, at times falling below prices in 2011. German, UK, Japan export, and Far East prices exhibited similar trends during 2006-07. The movement of prices for German, UK, and the Far East continued their similarity to U.S. price trends during January 2008-September 2012. The price trend diverged for Japan exports which exhibited a fairly steady increase during 2008, whereas prices for Germany, the UK, and the Far East decreased. During most of 2009 through September 2012, Japan export prices trended with the other countries;

[33] ***.

however, at the beginning of 2009, Japan export prices were much higher than those of the other countries.[34]

Table IV-27
Galvanized steel: Prices for galvanized steel, by country or by region, and by month, January 2006- December 2012

* * * * * * *

Figure IV-4
Hot-dip galvanized: Prices for hot-dip galvanized steel, by country or by region, January 2006–December 2012

* * * * * * *

Based on ***'s published monthly prices for galvanized steel, the record is mixed on the level of U.S. prices compared with those in other countries; during 2006-10, U.S. prices were higher than some countries but lower than others. China prices were usually the lowest of all countries. During 2011 and 2012, prices in the United States were almost always higher than those of the other countries.[35]

Additional Global Supply and Demand Factors[36]

Worldwide, hot-dip galvanizing ("HDG") capacity accounts for the large majority of sheet mills' rated galvanizing capacity - *** percent, by ***'s estimate, compared to *** percent for electrogalvanizing ("EG") capacity in 2011.[37] Galvanizing capacity is largely located in Asia, Europe, and North America, respectively by decreasing capacity. Global capacity increased by *** short tons and all regions increased capacity during 2009-12; Asia by *** short tons, (most of the increase is accounted for by China where capacity grew by *** short tons), Europe by *** short tons, the CIS by *** short tons, North America by *** short tons, and Central and South America by *** short tons (table IV-28).[38] Global capacity is forecasted to increase *** by *** short tons between 2013 and 2016 (table IV-29).

Table IV-28
Total galvanizing capacity globally, by region, and by selected countries, 2009-12

* * * * * * *

Table IV-29
Forecast of total galvanizing capacity globally, by region, and by selected countries, 2013-16

* * * * * * *

[34] Compiled from data published in ***.

[35] Ibid.

[36] Information presented in this section is derived from ***.

[37] ***.

[38] ***.

Foreign Demand

The majority of responding firms in the corrosion-resistant steel market reported that demand has increased or fluctuated since 2006, and indicated that they expect these trends to continue. However, a number of purchasers also indicated that demand has not changed, and they do not expect any changes in demand. Firms' responses regarding demand outside the United States since 2006, and anticipated future demand through 2014, are summarized in table IV-30 below.

Table IV-30
Corrosion-resistant steel: Firms' perceptions regarding demand outside of the United States

Item	Number of firms reporting			
	Increase	No change	Decrease	Fluctuate
Demand since 2006[1]				
U.S. producers	4	1	1	6
Importers	6	3	5	11
Purchasers	8	7	4	11
Foreign producers	1	0	0	6
Demand in home markets since 2006				
Foreign producers	1	1	0	5
Anticipated demand through 2014				
U.S. producers	3	1	3	4
Importers	8	3	4	8
Purchasers	11	7	1	10
Foreign producers	5	0	0	2
Anticipated demand in home markets through 2014				
Foreign producers	3	2	1	1

[1] U.S. producer and importer *** and purchaser *** selected both "increase" and "fluctuate."

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

In additional comments, firms noted the impact of market uncertainty and the global economic downturn and indicated that since 2006, the uncertainty decreased demand in some areas (Europe) but had a lesser impact in others (Asia). Responding firms specifically mentioned an increase in demand in China, India, Brazil, Mexico, South Korea, and Russia. Most firms expect these trends to continue as the global economy continues to recover. Firms stated that, as the economy improves, they expect an increase in demand for corrosion-resistant steel in developing countries and in the automotive and construction industries.

Forecasts show that GDP in Europe and Asia will increase in 2013. The International Monetary Fund (IMF) projects economic activity in Europe to increase gradually in 2013,[39] with GDP forecast to grow in 2013 by 0.9 percent in Germany and by 0.8 percent in the European Union as a whole.[40] The IMF reported moderate growth in Asia due to weaker demand, but projects GDP growth of 5.8 percent in Asia in 2013.[41] [42] During 2013, the IMF projects that GDP will grow by 3.6 percent in Korea, 8.2 percent in China, and 1.2 percent in Japan.[43]

According to ***, ***. ***.[44] [45] In ***, *** projects that ***.[46] ***. However, ***.[47] *** described ***.[48] In addition, *** expects ***.[49]

Korean producers reported that there are four main producers of corrosion-resistant steel in Korea: POSCO, HYSCO, Dongbu, and Union Steel. *** noted that Korea and Asia are the main target markets of these firms. *** reported that competition between these producers has been low as each producer has developed new products and targeted specific end uses. German producers noted the importance of the automotive industry for German corrosion-resistant steel demand. They also reported competition from other German producers as well as other European producers (including those in France, Italy, Spain, the Netherlands, United Kingdom, Austria, Slovakia, Sweden, and Finland) due to standardized European technical specifications.

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[39] International Monetary Fund, *World Economic Outlook*, October 2012, p. 64.

[40] International Monetary Fund, *World Economic Outlook*, October 2012, p. 66.

[41] International Monetary Fund, *World Economic Outlook*, October 2012, pp. 71-72.

[42] *** reported ***. ***, and ***.

[43] International Monetary Fund, *World Economic Outlook*, October 2012, p. 72.

[44] ***.

[45] In addition, ***, reported that ***, and 2012 sales were projected to be *** than in 2011. ***. On the other hand, according to Automotive News Europe, auto demand in Western Europe is expected to fall next year (2013), and likely will not return to pre-recession levels until the end of the decade. Nucor's prehearing brief, exhibit 1, *Automotive News Europe,* "Europe's auto industry won't see full recovery until 2020, study says."

[46] ***.

[47] ***.

[48] ***.

[49] ***.

PART V: PRICING AND RELATED INFORMATION

FACTORS AFFECTING PRICES

Raw Material Costs

U.S. producers, importers,[1] and foreign producers reported that the prices of corrosion-resistant steel are related to the costs of raw materials and tend to follow similar trends.[2] U.S. producers' raw materials costs as a share of cost of goods sold increased from 61.3 percent in 2006 to 74.7 percent in 2011. Raw materials as a share of cost of goods sold in interim 2011 and 2012 were 76.1 and 77.6 percent respectively. Some market participants reported surcharges on raw materials, which are discussed later in Part V.

Raw materials for corrosion-resistant steel include coal, iron, steel scrap, and coating materials. Prices for these raw materials fluctuated during 2006-12, and several U.S. producers, importers and foreign producers reported that they expect these trends to continue. As shown in figure V-1, costs for primary raw materials, iron ore, coal, and iron and steel scrap increased during January 2006 to December 2012.[3] Prices for iron ore and coal rose by approximately 42 and 72 percent respectively during this period.[4] Iron and steel scrap prices fluctuated, spiking in mid-2008 then largely declining by the end of the year. Continuing to fluctuate through December 2012, scrap prices rose by approximately 79 percent overall from the January 2006 price. Producers and importers reported that the increase in raw material costs has resulted in an increase in their prices to customers.

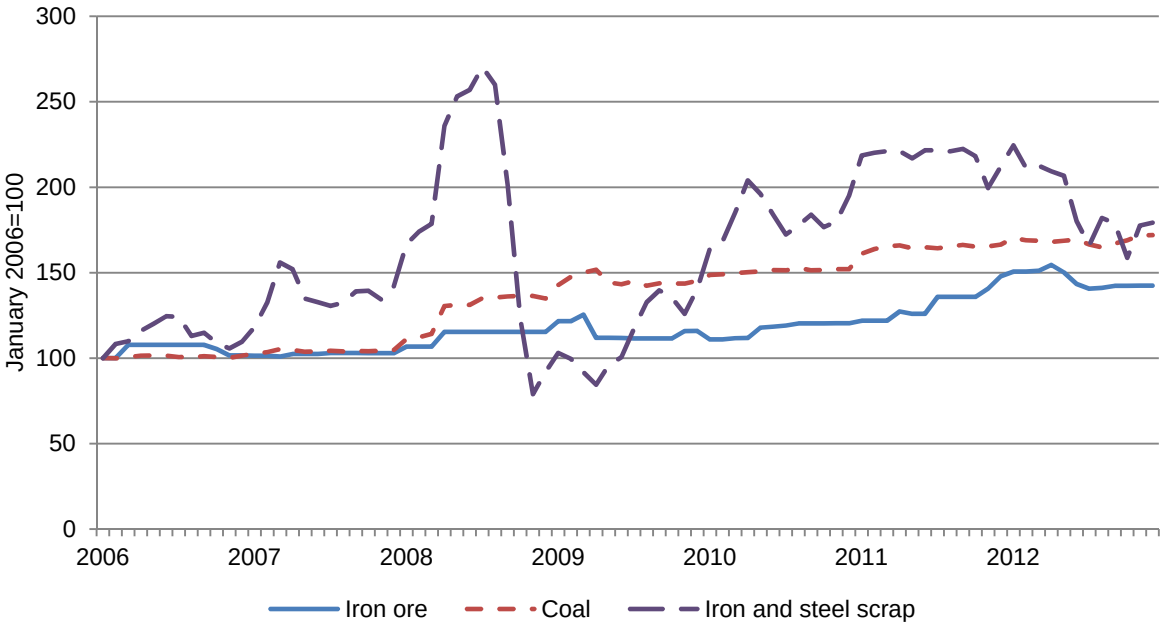
[1] *** submitted both a U.S. producer and an importer questionnaire. Attachment 2A to *** importer questionnaire stated that since *** submitted a U.S. producer questionnaire, *** did not respond to the duplicated questions in its importer questionnaire response. For purposes of Part V of this report, responses from *** U.S. producer questionnaire narrative responses were also counted for its importer questionnaire narrative responses. *** submitted an importer questionnaire. *** submitted data for both its stainless steel imports from Korea, which are not subject product, and corrosion-resistant steel imports from nonsubject sources. For purposes of Part V of this report, responses from *** importer questionnaire are included unless the question pertained to imports of corrosion-resistant steel specifically from subject sources.

[2] ***.

[3] Iron and steel scrap are used to produce cold-rolled steel, which is the substrate for corrosion-resistant steel (see Part I for more information).

[4] *** reported that it uses coal to produce coke. Staff telephone interview with ***. Staff collected data on coke prices for the record. The data shows an overall increase in coke prices from 2006-12, with a peak in 2008. USITC staff calculations.

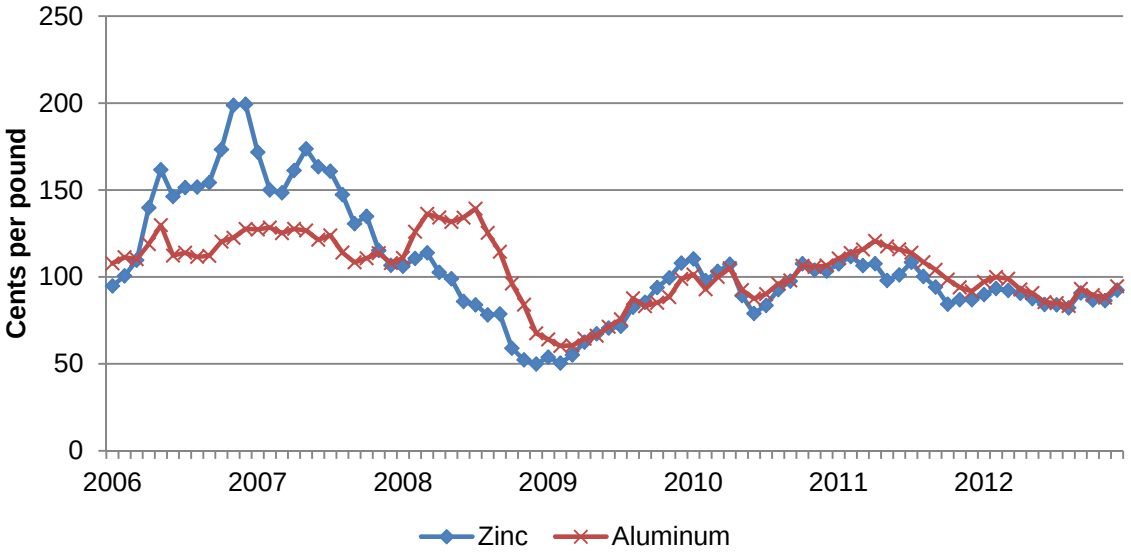
Figure V-1
Raw material costs: Producer price indexes of iron ore, coal, and iron and steel scrap in the United States, monthly, January 2006-December 2012



Source: U.S. Bureau of Labor Statistics, February 1, 2013.

Figure V-2 presents London Metal Exchange cash prices for zinc and aluminum, the coating materials used in the production of corrosion-resistant steel. Prices for both zinc and aluminum fluctuated during January 2006-December 2012, decreasing overall by 2.5 and 12.2 percent respectively from January 2006 to December 2012.

Figure V-2
Coating material costs: London Metal Exchange cash prices of zinc and aluminum, by months, January 2006-December 2012



Source: American Metal Market, January 22, 2013.

Energy costs are also a factor in corrosion-resistant steel production. As shown in figure V-3, electricity prices have fluctuated during 2006-12, increasing overall by approximately 15 percent from January 2006 to December 2012. After a spike in 2008, peaking in June 2008 at $13.07 per thousand cubic feet, natural gas prices have declined by approximately 62 percent from a January 2006 level of $8.95 per thousand cubic feet to $3.44 per thousand cubic feet in December 2012.

Both domestic and respondent interested parties estimated that natural gas prices in Europe were three to four times the price of natural gas in the United States.[5] Domestic parties also estimated that natural gas prices in Asia are four to five times prices in the United States.[6] [7] At the hearing, counsel for Steel Dynamics reported that natural gas as a production cost for making a ton of corrosion-resistant steel is probably less than one percent of the total production cost,[8] and in its posthearing brief, AK Steel estimated that the cost of natural gas consumed in the production of the steel inputs used in the production of corrosion-resistant steel in 2011 was approximately ***.[9] ArcelorMittal reported that natural gas accounted for approximately *** percent of total corrosion-resistant steel costs in 2011, and approximately *** percent in 2012.[10] ThyssenKrupp reported that natural gas accounts for *** of the total final cost of individual corrosion-resistant steel products,[11] and Nucor reported that natural gas accounted for *** percent of total production costs over the review period.[12]

[5] Hearing transcript, p. 163 (Schagrin), ThyssenKrupp posthearing brief, exhibit 1, p. 4, and ***.

[6] Hearing transcript, p. 163 (Schagrin), and ***.

[7] Korean respondents reported that POSCO purchases natural gas through long term contracts under which prices are determined based on a system that links natural gas prices to crude oil prices. In 2012, oil prices increased and therefore natural gas prices increased also. Korean respondents' posthearing brief, Responses to Commissioners' questions, p. Q-22.

[8] Hearing transcript, p. 163 (Schagrin).

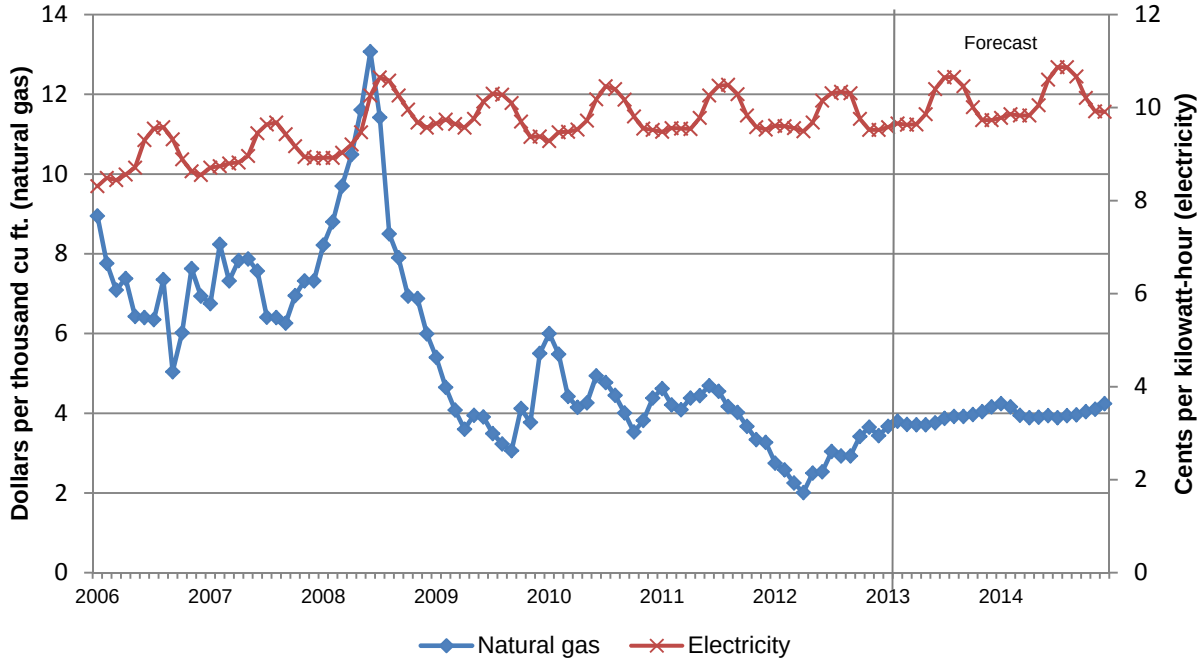
[9] AK Steel posthearing brief, exhibit 1, p. 6.

[10] ArcelorMittal's posthearing brief, exhibit 7, p. 3.

[11] ThyssenKrupp posthearing brief, exhibit 1, pp. 4-5.

[12] Nucor's posthearing brief, exhibit 1, p. 43.

Figure V-3
Industrial natural gas and electricity: Monthly prices, January 2006-December 2012, and January 2013-December 2014 (forecast)



Source: *Short Term Energy Outlook*, Energy Information Administration, www.eia.gov, January 11, 2013.

U.S. Inland Transportation Costs

Fifteen of 16 U.S. producers and 12 of 14 importers reported that they typically arrange transportation to their customers' locations. Most U.S. producers reported that their U.S. inland transportation costs ranged from 3 to 8 percent, and importers reported U.S. inland transportation costs of 10 percent or less.

PRICING PRACTICES

Pricing Methods

Price Determination

U.S. producers and importers reported using transaction-by-transaction negotiations, contracts, set price lists, or a combination of any of the three methods for determining the prices they charge for sales of corrosion-resistant steel. Ten U.S. producers reported using both transaction-by-transaction negotiations and contracts for their sales to steel service centers and distributors, eight for other end users, five for construction end users, and three for automotive end users.[13] Four U.S. producers reported using only contracts for sales to automotive end users, and two producers reported using only contracts for sales to construction and other end users. Four U.S. producers reported using only transaction-by-transaction negotiations for sales to construction end users, two for automotive end users, two for other end users,

[13] For other end users, U.S. producers identified manufacturers in the following sectors: agriculture, appliances, containers, HVAC, infrastructure and non-automotive/non-construction manufacturing, other electrical goods, and pipe and tube.

and two for sales to steel service centers and distributors. One U.S. producer reported using both transaction-by-transaction negotiations and set price lists for sales to construction end users, other end users, and steel service centers and distributors.[14] One U.S. producer reported using transaction-by-transaction negotiations, contracts, and set price lists for sales to automotive end users, construction end users, and steel service centers and distributors.

Eleven importers reported using transaction-by-transaction negotiations for sales to steel service centers and distributors, nine to construction end users, two to automotive end users and two to other end users.[15] Six importers reported using contracts for sales to automotive end users, five to steel service centers and distributors, and three to construction end users. Two importers reported using both transaction-by-transaction negotiations and contracts for sales to automotive end users, three for steel service centers and distributors, three for other end users, and one for sales to construction end users. One importer reported using set price lists for sales to automotive end users. *** reported setting a fixed price to their automotive customers for a set period of time, but indicated that this price is not controlled by a contract.

Negotiations

Of the 35 responding purchasers, 9 purchase daily, 9 purchase weekly, 7 purchase monthly, 3 purchase quarterly, 2 purchase as needed, 2 purchase through annual contracts with daily releases, 1 purchases annually, 1 purchases bi-annually, and 1 purchases once every two months. Only three purchasers indicated that they expect their purchasing pattern to change in the next two years.[16]

Twenty-seven of 32 responding purchasers reported contacting no more than 5 suppliers before making a purchase. However, most automotive purchasers reported contacting 5 or more suppliers.[17] Thirty-two of 35 purchasers reported negotiating with the supplier when purchasing corrosion-resistant steel, and 20 purchasers indicated that the negotiations are based on price, among other factors. Several purchasers stated that negotiations are also based on delivery and payment terms, availability, and quality. The majority of purchasers (20 of 35) reported that they do not vary their purchases from a given supplier within a specified time period based on the price offered for that period.

Contract and Spot Sales

Most U.S. producers sold on a short-term contract basis to automotive end users and on a spot sales basis to construction end users and other end users. U.S. importers sold mainly on a short-term contract basis to all three end user groups (table V-1).[18] The majority of responding U.S. producers

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[14] U.S. producer *** reported using contracts and price lists with competitive negotiations for sales to automotive end users; transaction-by-transaction negotiations, contracts, and price lists with competitive negotiations for sales to construction end users; and transaction-by-transaction negotiations and price lists with competitive negotiations for sales to other end users (manufacturing).

[15] Three U.S. importers defined other end users as manufacturers of functional hardware for kitchen cabinets, appliances, other electrical goods, pipe and tube, containers, and alkaline battery and household electrical items.

[16] Purchaser *** reported that it expects changes due to market conditions. *** indicated that price and customer demand can drive purchasing decisions and therefore some purchases are made in the anticipation that the price will increase. *** reported that it would like to switch from quarterly to monthly purchases of corrosion-resistant steel.

[17] *** each reported contacting 5 suppliers. *** reported having ongoing orders with 10 suppliers, and *** reported contacting 15 suppliers before making a purchase. On the other hand, *** reported selecting a single supplier for *** percent of its vehicle steel requirements as much as 24 months in advance of production. *** responded that the question was "Not applicable."

[18] Firms were asked if they offered financing to customers located in the United States. Only three of 26 responding importers reported offering financing. No U.S. producers or foreign producer reported that they offer financing to customers in the United States.

Table V-1
Corrosion-resistant steel: U.S. producers' and importers' U.S. commercial shipments to automotive, construction, and other end users by type of sale, 2011

Type of sale	Shares of 2011 U.S. commercial shipments (*percent*)					
	U.S. producers			Importers		
	Automotive end users	Construction end users	Other end users	Automotive end users	Construction end users	Other end users
Long-term contracts	10.5	5.5	2.6	16.3	0.0	0.0
Short-term contracts	86.4	17.1	31.2	83.7	100.0	99.0
Spot sales	3.1	77.4	66.2	0.0	0.0	1.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

Note.—Because of rounding, figures may not add to the totals shown.

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

reported that their short term contracts were 365 days in length, fixed quantity or price (but not both), did not allow for price renegotiation during the contract term, and did not contain meet or release provisions. The majority of responding importers reported that their short term contracts were 90 to 180 days in length, fixed both price and quantity, did not allow for price renegotiation during the contract term, and did not contain meet or release provisions. Most foreign producers reported selling mainly on a short term contract basis for at least 86 percent of their sales to automotive end users and 100 percent of their sales to construction end users.[19] The majority of responding foreign producers reported that their short term contracts were 90 to 180 days in length, fixed price, allowed for price renegotiation during the contract period, and did not contain meet or release provisions.

Firms were asked to report what percentage of their 2011 contract sales fell within certain lengths of time. U.S. producers reported that the majority of their contract sales were sold on contracts lasting seven months or longer. Importers and foreign producers reported that the majority of their sales were sold on contracts shorter than six months.

Surcharges

Seven of 12 U.S. producers, two of 18 importers, and one of six foreign producers reported that their long-term contracts provided provisions for price changes or surcharges during the pendency of the contract. Four U.S. producers reported surcharges based on raw material costs, including, iron, iron ore, scrap, zinc, and energy prices. Other U.S. producers reported that their long-term contracts contain provisions to adjust prices at some interval (i.e., monthly, semi-annually, etc.) based on CRU indexes. Producer and importer *** stated that its contracts allow for price adjustments in relation to changes in market conditions and noted that prices may be increased or decreased.[20] Importer *** reported basing price changes on monthly average Midwest CRU prices, and importer *** stated that its contract with *** is "***."

[19] Two foreign producers reported using long term contract for sales to automotive end users. No foreign producer reported using spot sales. These contracts were *** years in length and fixed ***. Only one firm reported that they allowed for price renegotiation during the contract term.

[20] *** provided a narrative response to this question, but did not respond "yes" or "no."

Sales Terms and Discounts

Eight of 11 responding U.S. producers and 10 of 12 importers quote prices on a delivered basis for sales to automotive end users.[21] However, 12 of 14 responding U.S. producers and nine of 13 importers reported quoting prices on an f.o.b. basis for sales to construction end users.[22] Ten of 14 U.S. producers and two of six importers quote prices on an f.o.b. basis to other end users.[23] Fourteen of 15 responding U.S. producers and 13 of 20 importers reported quoting prices on an f.o.b. basis to steel service centers and distributors.[24]

Most responding U.S. producers and importers reported offering no discounts (table V-2). Some producers reported offering annual total volume discounts and/or quantity discounts, and one producer *** reported offering market competitive discounts as required by market conditions. Two importers reported offering quantity discounts, and importer *** reported offering negotiated discounts to construction end users and steel service centers and distributors for early payments.

Table V-2
Corrosion-resistant steel: U.S. producers' and importers discount policy type, by end user

	Number of U.S. producers reporting				Number of importers reporting			
End user	Quantity discounts	Annual total volume discounts	No discount	Other discounts	Quantity discounts	Annual total volume discounts	No discount	Other discounts
Automotive	2	1	8	2	1	0	12	0
Construction	3	4	8	1	0	0	13	1
Other	3	4	7	1	1	0	6	0
Steel service centers and distributors	4	5	9	1	0	0	20	1

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

Price Leadership

Purchasers were asked to identify price leaders in the corrosion-resistant steel market. Twenty-four of 32 purchasers reported price leaders and listed one or more suppliers, including U.S. Steel (reported by 16 firms), Nucor Corporation (13 firms), AK Steel (11 firms), ArcelorMittal (7 firms), Steel Dynamics (3 firms), POSCO (2 firms), RG Steel (2 firms), and Severstal, Dongbu, and Ternium, (1 firm each). Purchasers reported AK Steel, ArcelorMittal, U.S Steel, Steel Dynamics, and Nucor as price leaders because they usually initiate public announcement of price changes based on market trends/conditions.

[21] U.S. producer *** reported quoting prices on both an f.o.b. basis and delivered.

[22] Nine U.S. producers and five importers reported quoting prices exclusively on an f.o.b. basis; U.S. producers ***, producer and importer ***, and importers *** reported quoting both f.o.b. and delivered.

[23] Other end users included manufacturers of appliances, HVAC, infrastructure and non-automotive/non-construction manufacturing, other electrical goods, pipe and tube, and containers by U.S. producers; and as manufacturers of functional hardware for kitchen cabinets and alkaline battery and household electrical items by importers. Three U.S. producers, ***, reported quoting both f.o.b. and delivered.

[24] Three U.S. producers and four importers reported quoting both f.o.b. and delivered.

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 products shipped to unrelated U.S. customers during January 2006-June 2012:

Product 1.-- Hot-dipped galvanized carbon steel sheet, in coils, ASTM A-653, DQSK, minimum spangle, G-40 to G-60 coating weight (Z120 to Z180 in metric coating weight), 40" to 70" in width, 0.018" to under 0.020" in thickness

Product 2.-- Hot-dipped galvanized carbon steel sheet, in coils, ASTM A-653, Structural Quality, Grade 80, <G60, regular or minimum spangle, not annealed, 40" to 70" in width, 0.018" to under 0.020" in thickness

Product 3.-- Electrolytically zinc coated carbon steel sheet, in coils, ASTM A-879, 50-90 grams/square meter per side coating, without organic coating, forming steel, 40" to under 60" in width, 0.022" to under 0.044" in thickness

Product 4.-- Hot-dipped galvanized carbon steel sheet, in coils, bake hardenable, 43" to 73" in width, 0.0232" to 0.0591" in thickness, coating weight 50G to 70G (Z100 to Z140 in metric coating weight)

Data were requested separately for contract and non-contract sales. Eight U.S. producers and five importers provided usable pricing data for contract sales, and 12 U.S. producers and one importer provided useable pricing data for non-contract sales, although not all firms reported pricing for all products for all quarters.[25] By quantity, pricing data for January 2006-June 2012 accounted for 6.3 percent of U.S. producers' shipments of corrosion-resistant steel, 1.3 percent of U.S. shipments of subject imports from Germany, and 3.1 percent of U.S. shipments of subject imports from Korea.

Price Trends and Comparisons

Price data for contract and non-contract sales of products 1 through 4 are presented in tables V-3 through V-10 and figures V-4 through V-11. Price trend summary data are presented in tables V-11 and V-12. Available data show that contract and non-contract prices for products 1-3 from all sources fluctuated throughout the period of review, reaching a peak in late 2008 and early 2009, falling in mid-2009, and recovering by 2012. Domestic contract prices for product 4 steadily increased from January 2006-June 2012. Domestic non-contract prices for product 4 fluctuated, peaking in 2008, before falling sharply in 2009, and recovering to near 2008 levels by 2012.

Margins for underselling and overselling are presented in table V-13. Based on these data, prices for corrosion-resistant steel imported from Korea were below those for U.S.-produced corrosion-resistant steel in 30 of 64 instances; margins for underselling ranged from *** percent to *** percent, with an average margin of 7.2 percent. In the remaining 34 instances, prices for corrosion-resistant steel from Korea were above prices for U.S.-produced corrosion-resistant steel; margins of overselling ranged from *** percent to *** percent, with an average margin of 11.9 percent. In all nine instances, prices for corrosion-resistant steel from Germany were above prices for U.S.-produced corrosion-resistant steel; margins of overselling ranged from *** percent to *** percent, with an average margin of *** percent.

[25] U.S. producer *** reported that the pricing data it provided for contract and non-contract sales of product 1 are for a similar product that is batch annealed after galvanizing. U.S. producer *** provided two quarters of data (totaling 36 short tons) for non-contract sales of product 1 for a similar product with gauge heavier than .020.

Table V-3
Corrosion-resistant steel: Weighted-average f.o.b. prices and quantities for contract sales of domestic and imported product 1[1] and margins of underselling/(overselling), by quarters, January 2006-June 2012

* * * * * * *

Table V-4
Corrosion-resistant steel: Weighted-average f.o.b. prices and quantities for non-contract sales of domestic and imported product 1, by quarters, January 2006-June 2012

* * * * * * *

Table V-5
Corrosion-resistant steel: Weighted-average f.o.b. prices and quantities for contract sales of domestic and imported product 2 and margins of underselling/(overselling), by quarters, January 2006-June 2012

* * * * * * *

Table V-6
Corrosion-resistant steel: Weighted-average f.o.b. prices and quantities for non-contract sales of domestic and imported product 2, by quarters, January 2006-June 2012

* * * * * * *

Table V-7
Corrosion-resistant steel: Weighted-average f.o.b. prices and quantities for contract sales of domestic and imported product 3[1] and margins of underselling/(overselling), by quarters, January 2006-June 2012

Period	Contract sales				
	United States		Korea		
	Price *(per short ton)*	Quantity *(short tons)*	Price *(per short ton)*	Quantity *(short tons)*	Margin *(percent)*
2006:					
Jan.-Mar.	$705	99,501	$***	***	***
Apr.-June	681	98,217	***	***	***
July-Sept.	703	86,909	***	***	***
Oct.-Dec.	700	89,591	***	***	***
2007:					
Jan.-Mar.	845	90,694	***	***	***
Apr.-June	853	87,803	***	***	***
July-Sept.	855	80,513	***	***	***
Oct.-Dec.	856	80,558	***	***	***
2008:					
Jan.-Mar.	871	66,367	***	***	***
Apr.-June	888	56,723	***	***	***
July-Sept.	936	50,332	***	***	***
Oct.-Dec.	941	41,034	***	***	***
2009:					
Jan.-Mar.	1,050	21,792	***	***	***
Apr.-June	911	26,845	***	***	***
July-Sept.	927	36,841	***	***	***
Oct.-Dec.	888	38,327	***	***	***
2010:					
Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2011:					
Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	1,026	41,006	***	***	***
2012:					
Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***

[1] Product 3: Electrolytically zinc coated carbon steel sheet, in coils, ASTM A-879, 50-90 grams/square meter per side coating, without organic coating, forming steel, 40" to under 60" in width, 0.022" to under 0.044" in thickness.

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

Table V-8
Corrosion-resistant steel: Weighted-average f.o.b. prices and quantities for non-contract sales of domestic product 3,[1] by quarters, January 2006-June 2012

* * * * * * *

Table V-9
Corrosion-resistant steel: Weighted-average f.o.b. prices and quantities for contract sales of domestic and imported product 4[1] and margins of underselling/(overselling), by quarters, January 2006-June 2012

Period	Contract sales				
	United States		Germany		
	Price *(per short ton)*	Quantity *(short tons)*	Price *(per short ton)*	Quantity *(short tons)*	Margin *(percent)*
2006: Jan.-Mar.	$663	15,455	--	0	--
Apr.-June	655	19,040	--	0	--
July-Sept.	647	9,565	--	0	--
Oct.-Dec.	667	13,371	--	0	--
2007: Jan.-Mar.	800	13,601	--	0	--
Apr.-June	801	13,983	--	0	--
July-Sept.	796	12,670	--	0	--
Oct.-Dec.	791	12,304	--	0	--
2008: Jan.-Mar.	797	12,036	--	0	--
Apr.-June	793	16,395	--	0	--
July-Sept.	800	13,227	--	0	--
Oct.-Dec.	809	24,150	--	0	--
2009: Jan.-Mar.	884	14,556	--	0	--
Apr.-June	857	13,817	--	0	--
July-Sept.	837	21,851	--	0	--
Oct.-Dec.	842	25,242	--	0	--
2010: Jan.-Mar.	808	27,710	--	0	--
Apr.-June	856	27,910	$***	***	***
July-Sept.	851	26,461	***	***	***
Oct.-Dec.	846	26,826	***	***	***
2011: Jan.-Mar.	880	26,840	***	***	***
Apr.-June	881	34,245	***	***	***
July-Sept.	915	29,930	***	***	***
Oct.-Dec.	947	26,184	***	***	***
2012: Jan.-Mar.	949	21,098	***	***	***
Apr.-June	947	16,979	***	***	***

[1] Product 4: Hot-dipped galvanized carbon steel sheet, in coils, bake hardenable, 43" to 73" in width, 0.0232" to 0.0591" in thickness, coating weight 50G to 70G (Z100 to Z140 in metric coating weight).

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

Table V-10
Corrosion-resistant steel: Weighted-average f.o.b. prices and quantities for non-contract sales of domestic product 4,[1] by quarters, January 2006-June 2012

* * * * * * *

Figure V-4
Corrosion-resistant steel: Weighted-average f.o.b. prices and quantities for contract sales of domestic and imported product 1,[1] by quarters, January 2006-June 2012

* * * * * * *

Figure V-5
Corrosion-resistant steel: Weighted-average f.o.b. prices and quantities for non-contract sales of domestic and imported product 1,[1] by quarters, January 2006-June 2012

* * * * * * *

Figure V-6
Corrosion-resistant steel: Weighted-average f.o.b. prices and quantities for contract sales of domestic and imported product 2,[1] by quarters, January 2006-June 2012

* * * * * * *

Figure V-7
Corrosion-resistant steel: Weighted-average f.o.b. prices and quantities for non-contract sales of domestic and imported product 2,[1] by quarters, January 2006-June 2012

* * * * * * *

Figure V-8
Corrosion-resistant steel: Weighted-average f.o.b. prices and quantities for contract sales of domestic and imported product 3,[1] by quarters, January 2006-June 2012

* * * * * * *

Figure V-9
Corrosion-resistant steel: Weighted-average f.o.b. prices and quantities for non-contract sales of domestic product 3,[1] by quarters, January 2006-June 2012

* * * * * * *

Figure V-10
Corrosion-resistant steel: Weighted-average f.o.b. prices and quantities for contract sales of domestic and imported product 4,[1] by quarters, January 2006-June 2012

* * * * * * *

Figure V-11
Corrosion-resistant steel: Weighted-average f.o.b. prices and quantities for non-contract sales of domestic product 4,[1] by quarters, January 2006-June 2012

* * * * * * *

Table V-11

Corrosion-resistant steel: Summary of weighted-average f.o.b. prices for contract sales of products 1 through 4 from the United States, Germany, and Korea

Item	Number of quarters	Low price (*per short ton*)	High price (*per short ton*)	Change in price[1] (*percent*)
Product 1				
United States	26	$***	$***	***
Germany	0	-	-	-
Korea	24	***	***	***
Product 2				
United States	26	***	***	***
Germany	0	-	-	-
Korea	9	***	***	***
Product 3				
United States	26	***	***	***
Germany	0	-	-	-
Korea	26	***	***	***
Product 4				
United States	26	647.39	948.88	42.7
Germany	9	***	***	***
Korea	0	-	-	-

[1] Percentage change (based on unrounded data) from first quarter of data available through last quarter of data available for each product. Thus, the percentage change is not necessarily calculated from the high and low prices shown in this table.

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

Table V-12

Corrosion-resistant steel: Summary of weighted-average f.o.b. prices for non-contract sales of products 1 through 4 from the United States and Korea

Item	Number of quarters	Low price (*per short ton*)	High price (*per short ton*)	Change in price[1] (*percent*)
Product 1				
United States	26	$***	***	***
Korea	1	***	***	-
Product 2				
United States	26	***	***	***
Korea	4	***	***	***
Product 3				
United States	26	***	***	***
Korea	0	-	-	-
Product 4				
United States	26	***	***	***
Korea	0	-	-	-

[1] Percentage change (based on unrounded data) from first quarter of data available through last quarter of data available for each product. Thus, the percentage change is not necessarily calculated from the high and low prices shown in this table.

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

Table V-13
Corrosion-resistant steel: Instances of underselling/overselling and the range and average of margins, January 2006-June 2012[1]

Source	Underselling			Overselling		
	Number of instances	Range (*percent*)	Average margin (*percent*)	Number of instances	Range (*percent*)	Average margin (*percent*)
Margins for contract sales						
Germany	0	-	-	9	***	***
Korea	26	***	***	33	***	***
Total	26	***	***	42	***	***
Margins for non-contract sales						
Germany	0	-	-	0	-	-
Korea	4	***	***	1	***	***
Total	4	***	***	1	***	***
Margins for contract and non-contract sales						
Germany	0	-	-	9	***	***
Korea	30	***	7.2	34	***	11.9
Total	30	***	7.2	43	***	***

[1] In the second reviews, there were 91 possible price comparisons between U.S.-produced corrosion-resistant steel and imports from Germany and Korea. In 21 of these comparisons, subject imports undersold the domestic product; in the remaining 70 comparisons, subject imports oversold the domestic product. For Germany, there were 8 instances of underselling and 30 instances of overselling, with margins of underselling ranging from 0.0 to 24.3 percent, and an average underselling margin of 6.8 percent. For Korea, there were 13 instances of underselling and 40 instances of overselling, with margins of underselling ranging from 0.9 to 26.7 percent, and an average underselling margin of 12.2 percent. In the first reviews, there were 124 possible price comparisons between U.S.-produced corrosion-resistant steel and imports from Germany and Korea. For Germany, there were no instances of underselling and 15 instances of overselling. For Korea, there were 47 instances of underselling and 62 instances of overselling, with an average margin of underselling of 14.9 percent. In the original investigations, there were 51 possible price comparisons between U.S.-produced corrosion-resistant steel and imports from Germany and Korea. For Germany, there was 1 instance of underselling and 26 instances of overselling, with a margin of underselling of 3.9 percent. For Korea, there were 11 instances of underselling and 13 instances of overselling, with margins of underselling ranging from 5.0 to 30.2 percent.

Source: Compiled from data submitted in response to Commission questionnaires; and *Certain Carbon Steel Products from Australia, Belgium, Brazil, Canada, Finland, France, Germany, Japan, Korea, Mexico, Poland, Romania, Spain, Sweden, Taiwan, and the United Kingdom*, Inv. Nos. AA1921-197, 71-TA-319, 320, 325-327, 348, 350, and 731-TA-573, 574, 576, 578, 582-587, 612, 614-618 (Second Review), USITC Publication 3899 (January 2007).

Purchasers' Perceptions of Relative Price Trends

Purchasers were asked how the price of corrosion-resistant steel from the United States had changed relative to the prices of product from subject countries since 2006. Eighteen of 25 responding purchasers reported that prices had changed by the same amount, five purchasers reported that the price of U.S.-produced product had changed relative to Korean prices, and two purchasers reported that U.S. prices had changed relative to German prices. When reporting how the price of U.S.-produced corrosion-resistant steel had changed relative to the price of corrosion-resistant steel from Germany, five purchasers indicted that U.S. prices are now relatively higher than German prices, and five purchasers indicated that U.S. prices are now relatively lower than German prices. When reporting how the price of U.S.-produced corrosion-resistant steel had changed relative to the price of corrosion-resistant steel from Korea, five purchasers indicated that U.S. prices are now relatively higher than Korean prices, and six purchasers indicated that U.S. prices are now relatively lower than Korean prices.

APPENDIX A

FEDERAL REGISTER NOTICES AND THE COMMISSION'S STATEMENT ON ADEQUACY

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
77 FR 85 January 3, 2012	Initiation of Five-Year ("Sunset") Review	http://www.gpo.gov/fdsys/pkg/FR-2012-01-03/pdf/2011-33674.pdf
77 FR 301 January 4, 2012	Corrosion-Resistant Carbon Steel Flat Products From Germany and Korea: Institution of Five-Year Reviews Concerning the Countervailing Duty Order on Corrosion-Resistant Carbon Steel Flat Products From Korea and the Antidumping Duty Orders on Corrosion-Resistant Carbon Steel Flat Products From Germany and Korea	http://www.gpo.gov/fdsys/pkg/FR-2012-01-04/pdf/2011-33770.pdf
77 FR 24221 April 23, 2012	Corrosion-Resistant Carbon Steel Flat Products From Germany and Korea; Notice of Commission Determinations To Conduct Full Five-Year Reviews	http://www.gpo.gov/fdsys/pkg/FR-2012-04-23/pdf/2012-9665.pdf
77 FR 27438 May 10, 2012	Certain Corrosion-Resistant Carbon Steel Flat Products From Korea: Final Results of Expedited Five-Year ("Sunset") Review of the Countervailing Duty Order	http://www.gpo.gov/fdsys/pkg/FR-2012-05-10/pdf/2012-11221.pdf
77 FR 31877 May 30, 2012	Corrosion-Resistant Carbon Steel Flat Products From Germany and Korea; Scheduling of Full Five-Year Reviews	http://www.gpo.gov/fdsys/pkg/FR-2012-05-30/pdf/2012-13078.pdf
77 FR 67395 November 9, 2012	Corrosion-Resistant Carbon Steel Flat Products From Germany and Korea; Revised Schedule for the Subject Reviews	http://www.gpo.gov/fdsys/pkg/FR-2012-11-09/pdf/2012-27371.pdf
77 FR 72827 December 6, 2012	Corrosion-Resistant Carbon Steel Flat Products From Germany and the Republic of Korea: Final Results of Full Sunset Reviews	http://www.gpo.gov/fdsys/pkg/FR-2012-12-06/pdf/2012-29533.pdf
Note.–The press release of the Commission's adequacy determination can be found at http://usitc.gov/press_room/news_release/2012/er0409kk1.htm. The Commission's adequacy statement can be found at http://pubapps2.usitc.gov/sunset/caseProfSuppAttmnt/download/11453. The Commission's adequacy votes can be found at http://pubapps2.usitc.gov/sunset/caseProfSuppAttmnt/download/11452.		

APPENDIX B

HEARING CALENDAR

CALENDAR OF PUBLIC HEARING

Those listed below appeared as witnesses at the United States International Trade Commission's hearing:

Subject:	Corrosion-Resistant Carbon Steel Flat Products from Germany and Korea
Inv. Nos.:	701-TA-350 and 731-TA-616 and 618 (Third Review)
Date and Time:	January 9, 2013 - 9:30 a.m.

Sessions were held in connection with these reviews in the Main Hearing Room (room 101), 500 E Street, SW, Washington, D.C.

CONGRESSIONAL WITNESS:

The Honorable Peter J. Visclosky, U.S. Representative, 1st District, Indiana

OPENING REMARKS:

In Support of Continuation (**Kathleen W. Cannon**, Kelley Drye & Warren LLP)

In Opposition to Continuation (**Donald B. Cameron**, Morris, Manning & Martin LLP *and* **Kenneth J. Pierce**, Hughes Hubbard & Reed LLP)

In Support of the Continuation of the Antidumping and Countervailing Duty Orders:

Kelley Drye & Warren LLP
Washington, D.C.
on behalf of

ArcelorMittal USA, LLC ("AMUSA")

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

Sheila Janin, Director, Coated Products, Sales and Marketing, AMUSA

Robert DiCianni, Principal Analyst, Marketing, AMUSA

Todd Kegler, President, USA Local 9231

Gina Beck, Economist, Georgetown Economic Services

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

In Support of the Continuation of
the Antidumping and Countervailing Duty Orders (continued):

Schagrin Associates
Washington, D.C.
on behalf of

Steel Dynamics, Inc.

James Anderson, General Manager, The Techs
(Division of Steel Dynamics, Inc.)

Thomas Scruggs, Sales Manager, Steel Dynamics, Inc.

Roger B. Schagrin) – OF COUNSEL

King & Spalding
Washington, D.C.
on behalf of

AK Steel Corporation

Gary T. Barlow, Vice President, Sales and Customer
Service, AK Steel Corporation

Joseph W. Dorn)
) – OF COUNSEL
Stephen A. Jones)

Wiley Rein LLP
Washington, D.C.
on behalf of

Nucor Corporation ("Nucor")

Michael Keller, Vice President and Corporate
Contoller, Nucor

Rick Blume, General Manager, Commercial, Nucor

Alan H. Price)
) – OF COUNSEL
Christopher B. Weld)

In Support of the Continuation of
the Antidumping and Countervailing Duty Orders (continued):

Skadden, Arps, Slate, Meagher & Flom LLP
Washington, D.C.
on behalf of

United States Steel Corporation

Joseph R. Scherrbaum, Jr., Vice President, Sales, United States Steel Corporation

Robert Y. Kopf, General Manager, North American Flat-Rolled Marketing, United States Steel Corporation

Robert E. Lighthizer)
James C. Hecht) – OF COUNSEL
Stephen P. Vaughn)

In Opposition to the Continuation of
the Antidumping and Countervailing Duty Orders:

Hughes Hubbard & Reed LLP
Washington, D.C.
on behalf of

ThyssenKrupp Steel Europe AG
ThyssenKrupp Steel USA, LLC
ThyssenKrupp Steel North America, Inc.
Salzgitter Flachstahl GmbH

Christian Dohr, President and Chief Executive Officer, ThyssenKrupp Steel USA, LLC

Robert Holt, Vice President, Sales and Marketing, ThyssenKrupp Steel USA, LLC

Stefan Grünhage, Head of Distribution Service, Senior Manager Sales Strategy/Planning, ThyssenKrupp Steel Europe AG

Jörg Wichert, Head of Foreign Trade & Export Regulations, ThyssenKrupp Steel Europe AG

Johan Wesslen, President and Chief Executive Officer, ThyssenKrupp Steel North America, Inc.

Christian Koenig, Head of Corporate Affairs, ThyssenKrupp North America, Inc.

Kenneth J. Pierce)
) – OF COUNSEL
Robert L. LaFrankie)

In Opposition to the Continuation of
the Antidumping and Countervailing Duty Orders (continued):

Morris Manning & Martin LLP
Washington, D.C.
on behalf of

Dongbu Steel, Hyundai HYSCO, POSCO,
POSCO C&C, and Union Steel
(collectively "Korean Respondents")

Young-il Baek, Manager. CPA, Overseas Marketing Department, POSCO

Sehoon Hong, Sales Associate Manager, POSCO America

Dong Heui Pi, Deputy General Manager, Marketing Strategy Team, Hyundai HYSCO

Donald B. Cameron)
Julie C. Mendoza) – OF COUNSEL
R. Will Planert)

REBUTTAL/CLOSING REMARKS:

In Support of Continuation (**Paul C. Rosenthal**, Kelley Drye & Warren LLP
and **Stephen P. Vaughn**, Skadden, Arps, Slate, Meagher & Flom LLP)
In Opposition to Continuation (**Kenneth J. Pierce**, Hughes Hubbard & Reed LLP
and **Donald B. Cameron**, Morris, Manning & Martin LLP)

APPENDIX C

SUMMARY DATA

Table C-1
Corrosion-resistant steel: Summary data concerning the U.S. market, 2006-11, January-June 2011, and January-June 2012

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

	Reported data								Period changes						
							January-June								Jan.-June
Item	2006	2007	2008	2009	2010	2011	2011	2012	2006-11	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
U.S. consumption quantity:															
Amount	23,524,952	20,650,325	19,410,102	13,456,451	17,205,842	18,425,614	9,239,179	10,395,281	-21.7	-12.2	-6.0	-30.7	27.9	7.1	12.5
Producers' share (1)	82.2	87.7	88.6	90.8	90.7	90.0	90.2	87.9	7.8	5.5	1.0	2.2	-0.2	-0.7	-2.3
Importers' share (1):															
Germany	0.2	0.3	0.2	0.1	0.1	0.2	0.2	0.2	0.0	0.1	-0.1	-0.2	0.0	0.1	0.0
Korea	2.3	1.8	1.6	1.5	1.0	1.2	1.1	1.5	-1.1	-0.5	-0.1	-0.1	-0.5	0.2	0.4
Subtotal	2.5	2.1	1.9	1.6	1.1	1.4	1.4	1.8	-1.1	-0.4	-0.2	-0.3	-0.5	0.4	0.4
All other sources	15.3	10.3	9.5	7.6	8.2	8.5	8.4	10.3	-6.8	-5.0	-0.8	-1.9	0.7	0.3	1.9
Total imports	17.8	12.3	11.4	9.2	9.3	10.0	9.8	12.1	-7.8	-5.5	-1.0	-2.2	0.2	0.7	2.3
U.S. consumption value:															
Amount	17,728,312	16,369,845	18,555,048	8,832,528	14,475,037	17,270,821	8,635,119	9,634,967	-2.6	-7.7	13.3	-52.4	63.9	19.3	11.6
Producers' share (1)	82.1	86.8	87.6	87.7	89.9	89.2	89.6	87.3	7.1	4.7	0.8	0.1	2.2	-0.7	-2.3
Importers' share (1):															
Germany	0.2	0.3	0.3	0.2	0.1	0.2	0.3	0.2	0.1	0.2	0.0	-0.2	0.0	0.1	0.0
Korea	2.4	1.9	1.8	1.9	1.1	1.3	1.2	1.6	-1.1	-0.5	-0.1	0.1	-0.9	0.3	0.4
Subtotal	2.6	2.3	2.1	2.1	1.2	1.6	1.5	1.9	-1.0	-0.3	-0.2	0.0	-0.9	0.4	0.4
All other sources	15.3	10.9	10.3	10.2	8.9	9.2	8.9	10.9	-6.1	-4.4	-0.6	-0.1	-1.3	0.3	1.9
Total imports	17.9	13.2	12.4	12.3	10.1	10.8	10.4	12.7	-7.1	-4.7	-0.8	-0.1	-2.2	0.7	2.3
U.S. imports from:															
Germany:															
Quantity	45,297	64,201	46,629	10,532	14,768	38,813	22,154	22,045	-14.3	41.7	-27.4	-77.4	40.2	162.8	-0.5
Value	32,465	54,825	57,287	13,361	18,643	41,299	23,375	23,703	27.2	68.9	4.5	-76.7	39.5	121.5	1.4
Unit value	$ 717	$ 854	$ 1,229	$ 1,269	$ 1,262	$ 1,064	$ 1,055	$ 1,075	48.5	19.1	43.9	3.3	-0.5	-15.7	1.9
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Korea:															
Quantity	541,056	366,307	318,011	201,312	169,528	225,518	105,854	160,186	-58.3	-32.3	-13.2	-36.7	-15.8	33.0	51.3
Value	430,800	317,530	332,283	170,728	153,257	231,242	106,601	157,088	-46.3	-26.3	4.6	-48.6	-10.2	50.9	47.4
Unit value	$ 796	$ 867	$ 1,045	$ 848	$ 904	$ 1,025	$ 1,007	$ 981	28.8	8.9	20.5	-18.8	6.6	13.4	-2.6
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Subtotal (subject):															
Quantity	586,354	430,508	364,641	211,843	184,296	264,330	128,008	182,231	-54.9	-26.6	-15.3	-41.9	-13.0	43.4	42.4
Value	463,265	372,355	389,570	184,088	171,900	272,542	129,976	180,791	-41.2	-19.6	4.6	-52.7	-6.6	58.5	39.1
Unit value	$ 790	$ 865	$ 1,068	$ 869	$ 933	$ 1,031	$ 1,015	$ 992	30.5	9.5	23.5	-18.7	7.3	10.5	-2.3
Ending inventory quantity	68,709	65,044	41,670	19,696	19,840	27,408	43,445	26,336	-60.1	-5.3	-35.9	-52.7	0.7	38.1	-39.4
All other sources:															
Quantity	3,600,019	2,118,640	1,843,343	1,020,108	1,416,929	1,575,138	779,168	1,074,115	-56.2	-41.1	-13.0	-44.7	38.9	11.2	37.9
Value	2,710,700	1,784,407	1,914,764	901,313	1,289,113	1,589,472	772,202	1,046,874	-41.4	-34.2	7.3	-52.9	43.0	23.3	35.6
Unit value	$ 753	$ 842	$ 1,039	$ 884	$ 910	$ 1,009	$ 991	$ 975	34.0	11.9	23.3	-14.9	3.0	10.9	-1.7
Ending inventory quantity	147,660	97,224	78,658	55,993	68,751	66,967	74,371	84,447	-54.6	-34.2	-19.1	-28.8	22.8	-2.6	13.5
All sources:															
Quantity	4,186,373	2,549,149	2,207,984	1,231,952	1,601,224	1,839,468	907,176	1,256,346	-56.1	-39.1	-13.4	-44.2	30.0	14.9	38.5
Value	3,173,965	2,156,763	2,304,334	1,085,401	1,461,013	1,862,014	902,178	1,227,665	-41.3	-32.0	6.8	-52.9	34.6	27.4	36.1
Unit value	$ 758	$ 846	$ 1,044	$ 881	$ 912	$ 1,012	$ 994	$ 977	33.5	11.6	23.4	-15.6	3.6	10.9	-1.7
Ending inventory quantity	216,369	162,268	120,328	75,689	88,591	94,375	117,816	110,783	-56.4	-25.0	-25.8	-37.1	17.0	6.5	-6.0
U.S. producers':															
Average capacity quantity	23,472,040	24,164,040	24,470,863	23,612,015	23,720,936	24,044,200	11,868,385	12,732,220	2.4	2.9	1.3	-3.5	0.5	1.4	7.3
Production quantity	20,501,724	19,467,661	17,689,915	12,948,787	16,949,461	18,339,457	9,218,063	9,733,034	-10.5	-5.0	-9.1	-26.8	30.9	8.2	5.6
Capacity utilization (1)	87.3	80.6	72.3	54.8	71.5	76.3	77.7	76.4	-11.1	-6.8	-8.3	-17.4	16.6	4.8	-1.2
U.S. shipments:															
Quantity	19,338,579	18,101,176	17,202,118	12,224,500	15,604,618	16,586,146	8,332,004	9,138,935	-14.2	-6.4	-5.0	-28.9	27.7	6.3	9.7
Value	14,554,347	14,213,082	16,250,714	7,747,127	13,014,024	15,408,807	7,732,941	8,407,302	5.9	-2.3	14.3	-52.3	68.0	18.4	8.7
Unit value	$ 753	$ 785	$ 945	$ 634	$ 834	$ 929	$ 928	$ 920	23.4	4.3	20.3	-32.9	31.6	11.4	-0.9
Export shipments:															
Quantity	1,150,973	1,052,608	914,307	776,574	1,243,797	1,281,659	681,217	661,746	11.4	-8.5	-13.1	-15.1	60.2	3.0	-2.9
Value	820,476	857,567	804,512	599,173	1,084,747	1,215,113	628,883	657,269	48.1	4.5	-6.2	-25.5	81.0	12.0	4.5
Unit value	$ 713	$ 815	$ 880	$ 772	$ 872	$ 948	$ 923	$ 993	33.0	14.3	8.0	-12.3	13.0	8.7	7.6
Ending inventory quantity	1,645,919	2,026,363	1,636,171	1,616,872	1,724,176	2,191,408	1,939,849	2,207,094	33.1	23.1	-19.3	-1.2	6.6	27.1	13.8
Inventories/total shipments (1)	8.0	10.6	9.0	12.4	10.2	12.3	10.8	11.3	4.2	2.5	-1.5	3.4	-2.2	2.0	0.5
Production workers	12,170	12,575	12,330	9,980	11,112	11,866	11,644	11,582	-2.5	3.3	-1.9	-19.1	11.3	6.8	-0.5
Hours worked (1,000s)	27,358	27,281	26,441	20,421	24,468	26,201	13,094	13,414	-4.2	-0.3	-3.1	-22.8	19.8	7.1	2.4
Wages paid (1,000s)	947,621	932,141	921,049	700,474	893,276	957,760	480,801	515,523	1.1	-1.6	-1.2	-23.9	27.5	7.2	7.2
Hourly wages	$ 34.64	$ 34.17	$ 34.83	$ 34.30	$ 36.51	$ 36.55	$ 36.72	$ 38.43	5.5	-1.4	1.9	-1.5	6.4	0.1	4.7
Productivity (tons/1,000 hours)	749.4	713.6	669.0	634.1	692.7	700.0	704.0	725.6	-6.6	-4.8	-6.2	-5.2	9.2	1.0	3.1
Unit labor costs	$ 46.22	$ 47.88	$ 52.07	$ 54.10	$ 52.70	$ 52.22	$ 52.16	$ 52.97	13.0	3.6	8.7	3.9	-2.6	-0.9	1.5
Net sales:															
Quantity	19,925,800	18,824,213	17,532,045	12,721,074	16,424,896	17,317,412	8,779,125	9,577,657	-13.1	-5.5	-6.9	-27.4	29.1	5.4	9.1
Value	14,824,169	14,654,684	16,373,449	9,417,466	13,643,398	16,014,791	8,088,190	8,785,457	8.0	-1.1	11.7	-42.5	44.9	17.4	8.6
Unit value	$ 744	$ 779	$ 934	$ 740	$ 831	$ 925	$ 921	$ 917	24.3	4.6	20.0	-20.7	12.2	11.3	-0.4
Cost of goods sold (COGS)	13,986,360	13,701,678	15,300,636	9,653,108	12,894,119	14,995,437	7,360,245	8,052,990	7.2	-2.0	11.7	-36.9	33.6	16.3	9.4
Gross profit or (loss)	837,809	953,006	1,072,813	(235,642)	749,279	1,019,354	727,945	732,467	21.7	13.7	12.6	(2)	(2)	36.0	0.6
SG&A expenses	422,974	426,511	391,645	310,523	339,030	360,266	192,352	197,445	-14.8	0.8	-8.2	-20.7	9.2	6.3	2.6
Operating income or (loss)	414,836	526,495	681,169	(546,165)	410,249	659,088	535,593	535,023	58.9	26.9	-29.4	(2)	(2)	60.7	-0.1
Capital expenditures	442,031	623,900	916,708	659,655	1,180,534	450,690	183,211	274,782	2.0	41.1	46.9	-28.0	79.0	-61.8	50.0
Unit COGS	$ 702	$ 728	$ 873	$ 759	$ 785	$ 866	$ 838	$ 841	23.4	3.7	19.9	-13.1	3.5	10.3	0.3
Unit SG&A expenses	$ 21	$ 23	$ 22	$ 24	$ 21	$ 21	$ 22	$ 21	-2.0	6.7	-1.4	9.3	-15.4	0.8	-5.9
Unit operating income or (loss)	$ 21	$ 28	$ 39	($43)	$ 25	$ 38	$ 61	$ 56	82.8	34.3	-38.9	(2)	(2)	52.4	-8.4
COGS/sales (1)	94.3	93.5	93.4	102.5	94.5	93.6	91.0	91.7	-0.7	-0.9	0.0	9.1	-8.0	-0.9	0.7
Operating income or (loss)/ sales (1)	2.8	3.6	4.2	(5.8)	3.0	4.1	6.6	6.1	1.3	0.8	0.6	(2)	(2)	1.1	-0.5

(1) "Reported data" are in percent and "period changes" are in percentage points.
(2) Not applicable.

Note.--Financial data are reported on a fiscal year basis and may not necessarily be comparable to data reported on a calendar year basis. Because of rounding, figures may not add to the totals shown. Unit values and shares are calculated from the unrounded figures.

Source: Compiled from data submitted in response to Commission questionnaires and from official Commerce statistics.

APPENDIX D

RESPONSES OF U.S. PRODUCERS, U.S. IMPORTERS, U.S. PURCHASERS, AND FOREIGN PRODUCERS CONCERNING THE SIGNIFICANCE OF THE ANTIDUMPING DUTY AND COUNTERVAILING DUTY ORDERS AND THE LIKELY EFFECTS OF REVOCATION

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