# Carbon and Certain Alloy Steel Wire Rod from Belarus, Russia, and the United Arab Emirates

Investigation Nos. 731-TA-1349, 1352, and 1357 (Final)

**Publication 4752** 

January 2018

# U.S. International Trade Commission

Washington, DC 20436

# **U.S. International Trade Commission**

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### UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 731-TA-1349, 1352, and 1357 (Final)

Carbon and Certain Alloy Steel Wire Rod from Belarus, Russia, and the United Arab Emirates

### **DETERMINATIONS**

On the basis of the record<sup>1</sup> developed in the subject investigations, the United States International Trade Commission ("Commission") determines, pursuant to the Tariff Act of 1930 ("the Act"), that an industry in the United States is materially injured by reason of imports of carbon and certain alloy steel wire rod from Belarus, Russia, and the United Arab Emirates, provided for in subheadings 7213.91.30, 7213.91.45, 7213.91.60, 7213.99.00, 7227.20.00, and 7227.90.60 of the Harmonized Tariff Schedule of the United States, that have been found by the Department of Commerce ("Commerce") to be sold in the United States at less than fair value ("LTFV").<sup>2</sup>

### **BACKGROUND**

The Commission, pursuant to section 735(b) of the Act (19 U.S.C. 1673d(b)), instituted these investigations effective March 28, 2017, following receipt of a petition filed with the Commission and Commerce by Charter Steel, Saukville, Wisconsin; Gerdau Ameristeel US Inc., Tampa, Florida; Keystone Consolidated Industries, Inc., Peoria, Illinois; and Nucor Corporation, Charlotte, North Carolina. The Commission scheduled the final phase of the investigations following notification of preliminary determinations by Commerce that imports of carbon and certain alloy steel wire rod from Belarus, Russia, and the United Arab Emirates were being sold at LTFV within the meaning of section 733(b) of the Act (19 U.S.C. 1673b(b)). Notice of the scheduling of the final phase of the Commission's investigations 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* of September 20, 2017 (82 FR 44001). The hearing was held in Washington, DC, on November 16, 2017 and all persons who requested the opportunity were permitted to appear in person or by counsel.

<sup>&</sup>lt;sup>1</sup> The record is defined in sec. 207.2(f) of the Commission's Rules of Practice and Procedure (19 CFR 207.2(f)).

<sup>&</sup>lt;sup>2</sup> The Commission also finds that imports of wire rod subject to Commerce's affirmative critical circumstances determination are not likely to undermine seriously the remedial effect of the antidumping duty order on Russia.

### **Views of the Commission**

Based on the record in the final phase of these investigations, we determine that an industry in the United States is materially injured by reason of imports of carbon and alloy steel wire rod ("wire rod") from Belarus, Russia, and the United Arab Emirates found by the U.S. Department of Commerce ("Commerce") to be sold in the United States at less than fair value. We also find that critical circumstances do not exist with respect to imports of wire rod from Russia that are subject to Commerce's final affirmative critical circumstances determination.

# I. Background

The petitions in these investigations were filed on March 28, 2017, by Gerdau Ameristeel U.S. Inc. ("Gerdau"); Nucor Corporation ("Nucor"); Keystone Consolidated Industries, Inc. ("Keystone"); and Charter Steel (collectively "petitioners"), domestic producers of wire rod. Representatives for petitioners appeared at the hearing with counsel. Nucor submitted prehearing and posthearing briefs, as did the other three petitioners jointly.

Several respondent entities participated in these investigations. Open Joint Stock Company Byelorussian Steel Works, a producer and exporter of wire rod in Belarus ("Belarusian respondent"), submitted a posthearing brief. Ferriere Nord S.p.A, a producer and exporter of wire rod in Italy ("Italian respondent"), submitted a prehearing brief. POSCO, a producer and exporter of wire rod in Korea ("Korean respondent"), appeared at the hearing and submitted prehearing and posthearing briefs. NMLK-Ural, a producer and exporter of wire rod in Russia ("Russian respondent"), submitted a prehearing brief. The Ministry of Economic Development of Russia submitted a posthearing brief. Icdas Celik Enerji Tersane ve Ulasim Sanayi A.S., a producer and exporter of wire rod in Turkey, and The Istanbul Minerals and Metals Association and the Turkish Steel Exporters' Association, associations for producers and exporters of subject merchandise in Turkey ("Turkish respondents"), appeared at the hearing and submitted prehearing and posthearing briefs. The Ministry of Economic Development and Trade of Ukraine submitted a prehearing brief. British Steel Limited, a producer and exporter of wire rod in the United Kingdom ("British respondent"), appeared at the hearing and submitted prehearing and posthearing briefs. The American Wire Producers Association, an association for U.S. purchasers of wire rod ("AWPA"), appeared at the hearing and submitted prehearing and posthearing briefs. Finally, Kiswire Ltd. and Kiswire America Inc. (collectively "Kiswire") and Bekaert Corporation ("Bekaert"), U.S. purchasers of wire rod, appeared at the hearing and submitted a posthearing brief.

<sup>&</sup>lt;sup>1</sup> The petitions concerned wire rod from Belarus, Italy, Korea, Russia, South Africa, Spain, Turkey, Ukraine, the United Arab Emirates, and the United Kingdom. Commerce has not yet issued its final determinations in its investigations of wire rod from Italy, Korea, South Africa, Spain, Turkey, Ukraine, and the United Kingdom. The briefing and hearing described below address the Commission's final phase investigations with respect to wire rod from all ten subject countries.

U.S. industry data are based on the questionnaire responses from nine domestic producers that accounted for virtually all domestic production of wire rod in 2016.<sup>2</sup> The Commission received usable responses to its questionnaires from 23 U.S. importers of wire rod that represented essentially all imports of wire rod from Belarus, Italy, Korea, Russia, South Africa, Spain, Ukraine, the United Arab Emirates, and the United Kingdom, approximately 41 percent of imports of wire rod from Turkey, and approximately \*\*\* percent of imports of wire rod from nonsubject countries in 2016.<sup>3</sup> The Commission received usable responses to its foreign producer questionnaire from one producer of subject merchandise in Belarus whose reported exports accounted for \*\*\* percent of U.S. imports of wire rod from Belarus over the January 1, 2014 – September 30, 2017 period of investigation, 4 four producers of subject merchandise in Italy whose reported exports accounted for \*\*\* of U.S. imports from Italy over the period of investigation,<sup>5</sup> one producer of subject merchandise in Korea whose reported exports accounted for \*\*\* percent of all U.S. imports from Korea over the period of investigation, one producer of subject merchandise from Russia whose reported exports accounted for \*\*\* percent of all U.S. imports from Russia over the period of investigation, one producer of subject merchandise in South Africa whose reported exports accounted for \*\*\* percent of all U.S. imports from South Africa over the period of investigation, 8 four producers of subject merchandise in Spain whose reported exports accounted for \*\*\* percent of all U.S. imports from Spain over the period of investigation, <sup>9</sup> five producers of subject merchandise in Turkey whose reported exports accounted for \*\*\* percent of all U.S. imports from Turkey in 2016, 10 two producers of subject merchandise in Ukraine whose reported exports accounted for \*\*\* percent of all U.S. imports from Ukraine over the period of investigation, <sup>11</sup> and two producers of subject merchandise in the United Kingdom whose exports accounted for \*\*\* percent of all U.S. imports from the United Kingdom over the period of investigation. 12 The Commission did not receive any responses to its foreign producer questionnaire from any producer or exporter in the United Arab Emirates. 13

<sup>&</sup>lt;sup>2</sup> Confidential Report (INV-PP-161, December 8, 2017) ("CR") at III-1, Public Report ("PR") at III-1. Republic Steel, a domestic producer of wire rod that ceased production in March 2016, did not provide a usable questionnaire response in the preliminary phase of the investigations and did not provide any questionnaire response in the final phase. CR/PR at III-1 n.1.

<sup>&</sup>lt;sup>3</sup> CR at IV-1, PR at IV-1.

<sup>&</sup>lt;sup>4</sup> CR at VII-3, PR at VII-3.

<sup>&</sup>lt;sup>5</sup> CR at VII-9, PR at VII-7.

<sup>&</sup>lt;sup>6</sup> CR at VII-15, PR at VII-11.

<sup>&</sup>lt;sup>7</sup> CR at VII-21, PR at VII-15.

<sup>&</sup>lt;sup>8</sup> CR at VII-27, PR at VII-19.

<sup>&</sup>lt;sup>9</sup> CR at VII-33, PR at VII-23.

<sup>&</sup>lt;sup>10</sup> CR at VII-40, PR at VII-27.

<sup>&</sup>lt;sup>11</sup> CR at VII-46, PR at VII-31.

<sup>&</sup>lt;sup>12</sup> CR at VII-61, PR at VII-40.

<sup>&</sup>lt;sup>13</sup> CR at VII-53, PR at VII-36. Foreign industry information for the United Arab Emirates is based on a usable response to the foreign producer questionnaire that the Commission received in the preliminary phase of the investigations from one producer of subject merchandise in the United Arab (Continued...)

### II. Domestic Like Product

### A. In General

In determining whether an industry in the United States is materially injured or threatened with material injury by reason of imports of subject merchandise, the Commission first defines the "domestic like product" and the "industry." Section 771(4)(A) of the Tariff Act of 1930, as amended ("the Tariff Act"), defines the relevant domestic industry as the "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." In turn, the Tariff Act defines "domestic like product" as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation."

The decision regarding the appropriate domestic like product in an investigation is a factual determination, and the Commission has applied the statutory standard of "like" or "most similar in characteristics and uses" on a case-by-case basis. <sup>17</sup> No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation. <sup>18</sup> The Commission looks for clear dividing lines among possible like products and disregards minor variations. <sup>19</sup> Although the Commission must accept Commerce's determination as to the scope of the imported merchandise that is subsidized or

### (...Continued)

Emirates whose reported exports accounted for \*\*\* percent of U.S. imports of wire rod from the United Arab Emirates during 2014-2016. CR at VII-53-54, PR at VII-36.

<sup>&</sup>lt;sup>14</sup> 19 U.S.C. § 1677(4)(A).

<sup>&</sup>lt;sup>15</sup> 19 U.S.C. § 1677(4)(A).

<sup>&</sup>lt;sup>16</sup> 19 U.S.C. § 1677(10).

<sup>&</sup>lt;sup>17</sup> 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); Torrington Co. v. United States, 747 F. Supp. 744, 749 n.3 (Ct. Int'l Trade 1990), aff'd, 938 F.2d 1278 (Fed. Cir. 1991) ("every like product determination 'must be made on the particular record at issue' and the 'unique facts of each case'"). The Commission generally considers a number of factors, including the following: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) customer and producer perceptions of the products; (5) common manufacturing facilities, production processes, and production employees; and, where appropriate, (6) price. See Nippon, 19 CIT at 455 n.4; Timken Co. v. United States, 913 F. Supp. 580, 584 (Ct. Int'l Trade 1996).

<sup>&</sup>lt;sup>18</sup> See, e.g., S. Rep. No. 96-249 at 90-91 (1979).

<sup>&</sup>lt;sup>19</sup> Nippon, 19 CIT at 455; Torrington, 747 F. Supp. at 748-49; see also S. Rep. No. 96-249 at 90-91 (Congress has indicated that the like product standard should not be interpreted in "such a narrow fashion as to permit minor differences in physical characteristics or uses to lead to the conclusion that the product and article are not 'like' each other, nor should the definition of 'like product' be interpreted in such a fashion as to prevent consideration of an industry adversely affected by the imports under consideration.").

sold at less than fair value, <sup>20</sup> the Commission determines what domestic product is like the imported articles Commerce has identified. <sup>21</sup>

### B. Product Description

Commerce defined the imported merchandise within the scope of these investigations as:

... certain hot-rolled products of carbon steel and alloy steel, in coils, of approximately round cross section, less than 19.00 mm in actual solid cross-sectional diameter. Specifically excluded are steel products possessing the above-noted physical characteristics and meeting the Harmonized Tariff Schedule of the United States (HTSUS) definitions for (a) stainless steel; (b) tool steel; (c) highnickel steel; (d) ball bearing steel; or (e) concrete reinforcing bars and rods. Also excluded are free cutting steel (also known as free machining steel) products (i.e., products that contain by weight one or more of the following elements: 0.1 percent or more of lead, 0.05 percent or more of bismuth, 0.08 percent or more of sulfur, more than 0.04 percent of phosphorous, more than 0.05 percent of selenium, or more than 0.01 percent of tellurium). All products meeting the physical description of subject merchandise that are not specifically excluded are included in this scope.

Wire rod is currently imported under statistical reporting numbers 7213.91.3011, 7213.91.3015, 7213.91.3020, 7213.91.3093; 7213.91.4500, 7213.91.6000, 7213.99.0030, 7227.20.0030, 7227.20.0080, 7227.90.6010, 7227.90.6020, 7227.90.6030, and 7227.90.6035 of the Harmonized Tariff Schedule of the United States (HTSUS). Products entered under subheadings 7213.99.0090 and 7227.90.6090 of the HTSUS also may be included in this scope if they meet the physical description of subject merchandise above. The HTSUS provisions are for

<sup>&</sup>lt;sup>20</sup> See, e.g., USEC, Inc. v. United States, 34 Fed. Appx. 725, 730 (Fed. Cir. 2002) ("The ITC may not modify the class or kind of imported merchandise examined by Commerce."); Algoma Steel Corp. v. United States, 688 F. Supp. 639, 644 (Ct. Int'l Trade 1988), aff'd, 865 F.3d 240 (Fed. Cir.), cert. denied, 492 U.S. 919 (1989).

<sup>&</sup>lt;sup>21</sup> Hosiden Corp. v. Advanced Display Mfrs., 85 F.3d 1561, 1568 (Fed. Cir. 1996) (the Commission may find a single like product corresponding to several different classes or kinds defined by Commerce); Cleo, 501 F.3d at 1298 n.1 ("Commerce's {scope} finding does not control the Commission's {like product} determination."); Torrington, 747 F. Supp. at 748-52 (affirming the Commission's determination defining six like products in investigations in which Commerce found five classes or kinds).

convenience and customs purposes; the written description of the scope is dispositive.<sup>22</sup>

Wire rod is a hot-rolled intermediate steel product of circular or approximately circular cross section that typically is produced in nominal fractional diameters up to 47/64 inch (18.7 mm) and sold in irregularly wound coils, primarily for subsequent drawing and finishing by wire drawers.<sup>23</sup> Wire rod sold in the United States is categorized by quality according to end use.<sup>24</sup>

### C. Arguments of the Parties

Petitioners argue that the Commission should find a single domestic like product consisting of all wire rod, coextensive with the scope of the investigations. They assert that this would be consistent with the Commission's treatment of wire rod in prior investigations and reviews in which the Commission found all wire rod to comprise a single like product with no clear demarcations by type, grade, size, or use.<sup>25</sup>

Petitioners assert that the Commission has previously rejected respondents' argument that grade 1080 tire cord and tire bead wire rod is a separate domestic like product, and that nothing has changed in these investigations that would justify a different result.<sup>26</sup> Petitioners maintain that there is no clear dividing line between grade 1080 tire cord and tire bead wire rod and other wire rod products.<sup>27</sup>

Petitioners contend that all wire rod, including grade 1080 tire cord and tire bead wire rod, is used for subsequent drawing and finishing into wire products. Petitioners dispute respondents' contention that exacting metallurgical specifications, use of pure iron billets as opposed to scrap as a raw material, and inclusion and cleanliness standards are distinguishing characteristics of grade 1080 tire cord and tire bead wire rod. They acknowledge that different types of wire rod products are generally not interchangeable with one another

<sup>&</sup>lt;sup>22</sup> Carbon and Alloy Steel Wire Rod from Belarus, the Russian Federation, and the United Arab Emirates, 82 Fed. Reg. 56214, 56216 (Nov. 28, 2017) (affirmative final determinations of sales at less than fair value and partial affirmative finding of critical circumstances) ("Commerce Antidumping Duty Investigations"). The scope definition in Commerce's preliminary determinations in the trailing investigations is the same. See, e.g., Carbon and Alloy Steel Wire Rod from Italy, 82 Fed. Reg. 50381, 50383 (Oct. 31, 2017) (preliminary affirmative determination of sales at less than fair value); Carbon and Alloy Steel Wire Rod from Korea, 82 Fed. Reg. 56220, 56221 (Nov. 28, 2017) (amended preliminary determination of sales at less than fair value).

<sup>&</sup>lt;sup>23</sup> CR at I-15, PR at I-14.

<sup>&</sup>lt;sup>24</sup> CR at I-15, PR at I-14.

<sup>&</sup>lt;sup>25</sup> Gerdau, Keystone, and Charter Steel Prehearing Br. at 5-6.

 $<sup>^{26}</sup>$  Gerdau, Keystone, and Charter Steel Prehearing Br. at 7; Nucor Posthearing Br. at Exhibit 1 pp.

<sup>21-24.</sup> 

<sup>&</sup>lt;sup>27</sup> Gerdau, Keystone, and Charter Steel Prehearing Br. at 8.

<sup>&</sup>lt;sup>28</sup> Gerdau, Keystone, and Charter Steel Prehearing Br. at 8.

<sup>&</sup>lt;sup>29</sup> Gerdau, Keystone, and Charter Steel Prehearing Br. at 9-10; Gerdau, Keystone, and Charter Steel Posthearing Br. at Exhibit 1 pp.1-2, 14-15; Nucor Posthearing Br. at Exhibit 1 pp.5-10.

because they do not meet the specification required for a particular end use, but argue that this typically does not mandate defining separate like products.<sup>30</sup> Petitioners further argue that domestic producers produce all wire rod, including grade 1080 tire cord and tire bead wire rod, using the same facilities, equipment, and employees,<sup>31</sup> and sell the wire rod products mainly to end users.<sup>32</sup> Finally, with respect to price, petitioners stress that although grade 1080 tire cord and tire bead wire rod commands a price premium over lower end-products, other higher-end wire products such as suspension spring steel wire rod are similarly priced.<sup>33</sup>

The AWPA, Kiswire, and the British and Korean respondents, supported by the Turkish respondents, argue that grade 1080 tire cord and tire bead wire rod should be defined as a domestic like product separate from other wire rod covered by the scope.<sup>34</sup>

Kiswire and the British and Korean respondents claim that since the Commission's prior wire rod investigations, grade 1080 tire cord and tire bead wire rod has changed in terms of product, production processes, and applications. 35 The British and Korean respondents assert that there are now significant differences in physical characteristics between grade 1080 tire cord and tire bead wire rod and other wire rod products. They claim that grade 1080 tire cord and tire bead wire rod, in contrast to other types of wire rod, is produced to stringent, restrictive specifications requiring wire rod that is free of inclusions and surface defects.<sup>36</sup> Additionally, the British respondent contends that unlike "conventional low, medium, and high carbon" wire rod, the testing requirements are stringent and the technical parameters for grade 1080 tire cord and tire bead wire rod require steel cleanliness, segregation, surface quality, decarburization and dimensional tolerances.<sup>37</sup> The Korean respondent contends that grade 1080 tire cord and tire bead wire rod have significant differences with regard to the heightened control and technical parameters of non-metallic inclusions and surface cracking for purposes of reducing breakage.<sup>38</sup> Additionally, it maintains that wire rod producers of grade 1080 tire cord and tire bead wire rod must undergo a lengthy qualification process to become certified suppliers.<sup>39</sup>

The British and Korean respondents further argue that grade 1080 tire cord and tire bead wire rod is not interchangeable with other types of wire rod and has different channels of

<sup>&</sup>lt;sup>30</sup> Gerdau, Keystone, and Charter Steel Prehearing Br. at 10.

<sup>&</sup>lt;sup>31</sup> Gerdau, Keystone, and Charter Steel Prehearing Br. at 11-12; Gerdau, Keystone, and Charter Steel Posthearing Br. at Exhibit 1 p.15; Nucor Posthearing Br. at Exhibit 1 pp.10-14.

<sup>&</sup>lt;sup>32</sup> Gerdau, Keystone, and Charter Steel Prehearing Br. at 11.

<sup>&</sup>lt;sup>33</sup> Gerdau, Keystone, and Charter Steel Prehearing Br. at 13.

<sup>&</sup>lt;sup>34</sup> AWPA Prehearing Br. at 28-32; Kiswire Posthearing Br. at 1-8; British Respondent Prehearing Br. at 21-28; Korean Respondent Prehearing Br. at 2-30; Turkish Respondents Prehearing Br. at 10.

<sup>&</sup>lt;sup>35</sup> Kiswire Posthearing Br. at Responses to Commission Questions pp.5-6; British Respondent Prehearing Br. at 21; Korean Respondent Prehearing Br. at 5; Korean Respondent Posthearing Br. at 14.

<sup>&</sup>lt;sup>36</sup> British Respondent Prehearing Br. at 21; Korean Respondent Prehearing Br. at 23-24. Wire rod that is "free of inclusions" has consistent purity and cleanliness. *See id*.

<sup>&</sup>lt;sup>37</sup> British Respondent Prehearing Br. at 23-24.

<sup>&</sup>lt;sup>38</sup> Korean Respondent Prehearing Br. at 23-24.

<sup>&</sup>lt;sup>39</sup> Korean Respondent Prehearing Br. at 24.

distribution than other wire rod products. <sup>40</sup> Specifically, they assert that grade 1080 tire cord and tire bead rod is sold exclusively to producers of tire cord and tire bead wire in the automotive sector. <sup>41</sup> According to the British respondent, unlike standard wire, tire wire product specifications are technically complex and subject to trial and development programs. Consequently, domestic producers engage directly with tire cord and tire bead wire purchasers. <sup>42</sup> It maintains that standard wire rod, on the other hand, is sold to distributors. <sup>43</sup>

Additionally, Kiswire and the British and Korean respondents argue that grade 1080 tire cord and tire bead wire rod have different manufacturing facilities than other types of wire rod. They assert that grade 1080 tire cord and tire bead wire rod can only be produced to customers' requirements using the basic oxygen furnace ("BOF") process used by certain subject producers as opposed to the electric arc furnace ("EAF") process used by domestic producers for production of their wire rod. The Korean respondent states that although Evraz Rocky Mountain Steel ("Evraz") and Keystone reported production of grade 1080 tire cord and tire bead wire rod using the EAF process, the evidence indicates that the companies have been unable to produce these products in commercial quantities and to the satisfaction of tire manufacturers. Kiswire argues that Evraz is able to produce grade 1080 tire cord wire rod, but that it must use imported BOF billets from Canada to do so. It claims that domestic producers do not use imported BOF billets to produce any other types of wire rod thus evidencing a clear dividing line between grade 1080 tire cord and tire bead wire rod and other wire rod products.

Finally, the British and Korean respondents argue that customers perceive grade 1080 tire cord and tire bead wire rod to be a distinct product from other types of wire rod <sup>48</sup> and that grade 1080 tire cord and tire bead wire is priced higher than all other wire rod products. <sup>49</sup>

### D. Domestic Like Product Analysis

Based on the record, we define a single domestic like product consisting of all wire rod, coextensive with the scope of the investigations.<sup>50</sup>

<sup>&</sup>lt;sup>40</sup> British Respondent Prehearing Br. at 26-27; Korean Respondent Prehearing Br. at 26-27.

<sup>&</sup>lt;sup>41</sup> British Respondent Prehearing Br. at 27; Korean Respondent Prehearing Br. at 26.

<sup>&</sup>lt;sup>42</sup> British Respondent Prehearing Br. at 27.

<sup>&</sup>lt;sup>43</sup> British Respondent Prehearing Br. at 27.

<sup>&</sup>lt;sup>44</sup> Kiswire Posthearing Br. at 4; British Respondent Prehearing Br. at 24-26; Korean Respondent Prehearing Br. at 25-26.

<sup>&</sup>lt;sup>45</sup> Kiswire Posthearing Br. at 4; British Respondent Prehearing Br. at 21, 24; Korean Respondent Prehearing Br. at 25-26.

<sup>&</sup>lt;sup>45</sup> Korean Respondent Prehearing Br. at 25-26.

<sup>&</sup>lt;sup>46</sup> Korean Respondent Prehearing Br. at 11-19.

<sup>&</sup>lt;sup>47</sup> Kiswire Posthearing Br. at 5-6.

<sup>&</sup>lt;sup>48</sup> British Respondent Prehearing Br. at 27; Korean Respondent Prehearing Br. at 27.

<sup>&</sup>lt;sup>49</sup> British Respondent Prehearing Br. at 28; Korean Respondent Prehearing Br. at 29-30.

<sup>&</sup>lt;sup>50</sup> In the preliminary determinations, the Commission specifically considered and rejected the contention that grade 1080 tire cord and tire bead wire rod is a separate domestic like product. *Carbon* (Continued...)

Physical Characteristics and Uses. The record indicates that there is some overlap between grade 1080 tire cord and tire bead wire rod and all other wire rod with respect to physical characteristics and uses. All wire rod products within the scope, including grade 1080 tire cord and tire bead wire rod, are intermediate circular, hot-rolled steel products that are sold in irregularly wound coils and used for drawing and finishing into wire and wire products. The record indicates that the scope definition encompasses at least 11 major categories of wire rod, defined by end use, including low-carbon wire rod such as industrial wire rod used for nails and chain link fence, medium-high to high carbon wire rod used for mechanical springs, cold-heading quality ("CHQ") wire, prestressed concrete strand ("PC strand"), and the highest-end products, including tire cord wire rod and music spring wire rod. Tire cord wire rod itself comprises several grades, including grade 1070 and 1080.

The British and Korean respondents argue that grade 1080 tire cord and tire bead wire rod is physically distinct from other wire rod because it is produced through a tightly managed manufacturing process to stringent specifications. However, the record indicates that there is domestic production of tire cord and tire bead wire rod below grade 1080 that also requires a

### (...Continued)

and Alloy Steel Wire Rod from Belarus, Italy, Korea, Russia, South Africa, Spain, Turkey, Ukraine, United Arab Emirates, and the United Kingdom, Inv. Nos. 701-TA-573-574 and 731-TA-1349-1358 (Preliminary), USITC Pub. 4693 at 8-12 (May 2017) ("Preliminary Determinations"). The Commission found that although certain distinctions existed between grade 1080 tire cord and tire bead wire rod and other types of wire rod, there were substantial similarities as well. Specifically, it observed that grade 1080 tire cord and tire bead wire rod were high-end specialized products that were produced to specific customer requirements and standards and had limited interchangeability with other wire rod products in some end uses. It further observed that prices were lower for industrial quality wire rod and higher for higher quality and more specialized wire rod. However, given that all wire rod products shared certain basic physical properties, were generally manufactured in the same domestic facilities using the same processes, and were sold primarily to end users, and that limited interchangeability in some end uses and price differences was consistent with a grouping of a range of similar products, the Commission declined to define grade 1080 tire cord and tire bead wire rod as a separate domestic like product. See id. at 11-12. The Commission noted that this conclusion was consistent with findings it had made in 2002 and 2006 investigations of steel wire rod that grade 1080 tire cord and tire bead wire rod was not a separate domestic like product. Id. at 11 n.57. As explained below, while the record in the final phase of these investigations contains more extensive information with respect to the domestic like product factors, evidence on the record continues to indicate that grade 1080 tire cord and tire bead wire rod is not a separate domestic like product.

<sup>&</sup>lt;sup>51</sup> CR at I-15, PR at I-14.

<sup>&</sup>lt;sup>52</sup> CR at I-16-17, PR at I-14.

<sup>&</sup>lt;sup>53</sup> CR/PR at Table IV-9 n.1; Nucor Posthearing Br. at Exhibit 1 pp.7-10, Exhibits 8-10; Kiswire Posthearing Br. at Responses to Commission Questions p.9 (stating that \*\*\*) and Exhibit 1. The different grades of tire cord and tire bead wire rod correspond to the carbon content. Thus, the carbon content of grade 1070 tire cord and tire bead wire rod is 0.7 percent, grade 1080 tire cord and tire bead wire rod is 0.8 percent, and grade 1090 tire cord and tire bead wire rod is 0.9 percent. Hearing Tr. at 218 (Hughes).

tightly managed manufacturing process to exacting purchaser specifications.<sup>54</sup> Purchaser specifications indicate similar metallurgical requirements for grades 1070 and 1080 tire cord and tire bead wire rod. Specifically, \*\*\*.<sup>55</sup> Key technical parameters for tire cord and tire bead wire rod such as surface defect, decarburization, microstructure, centerline segregation, and inclusion standards are also identical \*\*\*.<sup>56</sup> Moreover, other highly specialized wire rod products such as aircraft quality wire rod and music spring wire rod also have exacting metallurgical standards.<sup>57</sup> Their production processes must be carefully controlled to ensure the surface quality and cleanliness of the steel.<sup>58</sup> Thus, stringent metallurgical and quality requirements are not unique to grade 1080 tire cord and tire bead wire rod, but rather are shared qualities of certain specialized wire rod products that are on the high end of the wire rod spectrum.

Manufacturing Facilities, Production Processes, and Employees. All wire rod, including grade 1080 tire cord and tire bead wire rod, shares a basic manufacturing process consisting of steelmaking, casting, hot-rolling and coiling, and cooling. <sup>59</sup> While changes in chemical composition, alloying elements and other raw materials, stand fittings, and cooling speed determine the quality of the wire rod produced, the basic equipment, machinery, and facilities remain the same for the production of all wire rod including grade 1080 tire cord and tire bead wire rod. <sup>60</sup> Keystone and Evraz, which reported producing and shipping grade 1080 tire cord and/or tire bead wire rod during the period of investigation, and Nucor, which recently started production of grade 1080 tire bead wire rod, state that they use the same manufacturing facilities, production processes, and employees to produce grade 1080 tire cord and tire bead wire rod and other wire rod products. Specifically, \*\*\* produces grade 1080 as well as grades 1065 to 1075 tire cord and tire bead wire rod, industrial quality wire rod, welding quality wire rod, suspension spring wire rod, and CHQ wire rod using the same facilities, production

<sup>&</sup>lt;sup>54</sup> Evraz produces grades 1065 to 1075 and grade 1080 tire cord and tire bead wire rod. Keystone produces grades 1070 to grade 1080 tire bead wire rod, including grades 1070, 1074, and 1078. Gerdau, Keystone, and Charter Steel Posthearing Br. at Exhibit 1 p.1.

<sup>&</sup>lt;sup>55</sup> Gerdau, Keystone, and Charter Steel Posthearing Br. at 13, Exhibit 1 p.14, Exhibit 10; Nucor Posthearing Brief at Exhibit 1 pp. 7-8, Exhibits 9, 10.

<sup>&</sup>lt;sup>56</sup> Gerdau, Keystone, and Charter Steel Posthearing Br. at 13-14, Exhibit 1 p.14, Exhibit 10; Nucor Posthearing Brief at Exhibit 1 pp. 7-8, Exhibit 9.

<sup>&</sup>lt;sup>57</sup> Nucor Posthearing Br. at Exhibit 1 pp.18-21, Exhibit 6 (stating that music spring wire rod possesses specifications, including greater than 0.8 percent carbon content, similar to that of grade 1080 tire cord and tire bead wire rod); Hearing Tr. at 110 (Nystrom).

<sup>&</sup>lt;sup>58</sup> Cascade U.S. Producer Questionnaire Response at V-1(a) (stating that music spring wire rod may be drawn to similar diameters as grade 1080 tire cord and tire bead wire rod and thus has similar quality requirements); Hearing Tr. at 110 (Nystrom); Kiswire Posthearing Br. at Responses to Commission Questions p. 3-4 (acknowledging the existence of other high end products that require the same tightly managed process and cleanliness of steel as grade 1080 tire cord and tire bead wire rod); Korean Respondent Posthearing Br. at 16 (stating that other high-end products, such as CHQ wire rod, suspension spring wire rod, and bearing quality rod, require stringent process controls and clean steel).

<sup>&</sup>lt;sup>59</sup> CR at I-18-24, PR at I-17-22.

<sup>&</sup>lt;sup>60</sup> CR at I-24. PR at I-20.

processes, and employees. \*\*\* states that \*\*\*.<sup>61</sup> \*\*\* produces and packages grade 1080 in addition to grades 1070, 1074, and 1078 tire bead wire rod, industrial quality wire rod, welding quality wire rod, and CHQ wire rod on \*\*\*.<sup>62</sup> \*\*\* produces grade 1080 tire bead wire rod, industrial quality wire rod, welding quality wire rod, suspension spring wire rod, and CHQ wire rod in the same facilities, using the same equipment and employees. \*\*\* states that in producing grade 1080 tire bead wire rod, it adds high levels of DRI or pig iron to reduce residual elements.<sup>63</sup>

The British and Korean respondents argue that grade 1080 tire cord and tire bead wire rod must be produced using the BOF process and that the domestic industry, which uses only EAF production facilities, is incapable of producing grade 1080 tire cord and tire bead wire rod. As an initial matter, the statute, by use of the word "domestic" in the definition, unambiguously indicates that only domestically produced products may be included in a domestic like product and expressly distinguishes the domestic like product from the imported articles under investigation. Because the like product analysis compares different domestically produced products, it is not probative to the analysis that domestic producers do not have BOF facilities to melt billets for the production of grade 1080 tire cord and tire bead wire rod. The evidence on the record indicates that domestic producers produce grade 1080 tire cord and tire bead wire rod using the same EAF facilities used to produce all other wire rod. \*\*\* also purchases billets from a BOF producer and rolls them on its rolling mill equipment to produce some of its grade 1080 tire cord and tire bead wire rod. \*\*\*

<sup>&</sup>lt;sup>61</sup> \*\*\* U.S. Producer Questionnaire Response at II-9, V-1(c) (Oct. 13, 2017); Gerdau, Keystone, and Charter Steel Posthearing Br. at Exhibit 1 p.1.

<sup>&</sup>lt;sup>62</sup> \*\*\* U.S. Producer Questionnaire Response at II-9, V-1(c) (Oct. 12, 2017); Gerdau, Keystone, and Charter Steel Posthearing Br. at Exhibit 1 p.1.

<sup>&</sup>lt;sup>63</sup> \*\*\* U.S. Producer Questionnaire Response at II-9, V-1(c) (Oct. 13, 2017).

<sup>&</sup>lt;sup>64</sup> 19 U.S.C. § 1677(10).

<sup>&</sup>lt;sup>65</sup> See, e.g., Large Residential Washers from China, Inv. No. 731-TA-1306 (Preliminary), USITC Pub. 4591 at 10 (Feb. 2016).

<sup>&</sup>lt;sup>66</sup> Email from \*\*\*, EDIS Doc. No. 629654 (stating that \*\*\*); Hearing Tr. at 41 (Armstrong) (Keystone produces grade 1080 tire bead wire rod from steel made in its EAF); Nucor Posthearing Br. at Exhibit 1 p.26 (stating that \*\*\*); Kiswire Posthearing Br. at 6 n.16 (acknowledging that some domestic producers may be able to produce grade 1080 tire bead wire rod using the EAF process); Korean Respondent Posthearing Br. at 12 (acknowledging that domestic producers produce grade 1080 tire bead wire rod).

We further note that EAF producers in Spain and Belarus also produce grade 1080 tire cord and tire bead wire rod that is exported to the United States. Gerdau, Keystone, and Charter Steel Posthearing Br. at 14, Exhibit 1 p.7, Exhibits 12 & 13; Global Steel Wire, S.A. Foreign Producer Questionnaire Response at III-1 (Oct. 13, 2017); Byelorussian Metallurgical Company Foreign Producer Questionnaire Response at III-1 (Dec. 10, 2017).

<sup>&</sup>lt;sup>67</sup> Email from \*\*\* (Nov. 14, 2017), EDIS Doc. No. 629654 (stating that \*\*\*); Email from \*\*\* (Nov. 27, 2017), EDIS Doc. No. 630383 (clarifying that \*\*\*).

The Korean respondent argues that the domestic producers have been unable to produce grade 1080 tire cord and tire bead wire rod in commercial quantities and to the satisfaction of tire manufacturers. The domestic industry, however, supplied between \*\*\* of apparent U.S. consumption (Continued...)

To the extent that respondents argue that a clear dividing line exists between grade 1080 tire cord and tire bead wire rod and other wire rod products based upon domestic producers' purchase of BOF billets to produce grade 1080 tire cord and tire bead wire rod, the evidence on the record indicates that this is not unique to grade 1080 tire cord and tire bead wire rod. Domestic producers purchase BOF billets to produce other types of wire rod. Specifically, \*\*\* during the period of investigation. \*\*\* .69 \*\*\* .70 In any event, the domestic producers primarily use steel melted in their EAF facilities to produce grade 1080 tire cord and tire bead wire rod. Consequently, there is little distinction in production facilities and manufacturing processes between domestically produced grade 1080 tire cord and tire bead wire rod and other domestically produced wire products.

Channels of Distribution. The majority of all domestically produced wire rod is sold to end users. In 2016, \*\*\* percent of U.S. producers' U.S. commercial shipments were to end users and \*\*\* percent were to distributors. Grade 1080 tire cord and tire bead wire rod was sold \*\*\* to end users. The majority (\*\*\* percent) of other wire rod products was also sold directly to end users.

Interchangeability. The scope definition encompasses 11 broad end use categories, including tire cord and tire bead wire rod, within which there is an overlap of metallurgical qualities, chemistries, and physical characteristics. Wire rod products used for different end uses are not always interchangeable. Consequently, wire rod used for industrial applications would not meet the quality specifications required for grade 1080 tire cord and tire bead wire rod. Higher grades of tire cord and tire bead wire rod, however, may be used in place of lower grades of tire cord and tire bead wire rod in producing tire cord and tire bead wire depending on purchaser specifications. Petitioners contend that tire cord and tire bead wire rod below grade 1080 are used to produce tire cord and tire bead wire. The Korean

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for grade 1080 tire cord and tire bead wire rod during the period of investigation. Gerdau, Keystone, and Charter Steel Posthearing Br. at 13. In 2016, the domestic industry shipped \*\*\* short tons of grade 1080 tire cord and tire bead wire rod, a volume that exceeded the reported \*\*\* short tons of imports of this product from Spain and \*\*\* short tons from the United Kingdom. This volume nearly matched the 20,446 short tons of grade 1080 tire cord and tire bead wire rod imports from Korea. CR/PR at Table I-11. Additionally, domestic producers indicate that: \*\*\*. Emails from \*\*\*, EDIS Doc. No. 630383.

<sup>&</sup>lt;sup>68</sup> Email from \*\*\* (Nov. 27, 2017), EDIS Doc. No. 630383.

<sup>&</sup>lt;sup>69</sup> Gerdau, Keystone, and Charter Steel Posthearing Br. at Exhibit 1 p.15.

<sup>&</sup>lt;sup>70</sup> Nucor Posthearing Br. at Exhibit 1 p.17.

<sup>&</sup>lt;sup>71</sup> Email from \*\*\* (Nov. 14, 2017), EDIS Doc. No. 629654 (stating that \*\*\*); Email from \*\*\* (Nov. 27, 2017), EDIS Doc. No. 630383 (stating that \*\*\*).

<sup>&</sup>lt;sup>72</sup> CR/PR at Table I-11.

<sup>&</sup>lt;sup>73</sup> CR/PR at Table I-11.

<sup>&</sup>lt;sup>74</sup> CR/PR at Table I-11.

<sup>&</sup>lt;sup>75</sup> CR/PR at I-34-35.

<sup>&</sup>lt;sup>76</sup> Nucor Posthearing Br. at Exhibit 1 pp.7-10. Nucor observes that \*\*\*, \*\*\*, and \*\*\*. *See id.* at Exhibits 8-10. Nucor claims that if grade 1080 tire cord wire rod is priced inexpensively, tire cord producers will substitute it for grades 1078 or 1070 tire cord wire rod. *See id.* at Exhibit 1 pp. 9-10.

respondent acknowledges that although the trend in the tire industry is to produce tires using grade 1080 tire cord and tire bead wire rod, grade 1070 tire cord and tire bead wire rod can be used to make tire cord and tire bead wire.<sup>77</sup>

Producer and Customer Perceptions. Information on the record regarding producer and customer perceptions with respect to differences and/or similarities between grade 1080 tire cord and tire bead wire rod and all other wire rod is mixed. Three U.S. producers reported that grade 1080 tire cord and tire bead wire rod and all other wire rod are fully or mostly comparable, and three U.S. producers reported that they are somewhat comparable. Three purchasers reported that grade 1080 tire cord and tire bead wire rod and all other wire rod are fully or mostly comparable, one purchaser reported that they are somewhat comparable, and four purchasers reported that they are not at all comparable.

The British and Korean respondents assert that customers clearly perceive grade 1080 tire cord and tire bead wire rod to be a distinct product that must be produced to stringent specifications. <sup>80</sup> It is not uncommon, however, for other wire rod products to be produced to exacting standards. This is true not only for grade 1080 tire cord and tire bead wire rod, but for tire cord and tire bead wire rod below grade 1080 and other types of specialized wire rod products as well. <sup>81</sup> Domestic producers generally produce both specialty and lower end types of wire rod, and do not make bright-line distinctions among the various types, but rather view the various types as comprising a range of wire rod products. <sup>82</sup>

*Price*. The average unit value in 2016 of U.S. commercial shipments of domestically produced grade 1080 tire cord and tire bead wire rod (\$\*\*\* per short ton) was higher than the average unit value of U.S. commercial shipments of all other domestically produced wire rod (\$\*\*\* per short ton). Petitioners agree that tire cord wire rod commands a price premium over lower-end products, but assert that this is true for other wire rod products as well. The record indicates that prices for domestically produced pricing product 6, suspension spring wire rod, a premium wire rod product, were substantially higher than those for industrial quality wire rod products during the period of investigation.

Conclusion. Based on the record in these investigations, we determine that there is one domestic like product. In investigations such as these in which domestically manufactured merchandise is made up of a grouping of similar products or involves niche products, the

<sup>&</sup>lt;sup>77</sup> Korean Posthearing Br. at 32.

<sup>&</sup>lt;sup>78</sup> CR at I-35, PR at I-26.

<sup>&</sup>lt;sup>79</sup> CR at I-35-36, PR at I-26.

<sup>&</sup>lt;sup>80</sup> British Respondent Prehearing Br. at 27; Korean Respondent Prehearing Br. at 27.

<sup>&</sup>lt;sup>81</sup> Gerdau, Keystone, and Charter Steel Posthearing Br. at 13-14, Exhibit 1 p.14, Exhibit 10; Nucor Posthearing Brief at Exhibit 1 pp. 7-8, 18-21, Exhibits 6, 9, 10; Kiswire Posthearing Br. at Responses to Commission Questions p. 3-4; Korean Respondent Posthearing Br. at 16; Hearing Tr. at 110 (Nystrom).

<sup>&</sup>lt;sup>82</sup> Gerdau, Keystone, and Charter Steel Prehearing Br. at 12; Gerdau, Keystone, and Charter Steel Posthearing Br. at Exhibit 1 pp.1-3; Nucor Posthearing Brief at Exhibit 1 pp.1-10, 18-21.

 $<sup>^{83}</sup>$  CR/PR at Table I-12. The questionnaires did not seek quarterly pricing data on a grade 1080 tire cord and tire bead wire rod product.

<sup>&</sup>lt;sup>84</sup> Gerdau, Keystone, and Charter Steel Prehearing Br. at 13.

<sup>85</sup> CR/PR at Tables V-3-4. Table V-8.

Commission does not consider each item of merchandise to be a separate like product that is only "like" its identical counterpart in the scope, but considers the grouping itself to constitute the domestic like product<sup>86</sup> and "disregards minor variations," absent a "clear dividing line" between particular products in the group. In prior investigations involving wire rod, the Commission has found that distinctions between different types of wire rod do not constitute "clear dividing lines" warranting the definition of separate domestic like products. 88 Notwithstanding respondents' contention that product characteristics for grade 1080 tire cord and tire bead wire rod have changed since these prior proceedings, we conclude the record here warrants the same result. While grade 1080 tire cord and tire bead wire rod are high-end specialized products that may have certain unique characteristics and are made using specialized processes to specific customer requirements and standards, the same is true for other types of high end specialized wire rod. Moreover, all types of wire rod share certain basic physical properties, are generally manufactured in the same domestic facilities using the same processes, and are sold primarily to end users. Limited interchangeability in some end uses and price differences are consistent with a wide range of products comprising a continuum. We accordingly define a single domestic like product consisting of all wire rod, including grade 1080 tire cord and tire bead wire rod, corresponding to the scope of the investigations.

### III. Domestic Industry

The domestic industry is defined as the domestic "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes

<sup>&</sup>lt;sup>86</sup> See, e.g., Certain Hot-Rolled Steel Flat Products from Australia, Brazil, Japan, Korea, the Netherlands, Turkey, and the United Kingdom, Inv. Nos. 701-TA-545-547, 731-TA-1291-1297 (Preliminary), USITC Pub. 4570 at 10 (Oct. 2015); Certain Seamless Carbon and Alloy Steel Standard, Line, and Pressure Pipe from China, Inv. Nos. 701-TA-469 and 731-TA-1168 (Final), USITC Pub. 4190 at 8, n. 45 (Nov. 2010); Stainless Steel Bar from France, Germany, Italy, Korea, and the United Kingdom, Inv. Nos. 701-TA-413 (Final) and 731-TA-913-916 and 918 (Final), USITC Pub. 3488 at 6-7 (February 2002).

<sup>&</sup>lt;sup>87</sup> See S. Rep. No. 96-249 at 90-91 (1979).

<sup>&</sup>lt;sup>88</sup> E.g., Carbon and Certain Alloy Steel Wire Rod from China, Germany, and Turkey, Inv. Nos. 731-TA-1099-1101 (Preliminary), USITC Pub. 3832 at 10 (Jan. 2006); Carbon and Certain Alloy Steel Wire Rod from Brazil, Canada, Germany, Indonesia, Mexico, Moldova, Trinidad and Tobago, Turkey, and Ukraine, Inv. Nos. 701-TA-417-421 and 731-TA-953, 954, 956-959, 961, and 962 (Final), USITC Pub. 3546 at 9 (Oct. 2002). In the 2002 investigations, the scope excluded grade 1080 tire cord and tire bead wire. The Commission nevertheless defined a single domestic like product, finding that grade 1070, grade 1080, and grade 1090 tire cord wire rod had "the same physical characteristics, uses, prices, channels of distribution and production processes." Carbon and Certain Alloy Steel Wire Rod from Brazil, Canada, Germany, Indonesia, Mexico, Moldova, Trinidad and Tobago, Turkey, and Ukraine, USITC Pub. 3546 at 9. In the 2006 investigations, the scope included grade 1080 tire cord and tire bead wire rod. After considering party arguments addressing whether tire cord and tire bead wire rod should be a separate domestic like product, the Commission again found one domestic like product, which included grade 1080 tire cord and tire bead wire rod. Carbon and Certain Alloy Steel Wire Rod from China, Germany, and Turkey, USITC Pub. 3832 at 9-11.

a major proportion of the total domestic production of the product."<sup>89</sup> 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.

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

\*\*\* U.S. producer, \*\*\*, meets the statutory definition of a related party. <sup>92</sup> It shares the same parent company \*\*\* and as U.S. importer \*\*\*. <sup>93</sup> \*\*\* imported subject wire rod from \*\*\* during the period of investigation. <sup>94</sup> Because both \*\*\* and an importer and exporters of subject merchandise have a common parent, \*\*\* is a related party. <sup>95</sup>

<sup>&</sup>lt;sup>89</sup> 19 U.S.C. § 1677(4)(A).

<sup>&</sup>lt;sup>90</sup> See Torrington Co. v. United States, 790 F. Supp. 1161, 1168 (Ct. Int'l Trade 1992), aff'd without opinion, 991 F.2d 809 (Fed. Cir. 1993); Sandvik AB v. United States, 721 F. Supp. 1322, 1331-32 (Ct. Int'l Trade 1989), aff'd mem., 904 F.2d 46 (Fed. Cir. 1990); Empire Plow Co. v. United States, 675 F. Supp. 1348, 1352 (Ct. Int'l Trade 1987).

<sup>&</sup>lt;sup>91</sup> The primary factors the Commission has examined in deciding whether appropriate circumstances exist to exclude a related party include the following:

<sup>(1)</sup> the percentage of domestic production attributable to the importing producer;

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

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

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

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

<sup>&</sup>lt;sup>92</sup> Petitioners argue that the Commission should define the domestic industry to include all domestic producers of wire rod. Gerdau, Keystone, and Charter Steel Prehearing Br. at 13. None of the respondents address how the Commission should define the domestic industry.

 $<sup>^{93}</sup>$  CR/PR at Table III-1 n.1, Table VII-17, Table VII-25; CR at VII-27-28, PR at VII-19.

<sup>94 \*\*\*</sup> U.S. Importer Questionnaire at II-15, II-19 (Oct. 11, 2017).

<sup>&</sup>lt;sup>95</sup> 19 U.S.C. § 1677(7)(4)(B)(ii)(III).

Consequently, we define the domestic industry as all U.S. producers of the domestic like product.

<sup>&</sup>lt;sup>96</sup> CR/PR at Table III-1 n.1

<sup>&</sup>lt;sup>97</sup> CR/PR at Table III-7.

<sup>&</sup>lt;sup>98</sup> CR/PR at Table III-7.

<sup>&</sup>lt;sup>99</sup> \*\*\* U.S. Importer Questionnaire at II-4 (Oct. 11, 2017).

<sup>&</sup>lt;sup>100</sup> CR/PR at Table III-1. During 2014 and 2015, \*\*\* had the \*\*\* operating income ratio of any domestic producer. CR/PR at Table F-1.

### IV. Cumulation<sup>101</sup>

For purposes of evaluating the volume and effects for a determination of material injury by reason of subject imports, section 771(7)(G)(i) of the Tariff Act requires the Commission to cumulate subject imports from all countries as to which petitions were filed and/or investigations self-initiated by Commerce on the same day, if such imports compete with each other and with the domestic like product in the U.S. market. In assessing whether subject imports compete with each other and with the domestic like product, the Commission generally has considered four factors:

(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;

During March 2016 through February 2017, the most recent 12-month period preceding the filing of the petitions, subject imports from Russia accounted for 6.0 percent of total imports. CR/PR at Table IV-8. Because this exceeds the 3 percent individual subject country negligibility threshold applicable to antidumping duty investigations, we find that subject imports from Russia are not negligible for purposes of the antidumping duty investigation on wire rod from Russia. Subject imports from Belarus (2.6 percent) and the United Arab Emirates (1.3 percent) are below the 3 percent individual subject country statutory negligibility threshold pertinent to antidumping duty investigations. CR/PR at Table IV-8. In determining whether the aggregate statutory threshold is met, we consider all sources with respect to which investigations were simultaneously initiated. 19 U.S.C. § 1677(24)(A)(ii). There are five countries for which wire rod antidumping investigations were simultaneously initiated for which wire rod imports are below the pertinent 3 percent individual subject country statutory negligibility threshold. The other three countries are Italy (2.5 percent), South Africa (1.2 percent), and the United Kingdom (2.6 percent), and the aggregate percentage of imports from these five sources during the 12-month negligibility period was 10.2 percent. CR/PR at Table IV-8. Because this exceeds the 7 percent statutory threshold pertinent to aggregated imports from individually negligible sources, we find that subject imports are not negligible for purposes of the antidumping duty investigations on wire rod from Belarus and the United Arab Emirates.

Pursuant to Section 771(24) of the Tariff Act, imports from a subject country of merchandise corresponding to a domestic like product that account for less than 3 percent of all such merchandise imported into the United States during the most recent 12 months for which data are available preceding the filing of the petition shall be deemed negligible. 19 U.S.C. §§ 1671b(a), 1673b(a), 1677(24)(A)(i), 1677(24)(B); see also 15 C.F.R. § 2013.1 (developing countries for purposes of 19 U.S.C. § 1677(36)). The statute further provides that subject imports from a single country which comprise less than 3 percent of total such imports of the product may not be considered negligible if there are several countries subject to investigation with negligible imports and the sum of such imports from all those countries collectively accounts for more than 7 percent of the volume of all such merchandise imported into the United States. 19 U.S.C. § 1677(24)(A)(ii). In the case of countervailing duty investigations involving developing countries (as designated by the United States Trade Representative), the statute indicates that the negligibility limits are 4 percent and 9 percent, rather than 3 percent and 7 percent. 19 U.S.C. § 1677(24)(B).

- (2) the presence of sales or offers to sell in the same geographic markets of subject 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 the subject imports are simultaneously present in the market. 102

While no single factor is necessarily determinative, and the list of factors is not exclusive, these factors are intended to provide the Commission with a framework for determining whether the subject imports compete with each other and with the domestic like product. Only a "reasonable overlap" of competition is required.

Petitioners argue that the Commission should cumulatively assess imports from all subject countries. They contend that the petitions covering imports from all ten subject countries were filed simultaneously on the same day and the record demonstrates a reasonable overlap of competition. Specifically, petitioners claim that subject imports from all sources are generally interchangeable with each other and with domestically produced wire rod. Additionally, petitioners assert that domestically produced wire rod and subject imports from all sources are marketed and sold throughout the United States using the same channels of distribution (distributors and end users) and have been simultaneously present in the U.S. market for most of the period of investigation. No respondent party addressed whether the Commission should cumulate wire rod imports from all subject countries for purposes of the Commission's material injury analysis.

The statutory threshold for cumulation is satisfied in these investigations because petitioners filed the antidumping and countervailing duty petitions with respect to all ten subject countries on the same day, March 28, 2017. As discussed below, we find a

See Certain Cast-Iron Pipe Fittings from Brazil, the Republic of Korea, and Taiwan, Inv. Nos. 731-TA-278-280 (Final), USITC Pub. 1845 (May 1986), aff'd, Fundicao Tupy, S.A. v. United States, 678 F. Supp. 898 (Ct. Int'l Trade), aff'd, 859 F.2d 915 (Fed. Cir. 1988).

<sup>&</sup>lt;sup>103</sup> See, e.g., Wieland Werke, AG v. United States, 718 F. Supp. 50 (Ct. Int'l Trade 1989).

The Statement of Administrative Action (SAA) to the Uruguay Round Agreements Act (URAA), expressly states that "the new section will not affect current Commission practice under which the statutory requirement is satisfied if there is a reasonable overlap of competition." H.R. Rep. No. 103-316, Vol. I at 848 (1994) (*citing Fundicao Tupy, S.A. v. United States*, 678 F. Supp. at 902; *see Goss Graphic Sys., Inc. v. United States*, 33 F. Supp. 2d 1082, 1087 (Ct. Int'l Trade 1998) ("cumulation does not require two products to be highly fungible"); *Wieland Werke, AG*, 718 F. Supp. at 52 ("Completely overlapping markets are not required.").

<sup>&</sup>lt;sup>105</sup> Gerdau, Keystone, and Charter Steel Prehearing Br. at 15.

<sup>&</sup>lt;sup>106</sup> Gerdau, Keystone, and Charter Steel Prehearing Br. at 15-16.

<sup>&</sup>lt;sup>107</sup> Gerdau, Keystone, and Charter Steel Prehearing Br. at 16.

<sup>&</sup>lt;sup>108</sup> Gerdau, Keystone, and Charter Steel Prehearing Br. at 17-19.

we observe that Commerce made a *de minimis* preliminary countervailing duty determination with respect to Turkish exporter Icdas. 82 Fed. Reg. 41929 (Sept. 5, 2017). Although imports from this firm subject to the countervailing duty investigation consequently would not be (Continued...)

reasonable overlap of competition among wire rod produced in Belarus, Italy, Korea, Russia, South Africa, Spain, Turkey, Ukraine, the United Arab Emirates, the United Kingdom, and the United States.

Fungibility. The record in the final phase of these investigations indicates that wire rod is interchangeable, regardless of source. All domestic producers reported that wire rod imports from the individual subject countries are always or frequently interchangeable with each other and with the domestic like product. Additionally, purchasers and importers generally reported that wire rod from each subject source was frequently interchangeable with each other and the domestic like product. It

Purchasers were asked to compare the domestic like product and imports from each subject country with respect to 16 purchasing factors. Most purchasers found domestically produced wire rod to be superior or comparable to imports from each subject source on every factor except price. Furthermore, most responding purchasers reported that domestically produced wire rod and imports from each subject source always or usually met minimum quality specifications. <sup>113</sup>

Additionally, although the types and qualities of imported wire rod vary to some extent among subject sources, generally, wire rod is imported within the same range of grades. The domestic industry shipped appreciable volumes of all types of wire rod. Each subject country shipped some appreciable volume of low-carbon industrial wire rod. Hence, there is an overlap between domestic and all subject sources within this grade as well as overlap between domestic and individual subject sources within other types of wire rod.

Although the record indicates varying degrees of overlap in product mix, and purchaser perceptions of the domestic product and products from individual subject sources vary to some extent, on balance we find the record indicates a reasonable level of fungibility between and among the domestic like product and wire rod from each subject source.

Channels of Distribution. Domestic producers and importers sold wire rod to both distributors and end users. In 2016, the majority of domestic producers' U.S. shipments of wire rod (\*\*\* percent), as well as substantial portions of U.S. shipments of imports of wire rod from Belarus (\*\*\* percent), Korea (\*\*\* percent), Russia (\*\*\* percent), Spain (\*\*\* percent), Turkey

### (...Continued)

eligible for cumulation for purposes of this determination, see 19 U.S.C. § 1677(7)(G)(ii)(I), allegedly dumped subject imports from this company are eligible for cumulation. See Carbon and Alloy Steel Wire Rod from Turkey, 82 Fed. Reg. 50377 (Oct. 31, 2017) (preliminary affirmative determination of sales at less than fair value and preliminary negative determination of critical circumstances) (exports from Icdas preliminarily found to be sold at less than fair value).

<sup>&</sup>lt;sup>110</sup> CR/PR at Tables II-10(a)-10(b).

<sup>&</sup>lt;sup>111</sup> CR/PR at Tables II-10(a)-10(b).

<sup>&</sup>lt;sup>112</sup> CR/PR at Table II-9.

<sup>113</sup> CR/PR at Table II-11.

<sup>&</sup>lt;sup>114</sup> CR/PR at Table IV-9.

<sup>&</sup>lt;sup>115</sup> CR/PR at Table IV-9.

<sup>&</sup>lt;sup>116</sup> CR at IV-16, PR at IV-12.

<sup>&</sup>lt;sup>117</sup> CR/PR at Table IV-9.

(\*\*\* percent), and Ukraine (\*\*\* percent) were sold to end users. Appreciable proportions of shipments of the domestic like product (\*\*\* percent) and of imports of wire rod from Belarus (\*\*\* percent), Korea (\*\*\* percent), and Turkey (\*\*\* percent), and the great majority of shipments of imports from Italy (\*\*\* percent), South Africa (\*\*\* percent), the United Arab Emirates (\*\*\* percent), and the United Kingdom (\*\*\* percent) were sold to distributors. 119

*Geographic Overlap.* Domestically produced wire rod is sold in all six regions in the contiguous United States. Subject imports are also sold to all six regions, but are concentrated in the Southeast, Midwest, and Central Southwest regions. The majority of subject imports, and an appreciable quantity of imports from each subject source, entered at ports in the South in 2016.

Simultaneous Presence in Market. The domestic like product and wire rod imported from all subject countries have been present in the U.S. market during both 2015 and 2016. 123

Conclusion. The record supports finding that subject imports from each subject country are fungible with the domestic like product and each other, that subject imports from each subject country overlap with the domestic like product in terms of channels of distribution, are present in similar geographic markets, and have been simultaneously present in the U.S. market. In light of the foregoing, we find that there is a reasonable overlap of competition between the domestic like product and imports from each subject country and between imports from each subject country. Consequently, for purposes of these determinations concerning wire rod from Belarus, Russia, and the United Arab Emirates, we cumulate subject imports from Belarus, Italy, Korea, Russia, South Africa, Spain, Turkey, Ukraine, the United Arab Emirates, and the United Kingdom.

# V. Material Injury by Reason of Subject Imports

Based on the record in the final phase of these investigations, we find that an industry in the United States is materially injured by reason of imports of wire rod from Belarus, Russia, and the United Arab Emirates that Commerce has found to be sold in the United States at less than fair value.

### A. Legal Standards

In the final phase of antidumping and countervailing duty investigations, the Commission determines whether an industry in the United States is materially injured or threatened with material injury by reason of the imports under investigation. <sup>124</sup> In making this

<sup>&</sup>lt;sup>118</sup> CR/PR at Table II-1.

<sup>119</sup> CR/PR at Table II-1.

<sup>&</sup>lt;sup>120</sup> CR/PR at Table II-2.

<sup>&</sup>lt;sup>121</sup> CR/PR at Table II-2.

<sup>&</sup>lt;sup>122</sup> CR/PR at Table IV-10.

<sup>123</sup> CR/PR at Table IV-11.

<sup>&</sup>lt;sup>124</sup> 19 U.S.C. §§ 1671d(b), 1673d(b). The Trade Preferences Extension Act of 2015, Pub. L. 114-27, amended the provisions of the Tariff Act pertaining to Commission determinations of material injury (Continued...)

determination, the Commission must consider the volume of subject imports, their effect on prices for the domestic like product, and their impact on domestic producers of the domestic like product, but only in the context of U.S. production operations. The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant." In assessing whether the domestic industry is materially injured by reason of subject imports, we consider all relevant economic factors that bear on the state of the industry in the United States. No single factor is dispositive, and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."

Although the statute requires the Commission to determine whether the domestic industry is "materially injured or threatened with material injury by reason of" unfairly traded imports, 129 it does not define the phrase "by reason of," indicating that this aspect of the injury analysis is left to the Commission's reasonable exercise of its discretion. In identifying a causal link, if any, between subject imports and material injury to the domestic industry, the Commission examines the facts of record that relate to the significance of the volume and price effects of the subject imports and any impact of those imports on the condition of the domestic industry. This evaluation under the "by reason of" standard must ensure that subject imports are more than a minimal or tangential cause of injury and that there is a sufficient causal, not merely a temporal, nexus between subject imports and material injury.

In many investigations, there are other economic factors at work, some or all of which may also be having adverse effects on the domestic industry. Such economic factors might include nonsubject imports; changes in technology, demand, or consumer tastes; competition

(...Continued)

and threat of material injury by reason of subject imports in certain respects. We have applied these amendments here.

 $<sup>^{125}</sup>$  19 U.S.C. § 1677(7)(B). The Commission "may consider such other economic factors as are relevant to the determination" but shall "identify each {such} factor ... and explain in full its relevance to the determination." 19 U.S.C. § 1677(7)(B).

<sup>&</sup>lt;sup>126</sup> 19 U.S.C. § 1677(7)(A).

<sup>&</sup>lt;sup>127</sup> 19 U.S.C. § 1677(7)(C)(iii).

<sup>&</sup>lt;sup>128</sup> 19 U.S.C. § 1677(7)(C)(iii).

<sup>&</sup>lt;sup>129</sup> 19 U.S.C. §§ 1671d(a), 1673d(a).

<sup>&</sup>lt;sup>130</sup> Angus Chemical Co. v. United States, 140 F.3d 1478, 1484-85 (Fed. Cir. 1998) ("{T}he statute does not 'compel the commissioners' to employ {a particular methodology}."), aff'g, 944 F. Supp. 943, 951 (Ct. Int'l Trade 1996).

<sup>131</sup> The Federal Circuit, in addressing the causation standard of the statute, observed that "{a}s long as its effects are not merely incidental, tangential, or trivial, the foreign product sold at less than fair value meets the causation requirement." *Nippon Steel Corp. v. USITC*, 345 F.3d 1379, 1384 (Fed. Cir. 2003). This was further ratified in *Mittal Steel Point Lisas Ltd. v. United States*, 542 F.3d 867, 873 (Fed. Cir. 2008), where the Federal Circuit, quoting *Gerald Metals, Inc. v. United States*, 132 F.3d 716, 722 (Fed. Cir. 1997), stated that "this court requires evidence in the record 'to show that the harm occurred "by reason of" the LTFV imports, not by reason of a minimal or tangential contribution to material harm caused by LTFV goods." *See also Nippon Steel Corp. v. United States*, 458 F.3d 1345, 1357 (Fed. Cir. 2006); *Taiwan Semiconductor Industry Ass'n v. USITC*, 266 F.3d 1339, 1345 (Fed. Cir. 2001).

among domestic producers; or management decisions by domestic producers. The legislative history explains that the Commission must examine factors other than subject imports to ensure that it is not attributing injury from other factors to the subject imports, thereby inflating an otherwise tangential cause of injury into one that satisfies the statutory material injury threshold. In performing its examination, however, the Commission need not isolate the injury caused by other factors from injury caused by unfairly traded imports. Nor does the "by reason of" standard require that unfairly traded imports be the "principal" cause of injury or contemplate that injury from unfairly traded imports be weighed against other factors, such as nonsubject imports, which may be contributing to overall injury to an industry. It is clear that the existence of injury caused by other factors does not compel a negative determination.

Assessment of whether material injury to the domestic industry is "by reason of" subject imports "does not require the Commission to address the causation issue in any particular way" as long as "the injury to the domestic industry can reasonably be attributed to the subject

<sup>&</sup>lt;sup>132</sup> SAA at 851-52 ("{T}he Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports."); S. Rep. 96-249 at 75 (1979) (the Commission "will consider information which indicates that harm is caused by factors other than less-than-fair-value imports."); H.R. Rep. 96-317 at 47 (1979) ("in examining the overall injury being experienced by a domestic industry, the ITC will take into account evidence presented to it which demonstrates that the harm attributed by the petitioner to the subsidized or dumped imports is attributable to such other factors;" those factors include "the volume and prices of nonsubsidized imports or imports sold at fair value, contraction in demand or changes in patterns of consumption, trade restrictive practices of and competition between the foreign and domestic producers, developments in technology and the export performance and productivity of the domestic industry"); accord Mittal Steel, 542 F.3d at 877.

<sup>&</sup>lt;sup>133</sup> SAA at 851-52 ("{T}he Commission need not isolate the injury caused by other factors from injury caused by unfair imports."); *Taiwan Semiconductor Industry Ass'n*, 266 F.3d at 1345 ("{T}he Commission need not isolate the injury caused by other factors from injury caused by unfair imports ... . Rather, the Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports." (emphasis in original)); *Asociacion de Productores de Salmon y Trucha de Chile AG v. United States*, 180 F. Supp. 2d 1360, 1375 (Ct. Int'l Trade 2002) ("{t}he Commission is not required to isolate the effects of subject imports from other factors contributing to injury" or make "bright-line distinctions" between the effects of subject imports and other causes.); *see also Softwood Lumber from Canada*, Inv. Nos. 701-TA-414 and 731-TA-928 (Remand), USITC Pub. 3658 at 100-01 (Dec. 2003) (Commission recognized that "{i}f an alleged other factor is found not to have or threaten to have injurious effects to the domestic industry, *i.e.*, it is not an 'other causal factor,' then there is nothing to further examine regarding attribution to injury"), *citing Gerald Metals*, 132 F.3d at 722 (the statute "does not suggest that an importer of LTFV goods can escape countervailing duties by finding some tangential or minor cause unrelated to the LTFV goods that contributed to the harmful effects on domestic market prices.").

<sup>&</sup>lt;sup>134</sup> S. Rep. 96-249 at 74-75; H.R. Rep. 96-317 at 47.

<sup>&</sup>lt;sup>135</sup> See Nippon Steel Corp., 345 F.3d at 1381 ("an affirmative material-injury determination under the statute requires no more than a substantial-factor showing. That is, the 'dumping' need not be the sole or principal cause of injury.").

imports" and the Commission "ensure{s} that it is not attributing injury from other sources to the subject imports." Indeed, the Federal Circuit has examined and affirmed various Commission methodologies and has disavowed "rigid adherence to a specific formula." <sup>137</sup>

The Federal Circuit's decisions in *Gerald Metals, Bratsk*, and *Mittal Steel* all involved cases where the relevant "other factor" was the presence in the market of significant volumes of price-competitive nonsubject imports. The Commission interpreted the Federal Circuit's guidance in *Bratsk* as requiring it to apply a particular additional methodology following its finding of material injury in cases involving commodity products and a significant market presence of price-competitive nonsubject imports. The additional "replacement/benefit" test looked at whether nonsubject imports might have replaced subject imports without any benefit to the U.S. industry. The Commission applied that specific additional test in subsequent cases, including the *Carbon and Certain Alloy Steel Wire Rod from Trinidad and Tobago* determination that underlies the *Mittal Steel* litigation.

*Mittal Steel* clarifies that the Commission's interpretation of *Bratsk* was too rigid and makes clear that the Federal Circuit does not require the Commission to apply an additional test nor any one specific methodology; instead, the court requires the Commission to have "evidence in the record" to "show that the harm occurred 'by reason of' the LTFV imports," and requires that the Commission not attribute injury from nonsubject imports or other factors to subject imports. <sup>139</sup> Accordingly, we do not consider ourselves required to apply the replacement/benefit test that was included in Commission opinions subsequent to *Bratsk*.

The progression of *Gerald Metals, Bratsk*, and *Mittal Steel* clarifies that, in cases involving commodity products where price-competitive nonsubject imports are a significant factor in the U.S. market, the Court will require the Commission to give full consideration, with adequate explanation, to non-attribution issues when it performs its causation analysis.<sup>140</sup>

<sup>&</sup>lt;sup>136</sup> Mittal Steel, 542 F.3d at 877-78; see also id. at 873 ("While the Commission may not enter an affirmative determination unless it finds that a domestic industry is materially injured 'by reason of' subject imports, the Commission is not required to follow a single methodology for making that determination ... {and has} broad discretion with respect to its choice of methodology.") citing United States Steel Group v. United States, 96 F.3d 1352, 1362 (Fed. Cir. 1996) and S. Rep. 96-249 at 75. In its decision in Swiff-Train v. United States, 793 F.3d 1355 (Fed. Cir. 2015), the Federal Circuit affirmed the Commission's causation analysis as comporting with the Court's guidance in Mittal.

<sup>137</sup> Nucor Corp. v. United States, 414 F.3d 1331, 1336, 1341 (Fed. Cir. 2005); see also Mittal Steel, 542 F.3d at 879 ("Bratsk did not read into the antidumping statute a Procrustean formula for determining whether a domestic injury was 'by reason' of subject imports.").

<sup>&</sup>lt;sup>138</sup> *Mittal Steel*, 542 F.3d at 875-79.

<sup>&</sup>lt;sup>139</sup> Mittal Steel, 542 F.3d at 873 (quoting from Gerald Metals, 132 F.3d at 722), 875-79 & n.2 (recognizing the Commission's alternative interpretation of *Bratsk* as a reminder to conduct a non-attribution analysis).

To that end, after the Federal Circuit issued its decision in *Bratsk*, the Commission began to present published information or send out information requests in the final phase of investigations to producers in nonsubject countries that accounted for substantial shares of U.S. imports of subject merchandise (if, in fact, there were large nonsubject import suppliers). In order to provide a more complete record for the Commission's causation analysis, these requests typically seek information on (Continued...)

The question of whether the material injury threshold for subject imports is satisfied notwithstanding any injury from other factors is factual, subject to review under the substantial evidence standard. Congress has delegated this factual finding to the Commission because of the agency's institutional expertise in resolving injury issues. 142

### B. Conditions of Competition and the Business Cycle

The following conditions of competition inform our analysis of whether there is material injury by reason of subject imports.

### 1. Captive Production

The domestic industry captively consumes a portion of its production of wire rod in the manufacture of downstream articles. We therefore consider whether the statutory captive production provision requires us to focus our analysis primarily on the merchant market when assessing market share and the factors affecting the financial performance of the domestic industry. 143 144

### (...Continued)

capacity, production, and shipments of the product under investigation in the major source countries that export to the United States. The Commission plans to continue utilizing published or requested information in the final phase of investigations in which there are substantial levels of nonsubject imports.

- <sup>141</sup> We provide in our discussion below a full analysis of other factors alleged to have caused any material injury experienced by the domestic industry.
- <sup>142</sup> Mittal Steel, 542 F.3d at 873; Nippon Steel Corp., 458 F.3d at 1350, citing U.S. Steel Group, 96 F.3d at 1357; S. Rep. 96-249 at 75 ("The determination of the ITC with respect to causation is ... complex and difficult, and is a matter for the judgment of the ITC.").
- <sup>143</sup> The captive production provision, 19 U.S.C. § 1677(7)(C)(iv), as amended by the Trade Preferences Extension Act of 2015, provides:
- (iv) CAPTIVE PRODUCTION If domestic producers internally transfer significant production of the domestic like product for the production of a downstream article and sell significant production of the domestic like product in the merchant market, and the Commission finds that-
  - (I) the domestic like product produced that is internally transferred for processing into that downstream article does not enter the merchant market for the domestic like product, and (II) the domestic like product is the predominant material input in the production of that downstream article.

The SAA indicates that where a domestic like product is transferred internally for the production of another article coming within the definition of the domestic like product, such transfers do not constitute internal transfers for the production of a "downstream article" for purposes of the captive production provision. SAA at 853.

<sup>144</sup> The Trade Preferences Extension Act of 2015 eliminated what had been the third statutory criterion of the captive production provision. Pub. L. 114-27, § 503(c).

Petitioners maintain that the criteria for applying the captive production provision are clearly satisfied, and that therefore the Commission should focus primarily on the merchant market in analyzing the market share and financial performance of the U.S. industry. None of the respondents directly address the applicability of the captive production provision.

Threshold Criterion. The captive production provision can be applied only if, as a threshold matter, significant production of the domestic like product is internally transferred and significant production is sold in the merchant market. In these investigations, internal consumption accounted for between \*\*\* percent and \*\*\* percent of the domestic industry's U.S. shipments of wire rod and transfers to related firms accounted for between \*\*\* percent and \*\*\* percent of the domestic industry's U.S. shipments of wire rod for each year between 2014 and 2016. Commercial shipments accounted for between \*\*\* percent and \*\*\* percent of the domestic industry's annual U.S. shipments in this period. He find that both internal transfers and merchant market sales constitute significant portions of the domestic industry's production, and therefore the threshold criterion for applying the captive production provision is met.

First Statutory Criterion. The first statutory criterion focuses on whether any of the domestic like product that is transferred internally for further processing is in fact sold on the merchant market. No domestic producers in these investigations reported diverting wire rod that was to be internally consumed to the merchant market. This criterion is therefore satisfied.

Second Statutory Criterion. In applying the second statutory criterion, we generally consider whether the domestic like product is the predominant material input into a downstream product by referring to its share of the raw material cost of the downstream product. <sup>151</sup> In these investigations, reporting domestic producers indicated that wire rod accounted for the majority of the finished cost of a number of downstream products produced

<sup>&</sup>lt;sup>145</sup> Gerdau, Keystone, and Charter Steel Prehearing Br. at 20-21.

<sup>&</sup>lt;sup>146</sup> The AWPA and Turkish respondents acknowledge that petitioners are vertically integrated and that their wire rod mills produce wire rod that is used to feed their downstream wire operations. AWPA Prehearing Br. at 15-18; Turkish Respondents Prehearing Br. at 3-6.

<sup>&</sup>lt;sup>147</sup> CR/PR at Table III-6.

<sup>&</sup>lt;sup>148</sup> CR/PR at Table III-6.

<sup>&</sup>lt;sup>149</sup> See, e.g., Hot-Rolled Steel Products from Argentina and South Africa, Inv. Nos. 701-TA-404, 731-TA-898, 905 (Final), USITC Pub. 3446 at 15-16 (Aug. 2001); Certain Cold-Rolled Steel Products from Argentina, Brazil, China, Indonesia, Japan, Russia, Slovakia, South Africa, Taiwan, Turkey and Venezuela, Inv. Nos. 701-TA-393 and 731-TA-829-40 (Final) (Remand), USITC Pub. 3691 at 2 & n.19 (May 2004).

<sup>&</sup>lt;sup>150</sup> CR at III-15, PR at III-10.

<sup>&</sup>lt;sup>151</sup> See generally, e.g., Polyethylene Terephthalate Film, Sheet and Strip from Brazil, China, Thailand, and the United Arab Emirates, Inv. Nos. 731-TA-1131-1134 (Final), USITC Pub. 4040 at 17 n.103 (October 2008); Polyethylene Terephthalate Film, Sheet, and Strip from India and Taiwan, Inv. Nos. 701-TA-415 and 731-TA-933-934 (Final), USITC Pub. 3518 at 11 & n.51 (June 2002). The Commission has construed "predominant" material input to mean the main or strongest element, and not necessarily a majority, of the inputs by value. See Polyvinyl Alcohol from Germany and Japan, Inv. Nos. 731-TA-1015-16 (Final), USITC Pub. 3604 at 15 n.69 (June 2003).

from wire rod.<sup>152</sup> Because wire rod is the predominant material input into downstream products, this criterion is also satisfied in these investigations.

Conclusion. We conclude that the criteria for application of the captive production provision are satisfied in these investigations and, accordingly, we focus primarily on the merchant market in analyzing the market share and financial performance of the domestic industry. We also have considered the market as a whole and the captive portion of the market.

### 2. Demand Considerations

Wire rod is a hot-rolled intermediate steel product that is used in a variety of downstream products in the construction, automotive, energy, and agriculture industries. Consequently, demand for wire rod depends on demand for these downstream products. Most U.S. producers reported that U.S. demand for wire rod has decreased since January 2014 while a plurality of importers and purchasers reported that U.S. demand has increased. 155

Apparent U.S. consumption of wire rod decreased by 4.2 percent in the merchant market from 4.4 million short tons in 2014 to 4.2 million short tons in 2016. Apparent U.S. consumption in the merchant market was higher in January - September ("interim") 2017 at 3.5 million short tons than in interim 2016 at 3.2 million short tons.

## 3. Supply Considerations

The U.S. market for wire rod is supplied by the domestic industry, cumulated subject imports, and nonsubject imports. The domestic industry was the largest supplier of wire rod to the U.S. market during the period of investigation, although its share of apparent U.S. consumption in the merchant market decreased from 59.3 percent in 2014 to 59.2 percent in

<sup>&</sup>lt;sup>152</sup> CR at III-15, PR at III-10.

<sup>&</sup>lt;sup>153</sup> In the 2014-15 investigations of wire rod from China, which involved the same domestic like product and essentially the same domestic industry as these investigations, the Commission found the threshold criterion, as well as the first and second statutory criteria, were satisfied. However, the Commission did not apply the captive production provision because it concluded that the third statutory criterion was not satisfied. *Carbon and Certain Alloy Steel Wire Rod from China*, Inv. Nos. 701-TA-512 and 731-TA-1248 (Final), USITC Pub. 4509 at 11-12 (Jan. 2015). As previously discussed, the Trade Preferences Extension Act of 2015 subsequently eliminated the third statutory criterion.

<sup>154</sup> CR/PR at II-1.

<sup>&</sup>lt;sup>155</sup> CR/PR at Table II-4.

<sup>&</sup>lt;sup>156</sup> CR/PR at Table IV-15, Table C-2. Apparent U.S. consumption in the overall market decreased by 2.3 percent, falling from 5.4 million short tons in 2014 to 5.3 million short tons in 2016. CR/PR at Table IV-13, Table C-1.

<sup>&</sup>lt;sup>157</sup> CR/PR at Table IV-15. Apparent U.S. consumption in the overall market was higher in interim 2017 at 4.3 million short tons than in interim 2016 at 4.1 million short tons. CR/PR at Table IV-13.

2015 and 58.2 percent in 2016.<sup>158</sup> The domestic industry's market share in the merchant market was lower in interim 2017 at 57.6 percent than in interim 2016 at 57.8 percent.<sup>159</sup>

In 2014, there were ten U.S. producers of wire rod, with seven of these firms internally transferring some wire rod to produce downstream products over the period of investigation. During the course of the period of investigation, two domestic producers ceased production: in August 2015, ArcelorMittal closed its mill in Georgetown, South Carolina, and in March 2016, Republic Steel idled its wire rod operations in Lorain, Ohio. Although ArcelorMittal's closure reduced domestic industry capacity by \*\*\* short tons, \*\*\* expanded its operations adding \*\*\* short tons of capacity. Overall, the domestic industry's capacity declined by 4.9 percent from 2014 to 2016 and was 0.3 percent lower in interim 2017 than in interim 2016. While domestic industry capacity was slightly below apparent U.S. consumption during the period of investigation, that the domestic industry was capable of producing the entire range of wire products that were imported into the United States from the subject countries and that it had ample capacity to supply the vast majority of U.S. wire rod demand during the period of investigation.

Cumulated subject imports' share of apparent U.S. consumption in the merchant market increased from 10.2 percent in 2014 to 15.3 percent in 2015 and 16.5 percent in 2016. Cumulated subject imports' market share in the merchant market was lower in interim 2017 at 14.0 percent than in interim 2016 at 17.4 percent. 168

Nonsubject imports' share of apparent U.S. consumption in the merchant market declined from 30.5 percent in 2014 to 25.5 percent in 2015 and 25.2 percent in 2016. Nonsubject imports' market share in the merchant market was higher in interim 2017 at 28.4

<sup>&</sup>lt;sup>158</sup> CR/PR at Table IV-15. The domestic industry's share of apparent U.S. consumption in the overall market increased from 66.9 percent in 2014 to 67.1 percent in 2015, before decreasing to 66.7 percent in 2016. CR/PR at Table IV-13.

<sup>&</sup>lt;sup>159</sup> CR/PR at Table IV-15. The domestic industry's market share in the overall market was lower in interim 2017 at 65.9 percent than in interim 2016 at 66.7 percent. CR/PR at Table IV-13.

<sup>&</sup>lt;sup>160</sup> CR/PR at Table III-1; CR at III-14, PR at III-9.

<sup>&</sup>lt;sup>161</sup> CR/PR at Table III-1 nn.1 & 7.

<sup>&</sup>lt;sup>162</sup> CR/PR at Table III-4. The domestic industry's capacity decreased from 4.9 million short tons in 2014 and 2015 to 4.7 million short tons in 2016. Its capacity was the same in interim 2016 and interim 2017 at 3.5 million short tons. *See id.* 

<sup>&</sup>lt;sup>163</sup> CR at III-7, PR at III-4.

<sup>&</sup>lt;sup>164</sup> Compare CR/PR at Table III-4 with id. at Table IV-13.

<sup>&</sup>lt;sup>165</sup> Nucor Prehearing Br. at 5-6.

<sup>&</sup>lt;sup>166</sup> Gerdau, Keystone, and Charter Steel Prehearing Br. at 24-25.

<sup>&</sup>lt;sup>167</sup> CR/PR at Table IV-15. In the overall market, cumulated subject imports' share of apparent U.S. consumption increased from 8.3 percent in 2014 to 12.4 percent in 2015 and 13.2 percent in 2016. CR/PR at Table IV-13.

<sup>&</sup>lt;sup>168</sup> CR/PR at Table IV-15. Cumulated subject imports' share in the overall market was lower in interim 2017 at 11.2 percent than in interim 2016 at 13.7 percent. CR/PR at Table IV-13.

<sup>&</sup>lt;sup>169</sup> CR/PR at Table IV-15. Nonsubject imports share of apparent U.S. consumption in the overall market declined from 24.8 percent in 2014 to 20.6 percent in 2015 and 20.1 percent in 2016. CR/PR at Table IV-13.

percent than in interim 2016 at 24.8 percent.<sup>170</sup> In 2016, the largest source of nonsubject imports was Canada, which accounted for 51.6 percent of nonsubject imports and 31.2 percent of all wire rod imports in that year.<sup>171</sup> During the period of investigation, wire rod imports from China were the subject of antidumping and countervailing duty investigations and in January 2015, Commerce issued antidumping and countervailing duty orders on these imports.<sup>172</sup> Subsequently, wire rod imports from China largely disappeared from the U.S. market.<sup>173</sup> Antidumping duty orders have also been in place since 2002 on U.S. wire rod imports from Brazil, Indonesia, Mexico, Moldova, and Trinidad and Tobago, as well as a countervailing duty order on wire rod imports from Brazil.<sup>174</sup>

## 4. Substitutability

The record indicates that there is a moderate-to-high degree of substitutability between domestically produced wire rod and wire rod imported from subject sources. As discussed above, domestic producers reported that wire rod imports from the individual subject countries are always or frequently interchangeable with each other and with the domestic like product. Additionally, purchasers and importers generally reported that wire rod from each subject source was frequently interchangeable with each other and the domestic like product. The domestic like product and cumulated subject imports compete with one another across a range of products, but particularly in the industrial/standard quality wire rod category, which in 2016 accounted for \*\*\* percent of the domestic industry's commercial U.S. shipments and \*\*\* percent of U.S. shipments of cumulated subject imports.

The record also indicates that price is an important consideration for purchasers of wire rod. Wire rod purchasers identified price, quality, and availability as the main factors that they consider in their purchasing decisions. When identifying the top three factors in purchasing decisions, purchasers listed quality most frequently as the first-most important factor, followed by price. The majority of purchasers also reported that price is very important in their

<sup>&</sup>lt;sup>170</sup> CR/PR at Table IV-15. Nonsubject imports' market share in the overall market was higher in interim 2017 at 22.8 percent than in interim 2016 at 19.6 percent. CR/PR at Table IV-13.

<sup>&</sup>lt;sup>171</sup> CR at II-8, PR at II-4.

<sup>&</sup>lt;sup>172</sup> Carbon and Certain Alloy Steel Wire Rod from China, 80 Fed. Reg. 1015 (Jan. 8, 2015) (antidumping duty order); Carbon and Certain Alloy Steel Wire Rod from China, 80 Fed. Reg. 1018 (Jan. 8, 2015) (countervailing duty order).

<sup>&</sup>lt;sup>173</sup> Wire rod imports from China exited the market at a rapid rate during the period of investigation. These imports were 374,785 short tons in 2014, 1,672 short tons in 2015, 81 short tons in 2016 (all of which entered in the first nine months), and 36 tons in interim 2017. CR/PR at Table IV-2.

<sup>&</sup>lt;sup>174</sup> CR/PR at Table I-1.

<sup>&</sup>lt;sup>175</sup> CR at II-14, PR at II-8.

<sup>&</sup>lt;sup>176</sup> CR/PR at Tables II-10(a)-10(b).

<sup>&</sup>lt;sup>177</sup> CR/PR at Tables II-10(a)-10(b).

<sup>&</sup>lt;sup>178</sup> CR/PR at Table IV-9.

<sup>&</sup>lt;sup>179</sup> CR at II-16, PR at II-9.

<sup>&</sup>lt;sup>180</sup> CR/PR at Table II-6.

purchasing decisions and that they usually purchase the lowest-priced product.<sup>181</sup> In response to a question regarding the significance of non-price factors when comparing the domestic like product and wire rod from the subject countries, all responding domestic producers reported that factors other than price are never significant and the majority of purchasers reported that non-price factors are sometimes or never significant.<sup>182</sup> Most importers reported that non-price factors are frequently or sometimes a significant difference.<sup>183</sup>

In light of this evidence, we find that the record indicates that price is an important factor in purchasing decisions, although quality and availability of supply are also important factors.<sup>184</sup>

## 5. Other Conditions

Raw material costs accounted for a substantial portion of the domestic industry's cost of goods sold ("COGS") in the merchant market during the period of investigation, ranging from a high of 64.0 percent in 2014 to a low of 54.2 percent in 2016. Steel scrap is the primary raw material input to manufacture wire rod. Different types and quantities of steel scrap are used depending on the type and quality of wire rod being produced; a larger amount of heavy melt scrap is used to produce industrial grade wire rod while more busheling scrap is used to produce higher-end grades of wire rod. Between January 2014 and September 2017, the average prices of heavy melt scrap, busheling scrap, and shredded auto scrap reported in American Metal Market \*\*\*, but declined overall. The average prices of no. 1 busheling scrap, no. 1 heavy melt scrap, and shredded auto scrap \*\*\* by \*\*\* percent, \*\*\* percent, and \*\*\* percent, respectively, from January 2014 to December 2015. The average prices of no. 1 busheling scrap, no. 1 heavy melt scrap, and shredded auto scrap \*\*\* by \*\*\* percent, \*\*\* percent, \*\*\* percent, and \*\*\* percent, respectively, from December 2015 to September 2017.

Most domestic producers and most importers report that their wire rod prices reflect changes in scrap costs. <sup>190</sup> Three U.S. producers and three importers reported that their wire rod prices are indexed to scrap prices. <sup>191</sup> One domestic producer and some importers report

<sup>&</sup>lt;sup>181</sup> CR at II-17-18, PR at II-9.

<sup>&</sup>lt;sup>182</sup> CR/PR at Table II-12.

<sup>&</sup>lt;sup>183</sup> CR/PR at Table II-12.

<sup>&</sup>lt;sup>184</sup> CR/PR at Table II-6.

<sup>&</sup>lt;sup>185</sup> CR/PR at Table VI-3. In the overall market, raw material costs accounted for between 65.0 percent and 55.5 percent of the domestic industry's COGS during the period of investigation. CR/PR at Table VI-1.

<sup>&</sup>lt;sup>186</sup> CR at V-1, PR at V-1.

<sup>&</sup>lt;sup>187</sup> CR at V-1, PR at V-1.

<sup>&</sup>lt;sup>188</sup> CR at V-1, PR at V-1.

<sup>&</sup>lt;sup>189</sup> CR at V-1-2, PR at V-1.

<sup>&</sup>lt;sup>190</sup> CR at V-5, PR at V-4.

<sup>&</sup>lt;sup>191</sup> CR at V-4. PR at V-2.

adding a separate raw material surcharge for scrap prices. Purchasers state that price negotiations for wire rod begin with references to published steel scrap prices. 193

Another condition of competition relevant to our analysis is the prevalence of spot sales in the wire rod market. In 2016, U.S. producers reported making \*\*\* percent of their U.S. commercial shipments in the spot market. That same year, responding importers reported making \*\*\* percent of their U.S. commercial shipments of subject imports in the spot market. Percent of their U.S. commercial shipments of subject imports in the spot market.

## C. Volume of Subject Imports

Section 771(7)(C)(i) of the Tariff Act provides that the "Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States, is significant." <sup>196</sup>

Cumulated subject imports had a significant and increasing presence in the U.S. market during the period of investigation. Cumulated subject import volume increased by 56.1 percent from 2014 to 2016, from 449,609 short tons in 2014 to 671,866 short tons in 2015 and 701,654 short tons in 2016. <sup>197</sup> Cumulated subject imports increased their share of apparent U.S. consumption in the merchant market from 10.2 percent in 2014 to 15.3 percent in 2015 and 16.5 percent in 2016. <sup>198</sup> This market share gain occurred at the expense of nonsubject imports

<sup>&</sup>lt;sup>192</sup> CR at V-5-6, PR at V-4.

<sup>&</sup>lt;sup>193</sup> AWPA Posthearing Br. at 3.

<sup>&</sup>lt;sup>194</sup> CR/PR at Table V-2. In 2016, U.S. producers reported making \*\*\* percent of their U.S. commercial shipments pursuant to annual contracts, \*\*\* percent pursuant to short-term contracts, and \*\*\* percent pursuant to long-term contracts. *See id.* 

<sup>&</sup>lt;sup>195</sup> CR/PR at Table V-2. In 2016, importers of wire rod reported making \*\*\* percent of their U.S. commercial shipments pursuant to short-term contracts and \*\*\* percent pursuant to long-term contracts. *See id.* 

<sup>&</sup>lt;sup>196</sup> 19 U.S.C. § 1677(7)(C)(i).

at 484,382 short tons than in interim 2016 at 563,600 short tons. CR/PR at Table IV-14. We find that the appreciable reduction in subject imports between the interim periods was attributable to the filing of the petitions in these investigations. This is substantiated largely by responses from several U.S. purchasers. \*\*\* states that \*\*\*; \*\*\* states that it \*\*\*; \*\*\* states that \*\*\*; \*\*\* U.S. Purchaser Questionnaire Response at III-12 (Sept. 30, 2017); \*\*\* U.S. Purchaser Questionnaire Response at III-12 (Oct. 13, 2017); \*\*\* U.S. Purchaser Questionnaire Response at III-12 (Sept. 20, 2017); \*\*\* U.S. Purchaser Questionnaire Response at III-12 (Oct. 13, 2017); \*\*\* U.S. Purchaser Questionnaire Response at III-12 (Oct. 9, 2017); \*\*\* U.S. Purchaser Questionnaire Response at III-12 (Oct. 13, 2017); \*\*\* U.S. Purchaser Questionnaire Response at III-12 (Oct. 9, 2017). We have consequently accorded reduced weight to the trade data for interim 2017 in our analysis. See 19 U.S.C. § 1677(7)(I).

<sup>&</sup>lt;sup>198</sup> CR/PR at Table IV-15. Cumulated subject import market share in the merchant market was lower in interim 2017 at 14.0 percent than in interim 2016 at 17.4 percent. *See id.* Cumulated subject imports increased as a share of apparent U.S. consumption in the overall market, increasing from 8.3 percent in 2014 to 12.4 percent in 2015 and 13.2 percent in 2016. Cumulated subject import market (Continued...)

and the domestic industry. As discussed above, wire rod imports from China, which became subject to antidumping and countervailing duty orders in January 2015, decreased precipitously, from 374,785 short tons in 2014 to 1,672 short tons in 2015 and 81 short tons in 2016. Although nonsubject imports from Canada, the largest supplier of nonsubject imports to the United States during the period of investigation, increased, the market share held by nonsubject imports in the merchant market decreased from 30.5 percent in 2014 to 25.5 percent in 2015 and 25.2 percent in 2016. The domestic industry's share of apparent U.S. consumption in the merchant market also fell from 59.3 percent in 2014 to 59.2 percent in 2015 and 58.2 percent in 2015.

The British and Turkish respondents argue that the increase in volume of cumulated subject imports was not significant because cumulated subject imports mostly replaced imports from China rather than displacing domestic production. <sup>203</sup> As an initial matter, this argument is

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share in the overall market was lower in interim 2017 at 11.2 percent than in interim 2016 at 13.7 percent. CR/PR at Table IV-13.

199 CR/PR at Table IV-14.

<sup>200</sup> In 2016, nonsubject imports from Canada accounted for 51.6 percent of nonsubject imports and 31.2 percent of all imports. CR at II-8, PR at II-4.

<sup>201</sup> CR/PR at Table IV-15. Nonsubject imports' market share in the merchant market was higher in interim 2017 at 28.4 percent than in interim 2016 at 24.8 percent. *See id.* Nonsubject imports' market share in the overall market decreased from 24.8 percent in 2014 to 20.6 percent in 2015 and 20.1 percent in 2016. Nonsubject imports' market share in the overall market was higher in interim 2017 at 22.8 percent than in interim 2016 at 19.6 percent. CR/PR at Table IV-13.

<sup>202</sup> CR/PR at Table IV-15. The domestic industry's market share in the merchant market was lower in interim 2017 at 57.6 percent than in interim 2016 at 57.8 percent. *See id.* The domestic industry's share of the overall market increased from 66.9 percent in 2014 to 67.1 percent in 2015 before decreasing to 66.7 percent in 2016. CR/PR at Table IV-13. The domestic industry's share of the overall market was lower in interim 2017 at 65.9 percent than in interim 2016 at 66.7 percent. *See id.* 

<sup>203</sup> British Respondent Prehearing Br. at 18-20; British Respondent Posthearing Br. at 4-5, Appendix E; Turkish Respondents Prehearing Br. at 13-15; Turkish Respondents Posthearing Br. at 4. The British respondent cites prior Commission decisions in arguing that subject import volume cannot be significant if the increase comes at the expense of nonsubject imports rather than domestically produced product. See id. at 18-20, citing Certain Carbon Steel Butt-Weld Pipe Fittings from France, India, Israel, Malaysia, Korea, Thailand, the United Kingdom, and Venezuela, Inv. Nos. 701-TA-360-361 and 731-TA-688-695, USITC Pub. 2870 (Final) (Apr. 1995); Polyvinyl Alcohol from Germany and Japan, Inv. Nos. 731-TA-1015-1016 (Final), USITC Pub. 3604 (June 2003)). Those prior decisions, however, involved fact patterns distinguishable from the one here. In Butt-Weld Pipe Fittings, the Commission found that subject imports increased significantly in the first two years of the period of investigation and that during that same time, the domestic industry also increased its market share from 47.4 percent in 1991 to 67.1 percent in 1992, and then to 67.2 percent in 1993. Certain Carbon Steel Butt-Weld Pipe Fittings from France, India, Israel, Malaysia, Korea, Thailand, the United Kingdom, and Venezuela, USITC Pub. 2870 at I-38. In Polyvinyl Alcohol, the Commission found that the presence of subject imports, despite increasing on an annual basis, was still small and that subject imports share relative to U.S. production or consumption was not at a level deemed significant. Polyvinyl Alcohol from Germany and Japan, USITC Pub. 3604 at 20.

of limited pertinence to our statutory inquiry, which concerns whether subject import volume or the increase in that volume – and not total import volume – is significant. Moreover, as discussed above in section V.B.4, cumulated subject imports competed directly with domestically produced wire rod during the period of investigation. Indeed, subject imports did not merely replace nonsubject imports from China, they also took market share from the domestic industry in the merchant market where the products competed.

We conclude that the volume of cumulated subject imports and the increase in that volume are significant in absolute terms and relative to consumption in the United States.

## D. Price Effects of the Subject Imports

Section 771(7)(C)(ii) of the Tariff Act provides that, in evaluating the price effects of the subject imports, the Commission shall consider whether

- (I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and
- (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.<sup>205</sup>

As stated above, the current record indicates a moderate-to-high degree of substitutability among subject imports and the domestically produced product produced to the produced to the same specifications and that price is an important consideration in purchasing purchasing decisions. Moreover, both the domestic like product and cumulated subject imports are concentrated in the industrial quality grades.<sup>206</sup>

In the final phase of these investigations, the Commission collected quarterly weighted-average sales price data for six wire rod products shipped to unrelated U.S. customers between January 2014 and September 2017. <sup>207</sup> Eight U.S. producers and 12 importers submitted usable

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<sup>&</sup>lt;sup>204</sup> 19 U.S.C. § 1677(7)(C)(i).

<sup>&</sup>lt;sup>205</sup> 19 U.S.C. § 1677(7)(C)(ii).

<sup>&</sup>lt;sup>206</sup> CR/PR at Table IV-9.

The pricing products are: (1) industrial quality wire rod, grade C1006, 5.5 mm (7/32 inch) through 12 mm (15/32 inch) in diameter, for hangers, chain link fencing, collated nails and staples, grades, and other formed products (in green condition, e.g., not cleaned, coated, etc.); (2) industrial quality wire rod, grades C1008 through C1010, 5.5 mm (7/32 inch) through 12 mm (15/32 inch) in diameter, for hangers, chain link fencing, collated nails and staples, grades, and other formed products (in green condition, e.g., not cleaned, coated, etc.); (3) mesh quality wire rod, grades C1006 through C1015, 5.5 mm (7/32 inch) through 14 mm (9/16 inch) in diameter, for the manufacturing of concrete reinforcement products such as wire for A-82 applications (in green condition, e.g., not cleaned, coated, etc.); (4) grades C1050 through C1070, 5.5 mm (7/32 inch) through 6.5 mm (1/4 inch) in diameter for spring applications, for spring applications excluding valve spring (in green condition, e.g., not cleaned, coated, etc.); (5) industrial quality wire rod, grades C1060 through C1065, 5.5 mm (7/32 inch) through (Continued...)

pricing data on sales of the requested products,<sup>208</sup> although not all firms reported pricing for all products for all quarters.<sup>209</sup>

The quarterly pricing data from 2014 to the first quarter of 2017 show that cumulated subject imports undersold the domestic like product in 139 of 199 instances (involving 1.0 million short tons of subject imports) at underselling margins that ranged from less than one percent to 42.5 percent. Cumulated subject imports oversold the domestic industry's price in the remaining 60 price comparisons (involving 306,700 short tons of subject imports) by overselling margins that ranged from less than one percent to 39.0 percent. Based on the pervasive underselling of the domestic like product by cumulated subject imports and the importance of price in purchasing decisions, we find that the underselling by subject imports to be significant. From 2014 to 2016, low-priced cumulated subject imports increased their volume and captured significant market share while wire rod imports from China essentially disappeared from the U.S. market after becoming subject to antidumping and countervailing duty orders in January 2014. Purchasers also confirmed purchasing subject imports instead of the domestic like product due to their lower price, which further supports a finding that this underselling was significant and enabled subject imports to capture substantial market share.

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17.5 mm (11/16 inch) in diameter, for spring wire rod used in upholstery and mechanical applications, as well as oil-tempered spring applications; and (6) suspension spring steel wire rod, grade SAE 9254, 5.5 mm (7/32 inch) through 21 mm 953/64 inch) in diameter, for use in the production of automotive and railway coil and suspension springs. CR at V-8-9, PR at V-5-6.

<sup>208</sup> CR at V-9, PR at V-6.

<sup>209</sup> CR at V-9, PR at V-6. The pricing data accounted for approximately 45.3 percent of the domestic industry's U.S. shipments, \*\*\* percent of subject imports from Belarus, \*\*\* percent of subject imports from Italy, \*\*\* percent of subject imports from Korea, \*\*\* percent of subject imports from Russia, \*\*\* percent of subject imports from South Africa, \*\*\* percent of subject imports from Spain, \*\*\* percent of subject imports from Turkey, \*\*\* percent of subject imports from Ukraine, \*\*\* percent of subject imports from the United Arab Emirates, and \*\*\* percent of subject imports from the United Kingdom in 2016. CR at V-9, PR at V-6.

<sup>210</sup> Derived from CR/PR at Tables V-3-8.

Derived from CR/PR at Tables V-3 -8. As discussed above, the filing of the petition in late March 2017 affected subject import volumes, and thus we have accorded less weight to post-petition pricing data, including the second and third quarters of 2017. During the entire period of investigation, cumulated subject imports undersold the domestic like product in 170 of 231 instances (involving 1.2 million short tons of subject imports) at underselling margins that ranged from less than one percent to 42.5 percent. Cumulated subject imports oversold the domestic industry's price in the remaining 61 price comparisons (involving 307,579 short tons of subject imports) by overselling margins that ranged from less than one percent to 39.0 percent. CR/PR at Table V-10a.

Cumulated subject imports increased by 56.1 percent, from 449,609 short tons in 2014 to 701,654 short tons in 2016. CR/PR at Table IV-14 and Table C-1. On the other hand, wire rod imports from China decreased precipitously by 100.0 percent, from 374,785 short tons in 2014 to 81 short tons in 2016. See id.

<sup>213</sup> Twenty-six of 40 purchasers responding to the Commission's questionnaire reported that they had purchased subject imports instead of the domestic like product since 2014, and 17 of those (Continued...)

We also examined price trends and find that between 2014 and 2015, cumulated subject imports depressed prices for the domestic like product. Prices for the domestically produced pricing products fell sharply from the first quarter of 2014 to the fourth quarter of 2015, and subsequently remained at lower levels. Similarly, the domestic industry's average

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purchasers reported that price was a primary reason for purchasing subject imports instead of the domestic like product. Fourteen purchasers estimated the quantity of subject imports that they purchased instead of the domestic like product since 2014. The aggregate tonnage involved in these purchases of subject imports, 538,397 short tons, is larger than the 252,045 short ton increase in cumulated subject imports between 2014 and 2016. CR at V-33, PR at V-16-17; CR/PR at Tables IV-14 & V-13.

<sup>214</sup> Commissioner Broadbent does not find significant price depression, and does not join this or the following two paragraphs. The record indicates that prices for U.S.-produced wire rod tracked changes in steel scrap prices over the period of investigation. CR at V-3; PR at V-1. In particular, published steel scrap prices that are followed by purchasers affect changes in wire rod prices. Hearing Tr. at 75-76 (Armstrong), 115 (Ashby), 145-146 (Korbel), 152 (Stauffer), 157-158 (Moffitt). Steel scrap prices \*\*\* over the period, \*\*\* sharply between the first quarter of 2014 and the first quarter of 2016, and then \*\*\* unevenly throughout the remainder of the period of investigation. CR/PR at Figure V-1. Overall, steel scrap prices were between \*\*\* percent \*\*\* in the first quarter of 2017 than in the first quarter of 2014. Derived from Updated Raw Materials, EDIS Doc. 631964 (Dec. 8, 2017). U.S. prices for wire rod followed similar trends, and were between 15.4 and 26.3 percent lower over the same period. CR/PR at Tables V-3-V-8. Likewise, the domestic industry's average unit value of commercial sales decreased less rapidly than the unit value of raw material costs or unit COGS in the merchant market. The unit value of commercial sales decreased by 26.0 percent (\$187 per short ton) between 2014 and 2016, while the unit value of merchant market raw material costs decreased by 38.1 percent (\$163 per short ton) and the unit value of merchant market COGS decreased by 26.7 percent (\$180 per short ton). CR/PR at Table VI-3. U.S. prices also were affected by decreasing demand over the POI, as merchant market consumption decreased by 4.2 percent between 2014 and 2016. CR/PR at Table C-2. Therefore, she does not find that cumulated subject imports depressed prices for the domestic like product to a significant degree.

Commissioner Broadbent also considered whether cumulated subject imports suppressed prices for the domestic like product. As discussed above, apparent U.S. consumption and raw material prices decreased over the period of investigation, and therefore price increases were unlikely under these conditions. Although steel scrap prices increased from the first quarter of 2016 until the first quarter of 2017, they remained low relative to steel scrap prices early in the POI. CR/PR at Figure V-1. U.S. prices for wire rod also increased substantially between the first quarters of 2016 and 2017. CR/PR at Tables V-3–V-8. The domestic industry's unit value of raw material costs and unit COGS in the merchant market also declined in each year between 2014 and 2016. CR/PR at Table VI-3. She therefore does not find that cumulated subject imports prevented price increases that otherwise would have occurred to a significant degree.

<sup>215</sup> CR/PR at Tables V-3-8. Quarterly weighted-average prices of product 1 manufactured in the United States declined from \$663 per short ton in the first quarter of 2014 to \$473 per short ton in the fourth quarter of 2015, or by 28.8 percent. CR/PR at Table V-3. Quarterly weighted-average prices of product 2 manufactured in the United States declined from \$684 per short ton in the first quarter of 2014 to \$467 per short ton in the fourth quarter of 2015, or by 29.9 percent. CR/PR at Table V-4. (Continued...)

unit commercial sales values declined sharply from \$716 per short ton in 2014 to \$585 per short ton in 2015. While continuous pricing series are not available for all pricing products from all subject countries, the available data indicate that subject import prices also generally decreased from 2014 to 2015. 217

Respondents argue that raw material costs, which declined between 2014 and 2015, principally influenced wire rod prices. Although we recognize that declining raw materials contributed to the downward trend in prices between 2014 and 2015, they do not explain the full magnitude of this decline. In this period, the domestic industry's unit raw material costs in the merchant market fell from \$431 per short ton in 2014 to \$323 per short ton in 2015, or by \$108. Largely due to the decline in raw material costs, the industry's unit COGS in the merchant market fell from \$673 per short ton in 2014 to \$558 per short ton in 2015, or by \$115. The average unit value of total domestic net sales in the merchant market, however, declined more sharply than unit raw material costs or unit COGS. It fell from \$716 per short ton

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Quarterly weighted-average prices of product 3 manufactured in the United States declined from \$662 per short ton in the first quarter of 2014 to \$464 per short ton in the fourth quarter of 2015, or by 29.9 percent. CR/PR at Table V-5. Quarterly weighted-average prices of product 4 manufactured in the United States declined from \*\*\* per short ton in the first quarter of 2014 to \*\*\* per short ton in the fourth quarter of 2015, or by \*\*\* percent. CR/PR at Table V-6. Quarterly weighted-average prices of product 5 manufactured in the United States declined from \*\*\* per short ton in the first quarter of 2014 to \*\*\* per short ton in the fourth quarter of 2015, or by \*\*\* percent. CR/PR at Table V-7. Quarterly weighted-average prices of product 6 manufactured in the United States declined from \*\*\* per short ton in the first quarter of 2014 to \*\*\* per short ton in the fourth quarter of 2015, or by \*\*\* percent. CR/PR at Table V-8.

Although prices for all six domestically produced pricing products fluctuated in 2016, as demand continued to decline and the volume of subject imports continued to increase, these prices remained at lower levels than those in 2014. See CR/PR at Tables V-3-8, Tables C-1-2.

<sup>216</sup> CR/PR at Table VI-3. Similarly, the average unit value of total domestic net sales in the overall market declined from \$716 per short ton in 2014 to \$585 per short ton in 2015. CR/PR at Table VI-1.

<sup>217</sup> CR/PR at Tables V-3-8. Specifically, from the first quarter of 2014 to the fourth quarter of 2015, prices of product 3 from Spain decreased by \*\*\* percent and prices of product 6 from Spain decreased by \*\*\* percent. From the second quarter of 2014 to the fourth quarter of 2015, prices of product 1 from Turkey decreased by \*\*\* percent, prices of product 2 from Turkey decreased by \*\*\* percent, and prices of product 3 from Turkey decreased by \*\*\* percent. See id.

<sup>218</sup> AWPA Prehearing Br. at 2-6; AWPA Posthearing Br. at 2-5; British Respondent Prehearing. Br. at 14-18; British Respondent Posthearing Br. at Appendix F; Turkish Respondents Prehearing Br. at 15.

<sup>219</sup> CR/PR at Tables VI-3-4. The domestic industry's unit raw material costs in the overall market declined from \$427 per short ton in 2014 to \$313 per short ton in 2015, or by \$114. CR/PR at Tables VI-1-2.

<sup>220</sup> CR/PR at Tables VI-3-4. The industry's unit COGS in the overall market fell from \$658 per short ton in 2014 to \$540 per short ton in 2015, or by \$118. CR/PR at Tables VI-1-2.

in 2014 to \$585 per short ton in 2015, or by \$132 per short ton. <sup>221</sup> U.S. demand for wire rod, which was relatively stable and declined by only 1.1 percent from 2014 to 2015, cannot explain the magnitude by which the decline in the average unit value of total domestic net sales exceeded the decline in the domestic industry's unit raw material costs or unit COGS. <sup>222</sup> The 17.1 percent decline in average unit COGS from 2014 to 2015 similarly cannot explain the price declines in excess of 25 percent from the first quarter of 2014 to the fourth quarter of 2015 in each of the six domestically produced pricing products referenced above.

Petitioners assert they were forced to lower prices in order to compete with low-priced subject imports that surged into the market.<sup>223</sup> They state that pricing of wire rod in the U.S. market is transparent because the majority of wire rod sales is made in the spot market and industry publications regularly publish wire rod prices.<sup>224</sup> They further state that due to this transparency in the market, low-priced subject imports sold on the spot market affected prices of their spot market sales<sup>225</sup> and their contract prices.<sup>226</sup> These contentions are corroborated by the data discussed above indicating sharp declines in the domestically produced pricing products from 2014 to 2015 and by the responses to the lost sales lost revenue survey of nine purchasers that reported that domestic producers had to reduce prices in order to compete with lower-priced imports from nine of the ten subject countries.<sup>227</sup>

Based on the foregoing, we find that cumulated subject imports had significant price effects. They significantly undersold the domestic like product and enabled subject imports to increase significantly and gain market share. We also find that subject imports depressed prices of the domestic like product during 2014 and 2015, and that prices remained at lower levels in 2016.<sup>228</sup>

 $<sup>^{221}</sup>$  CR/PR at Tables VI-3-4. The average unit value of total domestic net sales in the overall market decreased from \$716 per short ton in 2014 to \$585 per short ton in 2015, or by \$132. CR/PR at Tables VI-1-2.

<sup>&</sup>lt;sup>222</sup> CR/PR at Table C-2. In the overall market, demand decreased by only 0.3 percent from 2014 to 2015. CR/PR at Table C-1.

<sup>&</sup>lt;sup>223</sup> Gerdau, Keystone, and Charter Steel Prehearing Br. at 36-39; Nucor Posthearing Br. at 6-7; Hearing Tr. at 49-50 (Canosa); 54-56 (Ashby).

<sup>&</sup>lt;sup>224</sup> Hearing Tr. at 49-50 (Canosa).

<sup>&</sup>lt;sup>225</sup> Hearing Tr. at 49-50 (Canosa); 54-56 (Ashby).

Hearing Tr. at 50 (Canosa) (stating that Gerdau renegotiates its prices on a monthly or quarterly basis for wire rod sales made under annual supply agreements and that given the openness of the market, a small volume of low priced imports often has a big impact on prices for the domestic like product); 56 (Ashby) (stating that Keystone's supply agreement sales do not insulate the company from lower-priced imports sold on the spot market); 125 (Nystrom) (stating that contract prices are not binding and are affected by low spot prices).

<sup>&</sup>lt;sup>227</sup> CR/PR at Tables V-15-16.

<sup>&</sup>lt;sup>228</sup> Commission Broadbent does not find significant price depression.

# E. Impact of the Subject Imports<sup>229</sup>

Section 771(7)(C)(iii) of the Tariff Act provides that examining the impact of subject imports, the Commission "shall evaluate all relevant economic factors which have a bearing on the state of the industry." These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, gross profits, net profits, operating profits, cash flow, return on investment, return on capital, ability to raise capital, ability to service debts, research and development, and factors affecting domestic prices. No single factor is dispositive and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."

 $<sup>^{229}</sup>$  The statute instructs the Commission to consider the "magnitude of the dumping margin" in an antidumping proceeding as part of its consideration of the impact of imports. 19 U.S.C. § 1677(7)(C)(iii)(V). In its final determination of sales at less value, Commerce found dumping margins of 280.02 percent for imports from Belarus, 436.80 to 756.93 percent for imports from Russia, and 84.10 percent for imports from the United Arab Emirates. Commerce Antidumping Duty Investigations, 82 Fed. Reg. at 56215. For the remaining investigations we refer, as the statute instructs, to Commerce's preliminary margins. See 19 U.S.C. § 1677(35)(C)(ii). In its preliminary determinations, Commerce has found the following dumping margins: 22.06 percent for imports from Italy, 40.80 percent for imports from Korea, 135.46 to 142.26 percent for imports from South Africa, 10.61 percent for imports from Spain, 2.80 to 8.01 percent for imports from Turkey, 34.98 to 44.03 percent for imports from Ukraine, and 41.96 to 147.63 percent for imports from the United Kingdom. See Carbon and Alloy Steel Wire Rod from Italy, 82 Fed. Reg. 50381; Carbon and Alloy Steel Wire Rod from Korea, 82 Fed. Reg. 56220; Carbon and Alloy Steel Wire Rod from South Africa, 82 Fed. Reg. 50383 (Oct. 31, 2017) (preliminary affirmative determination of sales at less than fair value, preliminary affirmative determination of critical circumstances, and preliminary determination of no shipments); Carbon and Alloy Steel Wire Rod from Spain, 82 Fed. Reg. 57726 (Dec. 7, 2017) (amended preliminary determination of sales at less than fair value); Carbon and Alloy Steel Wire Rod from Turkey, 82 Fed. Reg. 50377; Carbon and Alloy Steel Wire Rod from Ukraine, 82 Fed. Reg. 50375 (Oct. 31, 2017) (preliminary affirmative determination of sales at less than fair value); Carbon and Alloy Steel Wire Rod from the United Kingdom, 82 Fed. Reg. 50394 (Oct. 31, 2017) (preliminary affirmative determination of sales at less than fair value and preliminary affirmative determination of critical circumstances). We take into account in our analysis the fact that Commerce has made preliminary or final findings that all subject producers in all ten subject countries are selling subject imports in the United States at less than fair value. In addition to this consideration, our impact analysis has considered other factors affecting domestic prices. Our analysis of the significant underselling and the other price effects of subject imports, described in both the price effects discussion and below, are particularly probative to an assessment of the impact of the subject imports.

<sup>&</sup>lt;sup>230</sup> 19 U.S.C. § 1677(7)(C)(iii); see also SAA at 851 and 885 ("In material injury determinations, 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 also may demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports.").

<sup>&</sup>lt;sup>231</sup> 19 U.S.C. § 1677(7)(C)(iii). This provision was amended by the Trade Preferences Extension Act of 2015, Pub. L. 114-27.

Most of the domestic industry's performance indicators declined from 2014 to 2016.<sup>232</sup> The domestic industry's share of apparent U.S. consumption in the merchant market fell from 59.3 percent in 2014 to 59.2 percent in 2015 and 58.2 percent in 2016.<sup>233</sup> Its capacity declined from 4.9 million short tons in 2014 and 2015 to 4.7 million short tons in 2016.<sup>234</sup> As previously discussed, domestic producers ArcelorMittal and Republic Steel ceased wire rod operations during the period of investigation.<sup>235</sup>

Contrary to the British respondents' contention, the Commission in its prior determinations did not "disregard" the data of domestic producers that exited the domestic industry in determining the domestic industry's production and market share. Rather, in the decisions cited by the British respondent, the Commission considered the domestic industry as a whole and examined the exits of certain domestic producers from the industry in its impact analyses. *See Liquid Sulfur Dioxide form Canada*, USITC Pub. 3826 at 20-23; *Titanium Sponge from Japan and Kazakhstan*, USITC Pub. 4736 at 29-32; *Steel Wire Rope from China and India*, USITC Pub. 3406 at 19 n.151. While the statute does provide one mechanism – the related parties provision – for the Commission to exclude data from certain domestic producers, respondents did not seek to exclude ArcelorMittal from the industry on this basis, as discussed above. As discussed above, we do not exclude ArcelorMittal despite it being a related party because of its principal interest in domestic production, among other factors. (Continued...)

<sup>&</sup>lt;sup>232</sup> As discussed above, the filing of the petition affected subject import volume and we are consequently according reduced weight to trade, output, and financial data for interim 2017.

<sup>&</sup>lt;sup>233</sup> CR/PR at Table IV-15. The domestic industry's market share in the merchant market was lower in interim 2017 at 57.6 percent than in interim 2016 at 57.8 percent. *See id.* The domestic industry's share of the overall market increased from 66.9 percent in 2014 to 67.1 percent in 2015, before decreasing to 66.7 percent in 2016. CR/PR at Table IV-13. The domestic industry's share of the overall market was lower in interim 2017 at 65.9 percent than in interim 2016 at 66.7 percent. *See id.* 

<sup>&</sup>lt;sup>234</sup> CR/PR at Table III-4. The domestic industry's capacity was 3.50 million short tons in interim 2016 and interim 2017. *See id.* 

<sup>&</sup>lt;sup>235</sup> Petitioners claim that subject imports were one of the factors that caused ArcelorMittal to shutter its Georgetown, South Carolina, mill in 2015 and Republic Steel to idle its Lorain, Ohio, mill in 2016. Nucor Prehearing Br. at 1-2; Nucor Posthearing Br. at Exhibit 1 pp.71-75; Hearing Tr. at 37, 82-83 (Rosenthal), 85-87 (Price), 111-112 (Price). Respondents contend that factors other than subject imports led to the closures. AWPA Prehearing Br. at 22-27; AWPA Posthearing Br. at 13-15; British Respondent Prehearing Br. at 9-12; British Respondent Posthearing Br. at Appendix B; Korean Respondent Prehearing Br. at 35-38; Turkish Respondents Prehearing Br. at 19-20; Turkish Respondents Posthearing Br. at 10. The British and Turkish respondents argue that the closures of ArcelorMittal's and Republic Steel's wire rod operations were not due to subject imports, and as such, the Commission should disregard the data of those companies in determining the domestic industry's production and market share. British Respondent Prehearing Br. at 6-8; British Respondent Posthearing Br. at 3-4; Turkish Respondents Prehearing Br. at 19; Turkish Respondents Posthearing Br. at 4; Hearing Tr. at 182 (Cunningham). The British respondent claims that in prior decisions, the Commission was careful to analyze domestic industry data when producers left the market for reasons other than subject imports. See id. at 7-8, citing Liquid Sulfur Dioxide form Canada, Inv. No. 731-TA-1098 (Preliminary), USITC Pub. 3826 (Dec. 2005); Titanium Sponge from Japan and Kazakhstan, Inv. No. 701-TA-587 and 731-TA-1385-1387 (Preliminary), USITC Pub. 4736 (Oct. 2017); and Steel Wire Rope from China and India, Inv. No. 731-TA-868 (Final), USITC Pub. 3406 (2001).

The domestic industry's production decreased from 3.7 million short tons in 2014 and 2015 to 3.6 million short tons in 2016. The domestic industry's commercial U.S. shipments decreased from 2.6 million short tons in 2014 and 2015 to 2.5 million short tons in 2016. Its capacity utilization decreased from 75.6 percent in 2014 to 75.2 percent in 2015, before increasing to 76.6 percent in 2016. Its ratio of end-of-period inventories to U.S. commercial shipments increased from 7.4 percent in 2014 to 7.5 percent in 2015 and 7.6 percent in 2016.

Most employment-related indicators for the domestic industry declined overall from 2014 to 2016. The number of production-related workers ("PRWs"), 240 wages paid, 241 and total

### (...Continued)

In any event, the record does not include any data from Republic Steel because the company did not provide a usable questionnaire response in the preliminary phase of the investigations and did not provide any questionnaire response in the final phase. CR/PR at III-1 n.1. ArcelorMittal issued press releases announcing the Georgetown mill's closure explaining that the mill was "severely impacted by waves of unfairly traded imports from China and other countries." Nucor Posthearing Br. at Exhibit 31. Contemporaneous newspaper articles also pointed to unfairly traded imports as playing a role in the closure. See id. at Exhibits 33-37. Moreover, employees who lost their jobs when the Georgetown mill closed received trade adjustment assistance. Hearing Tr. at 59 (Hart). The evidence also indicates that the Georgetown mill faced problems unrelated to cumulated subject imports. The port on which the mill was located became clogged with silt and the Army Corps of Engineers refused to dredge the port, preventing access for larger ships to deliver raw materials to the mill. Moreover, Nucor opened a new, modern, state of the art wire rod mill located only 100 miles from the Georgetown mill. See AWPA Prehearing Br. at 23-25; British Respondent Prehearing Br. at 10-11; British Respondent Posthearing Br. at Appendix B; Turkish Respondents Prehearing Br. at 19; Turkish Respondents Posthearing Br. at 10. Significantly, irrespective of the forces contributing to the closure decision, the Georgetown mill's closure should not have dictated a decline in the domestic industry's production. Other U.S. producers had excess capacity exceeding the amount that ArcelorMittal shuttered, and therefore had the ability to increase their production to meet demand previously served by ArcelorMittal. See CR/PR at Table III-4.

<sup>236</sup> CR/PR at Table III-4. The domestic industry's production was higher in interim 2017 at 2.9 million short tons than in interim 2016 at 2.8 million short tons. *See id.* 

<sup>237</sup> CR/PR at Table III-6. The domestic industry's commercial shipments were higher in interim 2017 at 2.0 million short tons than in interim 2016 at 1.9 million short tons. Its total U.S. shipments decreased from \*\*\* short tons in 2014 and 2015 to \*\*\* short tons in 2016 and were higher in interim 2017 at \*\*\* short tons than in interim 2016 at \*\*\* short tons. See id.

<sup>238</sup> CR/PR at Table III-4. The domestic industry's capacity utilization was higher in interim 2017 at 83.0 percent than in interim 2016 at 78.8 percent. *See id.* 

<sup>239</sup> CR/PR at Table III-7. The domestic industry's ratio of end-of-period inventories to U.S. commercial shipments was higher in interim 2017 at 7.7 percent than in interim 2016 at 7.4 percent. Its ratio of end-of-period inventories to total shipments increased from \*\*\* percent in 2014 and 2015 to \*\*\* percent in 2016 and was higher in interim 2017 at \*\*\* percent than in interim 2016 at \*\*\* percent. See id.

<sup>240</sup> CR/PR at Table III-9. The domestic industry's PRWs increased from 2,299 in 2014 to 2,410 in 2015, before decreasing to 2,222 in 2016. The number of PRWs was lower in interim 2017 at 2,238 than in interim 2016 at 2,242. *See id.* 

hours worked  $^{242}$  fluctuated between years but decreased overall from 2014 to 2016. Productivity also fluctuated between years but declined overall from 2014 to 2016. Unit labor costs increased from 2014 to 2016.

The domestic industry's financial indicators in the merchant market generally declined from 2014 to 2016. Net sales, <sup>245</sup> unit net sales value, <sup>246</sup> gross profit, <sup>247</sup> operating income, <sup>248</sup>

(...Continued)

 $^{241}$  CR/PR at Table III-9. Wages paid increased from \$170.6 million in 2014 to \$172.3 million in 2015, before decreasing to \$168.3 million in 2016. Wages paid were higher in interim 2017 at \$129.1 million than in interim 2016 at \$124.6 million. See id.

<sup>242</sup> CR/PR at Table III-9. Total hours worked increased from 4.8 million in 2014 to 4.9 million in 2015, before decreasing to 4.8 million in 2016. Total hours worked were higher in interim 2017 at 3.60 million than in interim 2016 at 3.57 million. *See id.* 

<sup>243</sup> CR/PR at Table III-9. The domestic industry's productivity (in short tons per 1,000 hours) decreased from 766.8 in 2014 to 744.7 in 2015, before increasing to 751.0 in 2016. The domestic industry's productivity (in short tons per 1,000 hours) was higher in interim 2017 at 805.1 than in interim 2016 at 772.7.*See id.* 

<sup>244</sup> CR/PR at Table III-9. The domestic industry's unit labor costs increased from \$46.01 to \$46.84 in 2015 and \$47.13 in 2016. The domestic industry's unit labor costs were lower in interim 2017 at \$44.60 than in interim 2016 at \$45.25. *See id.* 

<sup>245</sup> CR/PR at Table VI-3. The domestic industry's net sales revenues in the merchant market declined from \$1.9 billion in 2014 to \$1.5 billion in 2015 and \$1.3 billion in 2016. Its net sales revenues in the merchant market were higher in interim 2017 at \$1.2 billion than in interim 2016 at \$1.0 billion. See id. In the overall market, the domestic industry's net sales revenues declined from \$2.6 billion in 2014 to \$2.1 billion in 2015 and \$1.9 billion in 2016. Its net sales revenues in the overall market were higher in interim 2017 at \$1.7 billion than in interim 2016 at \$1.4 billion. CR/PR at Table VI-1. The domestic industry's net sales of internal consumption and transfers to related firms declined from \$672.0 million in 2014 to \$560.7 million in 2015 and \$535.8 million in 2016. Its net sales of internal consumption and transfers to related firms were higher in interim 2017 at \$482.2 million than in interim 2016 at \$428.5 million. Calculated from CR/PR at Table VI-1.

<sup>246</sup> CR/PR at Table VI-3. The domestic industry's unit net sales value in the merchant market declined from \$716 per short ton in 2014 to \$585 per short ton in 2015 and \$530 per short ton in 2016. Its unit net sales value in the merchant market was higher in interim 2017 at \$607 per short ton than interim 2016 at \$532 per short ton. *See id.* In the overall market, the domestic industry's unit net sales value declined from \$716 per short ton to \$585 per short ton in 2015 and \$530 per short ton in 2016. Its unit net sales value in the overall market was higher in interim 2017 at \$607 per short ton than interim 2016 at \$532 per short ton. CR/PR at Table VI-1.

<sup>247</sup> CR/PR at Table VI-3. The domestic industry's gross profit in the merchant market declined from \$115.1 million in 2014 to \$69.6 million in 2015, before increasing to \$90.7 million in 2016. Its gross profit in the merchant market was higher in interim 2017 at \$99.4 million than in interim 2016 at \$49.1 million. *See id.* In the overall market, the domestic industry's gross profit declined from \$157.7 million in 2014 to \$111.6 million in 2015, before increasing to \$139.6 million in 2016. Its gross profit in the overall market was higher in interim 2017 at \$140.5 million than in interim 2016 at \$120.2 million. CR/PR at Table VI-1.

<sup>248</sup> CR/PR at Table VI-3. The domestic industry's operating income in the merchant market decreased from \$52.6 million in 2014 to \$13.3 million in 2015, before increasing to \$25.1 million in (Continued...)

and net income  $^{249}$  declined overall from 2014 to 2016. Operating income as a share of net sales also declined overall from 2014 to 2016.  $^{250}$ 

Domestic producers' capital expenditures declined from 2014 to 2016.<sup>251</sup> Domestic producers also reported negative effects on investment and on growth and development due to subject imports.<sup>252</sup>

As discussed above, significant volumes of low-priced cumulated subject imports that were generally substitutable with the domestic like product entered the U.S. market and significantly undersold the domestic like product. Although wire rod imports from China retreated from the U.S. market following imposition of antidumping and countervailing duty orders covering those imports, which resulted in nonsubject imports decreasing their presence in the market, the domestic industry was unable to achieve any market share gains and, in fact, lost market share to the cumulated subject imports. The domestic industry's underutilization

## (...Continued)

2016. Its operating income in the merchant market was higher in interim 2017 at \$48.0 million than in interim 2016 at \$28.4 million. *See id.* In the overall market, the domestic industry's operating income decreased from \$75.4 million in 2014 to \$35.8 million in 2015, before increasing to \$52.9 million in 2016. Its operating income in the overall market was higher in interim 2017 at \$72.8 million than in interim 2016 at \$55.0 million. CR/PR at Table VI-1. The domestic industry's operating income in the captive market decreased from \$22.8 million in 2014 to \$22.5 million in 2015, before increasing to \$27.8 million in 2016. Its operating income in the captive market was lower in interim 2017 at \$24.8 million than in interim 2016 at \$26.6 million. Calculated from CR/PR at Tables VI-1 & VI-3.

The domestic industry's wire rod operations generated higher operating income in 2016 than in 2015 \*\*\* because of \*\*\*. CR at VI-12, PR at VI-9. Individually, the majority of reporting firms experienced operating losses in every full year during the period of investigation. *See id.* 

<sup>249</sup> CR/PR at Table VI-3. The domestic industry's net income in the merchant market decreased from \$46.4 million in 2014 to \$5.7 million in 2015, before increasing to \$21.1 million in 2016. Its net income in the merchant market was higher in \$46.9 million that in interim 2016 at \$25.3 million. *See id.* The domestic industry's net income in the overall market decreased from \$62.2 million in 2014 to \$22.1 million in 2015, before increasing to \$44.3 million in 2015. Its net income in the overall market was higher in interim 2017 at \$68.5 million than in interim 2016 at \$48.3 million. CR/PR at Table VI-1.

<sup>250</sup> CR/PR at Table VI-3. The domestic industry's operating income as a share of net sales in the merchant market decreased from 2.8 percent in 2014 to 0.9 percent in 2015, before increasing to 1.9 percent in 2016. Its operating income as a share of net sales in the merchant market was higher in interim 2017 at 3.9 percent than in interim 2016 at 2.8 percent. *See id.* The domestic industry's operating income as a share of net sales in the overall market decreased from 2.9 percent in 2014 to 1.7 percent in 2015, before increasing to 2.8 percent in 2016. Its operating income as a share of net sales in the overall market was higher in interim 2017 at 4.3 percent than in interim 2016 at 3.8 percent. CR/PR at Table VI-1.

<sup>251</sup> CR/PR at Table VI-7. The domestic industry's capital expenditures declined from \$90.9 million in 2014 to \$68.7 million in 2015 and \$52.9 million in 2016. Its capital expenditures were higher in interim 2017 at \$41.6 million than in interim 2016 at \$33.8 million. *See id.* 

<sup>252</sup> CR/PR at Tables VI-9-10.

<sup>253</sup> As discussed above, Chairman Schmidtlein, Vice Chairman Johanson, and Commissioner Williamson also find that cumulated subject imports depressed U.S. prices in 2014 and 2015.

of capacity led to fixed costs being spread across fewer sales than would have occurred otherwise. Consequently, from 2014 to 2016, the domestic industry's financial performance deteriorated as its output and revenues declined. We therefore find that cumulated subject imports had a significant impact on the domestic industry.<sup>254</sup>

We have considered the Turkish respondents' argument that the domestic industry's vertical integration and existence of domestic preference programs insulated the domestic industry from competition with subject imports. The record indicates, however, that of the domestic industry's U.S. shipments, the majority is directed to the merchant market and is not captively consumed. Domestic producers' merchant market shipments accounted for between 69.1 and 71.4 percent of their total U.S. shipments each year from 2014 to 2016. Moreover, prices in the merchant market affected revenues in the captive market. All domestic producers reported that transfers of wire rod to related companies occurred at fair market value. Consequently, average unit values for transfers to affiliated entities incurred similar declines as commercial sales average unit values. In sum, the record does not support the conclusion that the vertical integration of the domestic industry insulated domestic producers from the effects of competition by cumulated subject imports.

We acknowledge that subject imports are not able to compete on Buy America(n) procurements, but available information suggests that Buy America(n) preferences apply to a relatively small share of wire rod purchases in the U.S. market.<sup>259</sup> Moreover, these preferences did not prevent cumulated subject imports from making significant volume and market share gains during the period of investigation. Accordingly, these preference programs also did not insulate the domestic industry from direct competition with subject imports or from the adverse effects of the low-priced subject imports.

We have considered whether there are other factors that may have had an impact on the domestic industry during the period of investigation to ensure that we are not attributing

Commissioner Broadbent observes that application of the captive production provision, as amended by the Trade Preferences Extension Act of 2015, has a bearing on her assessment of the impact of subject imports in these investigations. As discussed in section V.B.1 above, the Commission did not apply the captive production provision in the 2014-15 investigations on wire rod from China because the third criterion for applying the provision was not satisfied. Consistent with the Trade Preferences Extension Act of 2015 which eliminated the third criterion, the Commission has applied the captive production provision in these investigations. Therefore, 19 U.S.C. § 1677(7)(C)(iv) provides that "the Commission, in determining market share and the factors affecting financial performance {...}, shall focus primarily on the merchant market for the domestic like product." As a result, Commissioner Broadbent has placed primary weight within her analysis on the fact that the domestic industry continued to lose merchant market share and experienced a slight decline in its profitability from merchant market sales, despite imports from China losing 8.5 percentage points of market share. In the overall market, the domestic industry's profitability and market share remained stable.

<sup>&</sup>lt;sup>255</sup> Turkish Respondents Prehearing Br. at 3-4, 8-10; Turkish Respondents Posthearing Br. at 5-7.

<sup>&</sup>lt;sup>256</sup> CR/PR at Table III-6.

<sup>&</sup>lt;sup>257</sup> CR at III-14-15, PR at III-9.

<sup>&</sup>lt;sup>258</sup> CR/PR at Table VI-1.

<sup>&</sup>lt;sup>259</sup> Gerdau, Keystone, and Charter Steel Posthearing Br. at Exhibit 8.

injury from such other factors to subject imports. Although apparent U.S. consumption declined during the period of investigation, the decline was modest and fails to explain either the significant increase in the volume and market share of cumulated subject imports or the domestic industry's inability to increase, or even to maintain, its market share after wire rod imports from China largely departed the U.S. market.<sup>260</sup>

We have also considered the role of nonsubject imports in these investigations. Nonsubject imports' share of apparent U.S. consumption in the merchant market decreased from 30.5 percent in 2014 to 25.5 percent in 2015 and 25.2 percent in 2016. Although wire rod imports from Canada, the largest source of nonsubject imports in 2016, increased, the pricing data show that they were predominantly priced higher than both subject imports and the domestic like product. Moreover, wire rod imports from six nonsubject countries are currently subject to antidumping duty orders and wire rod from two nonsubject countries are subject to countervailing duty orders. Accordingly, we find that nonsubject imports cannot explain the domestic industry's declines in market share or deteriorating condition over the period of investigation.

Accordingly, we conclude that subject imports have had a significant impact on the domestic industry.

## VI. Critical Circumstances

## A. Legal Standards and Party Arguments

In its final antidumping duty determination concerning imports of wire rod from Russia, Commerce found that critical circumstances exist with respect to all subject producers and exporters in that country. Because we have determined that the domestic industry is materially injured by reason of subject imports from Russia, we must further determine "whether the imports subject to the affirmative {Commerce critical circumstances} determination ... are likely to undermine seriously the remedial effect of the antidumping

<sup>&</sup>lt;sup>260</sup> We also discussed above that declines in demand cannot explain the magnitude of declines in prices for domestically produced products in 2014 and 2015.

<sup>&</sup>lt;sup>261</sup> CR/PR at Table IV-15. Nonsubject imports' market share in the merchant market was higher in interim 2017 at 28.4 percent than in interim 2016 at 24.8 percent. *See id.* Nonsubject imports' market share in the overall market decreased from 24.8 percent in 2014 to 20.6 percent in 2015 and 20.1 percent in 2016. Nonsubject imports' market share in the overall market was higher in interim 2017 at 22.8 percent than in interim 2016 at 19.6 percent. CR/PR at Table IV-13.

One importer reported pricing data for nonsubject imports from Canada, accounting for \*\*\* percent of U.S. commercial shipments of wire rod from Canada in 2016. CR at H-3, PR at H-3. These data show that prices for nonsubject imports from Canada were higher than the domestic like product in 24 quarterly comparisons and lower than the domestic like product in 21 quarterly comparisons; they were higher than cumulated subject imports in 106 quarterly comparisons and lower than cumulated subject imports in 31 quarterly comparisons. CR/PR at Table H-4.

<sup>&</sup>lt;sup>263</sup> CR/PR at Table I-1.

<sup>&</sup>lt;sup>264</sup> Commerce Antidumping Duty Investigations, 82 Fed. Reg. at 56215.

{and/or countervailing duty} order{s} to be issued."<sup>265</sup> The SAA indicates that the Commission is to determine "whether, by massively increasing imports prior to the effective date of relief, the importers have seriously undermined the remedial effect of the order" and specifically "whether the surge in imports prior to the suspension of liquidation, rather than the failure to provide retroactive relief, is likely to seriously undermine the remedial effect of the order."<sup>266</sup> The legislative history for the critical circumstances provision indicates that the provision was designed "to deter exporters whose merchandise is subject to an investigation from circumventing the intent of the law by increasing their exports to the United States during the period between initiation of an investigation and a preliminary determination by {Commerce}."<sup>267</sup> An affirmative critical circumstances determination by the Commission, in conjunction with an affirmative determination of material injury by reason of subject imports, would normally result in the retroactive imposition of duties for those imports subject to the affirmative Commerce critical circumstances determination for a period 90 days prior to the suspension of liquidation.

The statute provides that, in making this determination, the Commission shall consider, among other factors it considers relevant,

- (I) the timing and the volume of the imports,
- (II) a rapid increase in inventories of the imports, and
- (III) any other circumstances indicating that the remedial effect of the  $\{ \text{order} \}$  will be seriously undermined.  $^{268}$

In considering the timing and volume of subject imports, the Commission's practice is to consider import quantities prior to the filing of the petition with those subsequent to the filing of the petition using monthly statistics on the record regarding those firms for which Commerce has made an affirmative critical circumstances determination. <sup>269</sup>

Petitioners argue that the Commission should make an affirmative critical circumstances finding with respect to subject imports from Russia.<sup>270</sup> They contend that in conducting its critical circumstances analysis, the Commission should depart from its normal practice of comparing imports in the six-month period preceding and succeeding the filing of the petition

<sup>&</sup>lt;sup>265</sup> 19 U.S.C. §§ 1671d(b)(4)(A)(ii), 1673d(b)(4)(A)(ii).

<sup>&</sup>lt;sup>266</sup> SAA at 877.

<sup>&</sup>lt;sup>267</sup> ICC Industries, Inc. v United States, 812 F.2d 694, 700 (Fed. Cir. 1987), quoting H.R. Rep. No. 96-317 at 63 (1979), aff'g 632 F. Supp. 36 (Ct. Int'l Trade 1986). See 19 U.S.C. §§ 1671b(e)(2), 1673b(e)(2).

<sup>&</sup>lt;sup>268</sup> 19 U.S.C. §§ 1671d(b)(4)(A)(ii), 1673d(b)(4)(A)(ii).

See Lined Paper School Supplies from China, India, and Indonesia, Inv. Nos. 701-TA-442-43, 731-TA-1095-97, USITC Pub. 3884 at 46-48 (Sept. 2006); Carbazole Violet Pigment from China and India, Inv. Nos. 701-TA-437 and 731-TA-1060-61 (Final), USITC Pub. 3744 at 26 (Dec. 2004); Certain Frozen Fish Fillets from Vietnam, Inv. No. 731-TA-1012 (Final), USITC Pub. 3617 at 20-22 (Aug. 2003).

<sup>&</sup>lt;sup>270</sup> Nucor Prehearing Br. at 58; Nucor Posthearing Br. at Exhibit 1 pp.88-91.

and should instead use a four-month period.<sup>271</sup> Petitioners argue that subject imports from Russia increased using a fourth-month comparison period,<sup>272</sup> that end-of-period inventories of subject imports from Russia increased from September 2016 to September 2017,<sup>273</sup> and that the export orientation of subject producers in Russia all support an affirmative finding that critical circumstances exist.<sup>274</sup>

The Russian respondent argues that the Commission should make a negative critical circumstances finding with respect to imports from Russia. It asserts that wire rod imports from Russia were slightly lower in the six months after the filing of the petition than in the six months before the filing. It also argues that although inventories of wire rod from Russia were higher in September 2017 than in September 2016, the wire rod held in inventory is small and does not undermine the effectiveness of the order.

## B. Analysis

We first consider the appropriate period for comparison of pre-petition and post-petition levels of subject imports from Russia. In previous investigations, the Commission has relied on a shorter comparison period when Commerce's preliminary determination applicable to the country at issue fell within the six-month post-petition period the Commission typically considers. That situation arises here with respect to subject imports from Russia, and we have thus determined to compare the volume of subject imports five months prior to the filing of the petition with the volume of subject imports five months after the filing of the petition in our critical circumstances analyses regarding subject imports from Russia. 280

<sup>&</sup>lt;sup>271</sup> Nucor Prehearing Br. at 61-62.

<sup>&</sup>lt;sup>272</sup> Nucor Prehearing Br. at 63; Nucor Posthearing Br. at Exhibit 1 pp.88-89.

<sup>&</sup>lt;sup>273</sup> Nucor Prehearing Br. at 65; Nucor Posthearing Br. at Exhibit 1 pp.89.

<sup>&</sup>lt;sup>274</sup> Nucor Prehearing Br. at 63-68; Nucor Posthearing Br. at Exhibit 1 pp.88-89.

<sup>&</sup>lt;sup>275</sup> Russian Respondent Prehearing Br. at 6-8.

<sup>&</sup>lt;sup>276</sup> Russian Respondent Prehearing Br. at 3-4.

<sup>&</sup>lt;sup>277</sup> Russian Respondent Prehearing Br. at 5-6.

<sup>&</sup>lt;sup>278</sup> Certain Hot-Rolled Steel Flat Products from Australia, Brazil, Japan, Korea, the Netherlands, Turkey, and the United Kingdom, Inv. Nos. 701-TA-545-547, 731-TA-1291-1297 (Final), USITC Pub. 4638 at 49-50 (Sept. 2016); Certain Corrosion-Resistance Steel Products from China, India, Italy, Korea, and Taiwan, Inv. No. 701-TA-534-537 and 731-TA-1274-1278 (Final), USITC Pub. 4630 at 35-40 (July 2016); Carbon and Certain Steel Wire Rod from China, Inv. Nos. 701-TA-512, 731-TA-1248 (Final), USITC Pub. 4509 at 25-26 (Jan. 2015) (using five-month periods because preliminary Commerce countervailing duty determination occurred during the sixth-month period after the petition).

<sup>&</sup>lt;sup>279</sup> The petitions in these investigations were filed on March 28, 2017 and Commerce made its preliminary antidumping duty determination on wire rod imports from Russia on September 12, 2017. *Certain Carbon and Alloy Steel Wire Rod from Russia and the United Arab Emirates*, 82 Fed. Reg. 42794 (Sept. 12, 2017) (affirmative preliminary determinations of sales at less than fair value and affirmative preliminary determination of critical circumstance).

<sup>&</sup>lt;sup>280</sup> The periods considered are November 2016 through March 2017 and April 2017 through August 2017. We note that our ultimate finding would have been the same if we had used a four-(Continued...)

The monthly data for subject import volume from Russia for the five-month periods before and after the filing of the petition show an increase of only 3,857 short tons, from 31,313 short tons to 35,170 short tons. End of period inventories of imports from Russia were 4,089 short tons in September 2016 and 6,858 short tons in September 2017, an increase of 2,769 short tons. Although both import volume and inventory levels increased in the postpetition period, we do not find that the increased volumes, particularly in the context of the 4.4 million short ton merchant market for wire rod in 2016, was massive or sufficiently large to undermine seriously the remedial effect of the order.

Taken as a whole, the data on record do not show a sudden and significant increase in imports from Russia subject to Commerce's affirmative critical circumstances determination subsequent to the filing of the petition that would seriously undermine the remedial effect of the antidumping duty order to be issued on wire rod from Russia. Consequently, we make a negative critical circumstances determination with regard to subject imports in the antidumping duty investigation of wire rod from Russia.

### VII. Conclusion

For the reasons stated above, we determine that an industry in the United States is materially injured by reason of subject imports of wire rod from Belarus, Russia, and the United Arab Emirates that are sold in the United States at less than fair value. We also determine that critical circumstances do not exist with respect to subject imports from Russia covered by Commerce's affirmative critical circumstances determination.

(...Continued)

month comparison period, as petitioners advocate, or a six-month comparison period, as the Russian respondents requests.

<sup>&</sup>lt;sup>281</sup> CR/PR at Table IV-4.

<sup>&</sup>lt;sup>282</sup> CR/PR at Table VII-38.

## PART I: INTRODUCTION

#### **BACKGROUND**

These investigations result from petitions filed with the U.S. Department of Commerce ("Commerce") and the U.S. International Trade Commission ("USITC" or "Commission") by Charter Steel ("Charter"), Saukville, Wisconsin; Gerdau Ameristeel US Inc. ("Gerdau"), Tampa, Florida; Keystone Consolidated Industries, Inc. ("Keystone"), Peoria, Illinois; and Nucor Corporation ("Nucor"), Charlotte, North Carolina on March 28, 2017, alleging that an industry in the United States is materially injured and threatened with material injury by reason of subsidized imports of carbon and certain alloy steel wire rod ("wire rod") from Italy and Turkey, and less-than-fair-value ("LTFV") imports of wire rod from Belarus, Italy, Korea, Russia, South Africa, Spain, Turkey, Ukraine, the United Arab Emirates, and the United Kingdom. The following tabulation provides information relating to the background of these investigations. 2 3

Effective/applicable date	Action
March 28, 2017	Petitions filed with Commerce and the Commission; institution of the Commission's investigations (82 FR 16232, April 3, 2017)
April 17, 2017	Commerce's notice of initiation of countervailing duty (82 FR 19213, April 26, 2017) and antidumping duty investigations (82 FR 19207, April 26, 2017)
May 12, 2017	Commission's preliminary determinations (82 FR 22846, May 18, 2017)
July 9, 2017	Commerce's postponement of preliminary antidumping duty determinations on imports from Italy, Korea, South Africa, Spain, Turkey, Ukraine, the United Kingdom (82 FR 39564, August 21, 2017)
August 25, 2017	Commerce's preliminary countervailing duty determinations on imports from Italy (82 FR 41931, September 5, 2017), Turkey, and preliminary critical circumstances determinations on imports from Turkey (82 FR 41929, September 5, 2017)
September 5, 2017	Commerce's preliminary antidumping duty determinations on imports from Belarus (82 FR 42796, September 12, 2017), Russia, and the UAE, and preliminary critical circumstances determinations on imports from Russia (82 FR 42794, September 12, 2017)

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<sup>&</sup>lt;sup>1</sup> See the section entitled "The Subject Merchandise" in *Part I* of this report for a complete description of the merchandise subject in this proceeding.

<sup>&</sup>lt;sup>2</sup> Pertinent *Federal Register* notices are referenced in appendix A, and may be found at the Commission's website (www.usitc.gov).

<sup>&</sup>lt;sup>3</sup> A list of witnesses appearing at the hearing is presented in appendix B.

Effective/applicable date	Action
September 5, 2017	Scheduling of final phase of Commission investigations (82 FR 44001, September 20, 2017)
October 31, 2017	Commerce's preliminary antidumping duty determinations on imports from Italy (82 FR 50381), Spain (82 FR 50389), Korea (82 FR 50386), South Africa (82 FR 50383), United Kingdom (82 FR 50394), Turkey (82 FR 50377), and Ukraine (82 FR 50375)
November 16, 2017	Commission's hearing
November 28, 2017	Commerce's final antidumping duty determinations (Belarus, Russia, and UAE) (82 FR 56214)
November 28, 2017	Commerce's amended preliminary antidumping duty determination on imports from Korea (82 FR 56220)
December 19, 2017	Commission's vote (Belarus, Russia, and UAE)
January 11, 2018	Commission's views (Belarus, Russia, and UAE)

## STATUTORY CRITERIA AND ORGANIZATION OF THE REPORT

## Statutory criteria

Section 771(7)(B) of the Tariff Act of 1930 (the "Act") (19 U.S.C. § 1677(7)(B)) provides that in making its determinations of injury to an industry in the United States, the Commission--

shall consider (I) the volume of imports of the subject merchandise, (II) the effect of imports of that merchandise on prices in the United States for domestic like products, and (III) the impact of imports of such merchandise on domestic producers of domestic like products, but only in the context of production operations within the United States; and. . . may consider such other economic factors as are relevant to the determination regarding whether there is material injury by reason of imports.

Section 771(7)(C) of the Act (19 U.S.C. § 1677(7)(C)) further provides that--4

In evaluating the volume of imports of merchandise, the Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States is significant.... In evaluating the effect of imports of such merchandise on prices, the Commission shall consider whether...(I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like

<sup>&</sup>lt;sup>4</sup> Amended by PL 114-27 (as signed, June 29, 2015), Trade Preferences Extension Act of 2015.

products of the United States, and (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.. . . In examining the impact required to be considered under subparagraph (B)(i)(III), the Commission shall evaluate (within the context of the business cycle and conditions of competition that are distinctive to the affected industry) all relevant economic factors which have a bearing on the state of the industry in the United States, including, but not limited to. . . (I) actual and potential decline in output, sales, market share, gross profits, operating profits, net profits, ability to service debt, productivity, return on investments, return on assets, and utilization of capacity, (II) factors affecting domestic prices, (III) actual and potential negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment, (IV) actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product, and (V) in {an antidumping investigation}, the magnitude of the margin of dumping.

In addition, Section 771(7)(J) of the Act (19 U.S.C. § 1677(7)(J)) provides that—<sup>5</sup>

(J) EFFECT OF PROFITABILITY.—The Commission may not determine that there is no material injury or threat of material injury to an industry in the United States merely because that industry is profitable or because the performance of that industry has recently improved.

## **Organization of report**

Part I of this report presents information on the subject merchandise, subsidy/dumping margins, and domestic like product. Part II of this report presents information on conditions of competition and other relevant economic factors. Part III presents information on the condition of the U.S. industry, including data on capacity, production, shipments, inventories, and employment. Parts IV and V present the volume of subject imports and pricing of domestic and imported products, respectively. Part VI presents information on the financial experience of U.S. producers. Part VII presents the statutory requirements and information obtained for use in the Commission's consideration of the question of threat of material injury as well as information regarding nonsubject countries.

<sup>&</sup>lt;sup>5</sup> Amended by PL 114-27 (as signed, June 29, 2015), Trade Preferences Extension Act of 2015.

#### MARKET SUMMARY

Wire rod is generally used as an intermediate product for drawing into wire. The leading U.S. producers of wire rod are Charter, Gerdau, Keystone, Nucor, and Sterling. Leading responding producers of wire rod in subject countries are Byelorussian Steel Works ("Byelorussion") of Belarus; Ferriere Nord S.p.a. ("Ferriere Nord") of Italy; POSCO of Korea; NLMK Ural of Russia; ArcelorMittal South Africa of South Africa; ArcelorMittal Espana ("ArcelorMittal Spain") and Global Steel Wire, S.A. ("Global Steel Wire") of Spain; Icdas and Iskenderun Demir ve Celik A.S. (Isdemir) ("Isdemir") of Turkey; ArelorMittal Kryvyi Rih ("ArcelorMittal Ukraine") and Yenakiieve Steel ("Yenakiieve") of Ukraine; Emirates Steel Industries PJSC ("Emirates Steel") of the United Arab Emirates; and British Steel Limited ("British Steel") of the United Kingdom. The leading U.S. importers of wire rod from subject countries in 2016 are \*\*\*. U.S. purchasers of wire rod are primarily firms that draw wire and use wire for a variety of end use products. Several U.S. producers of wire rod are related to firms that draw wire, to which they transfer wire rod.

Apparent U.S. consumption of wire rod totaled approximately 5.3 million short tons (\$2.8 billion) in 2016. Eight firms reported ongoing production of wire rod in the United States throughout 2016. U.S. producers' U.S. shipments of wire rod totaled 3.5 million short tons (\$1.8 billion) in 2016, and accounted for 66.7 percent of apparent U.S. consumption by quantity and 64.8 percent by value. U.S. imports of wire rod from subject sources totaled 701,654 short tons (\$298.2 million) in 2016 and accounted for 13.2 percent of apparent U.S. consumption by quantity and 10.5 percent by value. U.S. imports of wire rod from nonsubject sources totaled 1,070,927 short tons (\$703.2 million) in 2016 and accounted for 20.1 percent of apparent U.S. consumption by quantity and 24.7 percent by value.

### SUMMARY DATA AND DATA SOURCES<sup>6</sup>

A summary of data collected in these investigations is presented in appendix C, tables C-1 and C-2, while table C-3 presents summary data on grade 1080 and higher tire cord and tire bead wire rod. Except as noted, U.S. industry data are based on questionnaire responses of eight firms that accounted for essentially all U.S. production of wire rod in 2016. U.S. import data are based on official Commerce statistics except as noted. The Commission received questionnaire responses from 23 U.S. importers and 22 foreign producers.

#### PREVIOUS AND RELATED INVESTIGATIONS

The Commission has conducted a number of previous import relief investigations on wire rod products or similar merchandise. There are currently antidumping orders in effect covering wire rod from Brazil, China, Indonesia, Mexico, Moldova, and Trinidad and Tobago, as well as countervailing duty orders in effect covering wire rod from Brazil and China. Table I-1 presents the Commission's countervailing and antidumping duty investigations concerning wire rod since 1982.

<sup>&</sup>lt;sup>6</sup> The U.S. Department of Commerce did not postpone its preliminary or final antidumping duty determinations for its investigations on wire rod from three of the subject countries (Belarus, Russia, and the United Arab Emirates). On November 28, 2017, Commerce published its affirmative final antidumping duty determinations on wire rod from Belarus and United Arab Emirates and affirmative antidumping duty and critical circumstances determinations on wire from Russia. *Certain Carbon and Alloy Steel Wire Rod From Belarus, the Russian Federation, and the United Arab Emirates: Affirmative Final Determinations of Sales at Less Than Fair Value and Partial Affirmative Finding of Critical Circumstances,* 82 FR 56214, November 28, 2017. As of the completion of this report, all other final determinations by Commerce are pending.

<sup>&</sup>lt;sup>7</sup> ArcelorMittal USA, closed in 2015. Data for its operations during 2014 and 2015 are included in this report. Republic produced \*\*\* in 2014, \*\*\* in 2015, and \*\*\* in 2016, but did not provide usable data in either the preliminary or the final phase of these investigations. Consequently, data for Republic's operations are not included in this report.

Table I-1
Wire rod: Previous and related title VII investigations

Wire rod: Previous and related title VII investigation Original investigation			First review		Second review			
Date <sup>1</sup>	Number	Country	Outcome	Date <sup>1</sup>	Outcome	Date <sup>1</sup>	Outcome	Current status
1982	731-TA-88	Venezuela	Negative	-	-	-	-	-
1982	731-TA-113	Brazil	Affirmative	-	-	-	-	ITA revoked 9/20/85
1982	731-TA-114	Trinidad & Tobago	Affirmative	-	-	1	-	ITA revoked 12/14/87
1982	701-TA-148	Brazil	Affirmative <sup>2</sup>	-	-	-	-	Investigation terminated 8/21/85
1982	701-TA-149	Belgium	Affirmative <sup>2</sup>	-	-	-	-	Petition withdrawn11/9/82
1982	701-TA-150	France	Affirmative <sup>2</sup>	-	-	-	-	Petition withdrawn 11/9/82
1983	701-TA-209	Spain	Affirmative	-	-	-	-	ITA revoked 9/11/85
1983	731-TA-157	Argentina	Affirmative	1998	Negative	-	-	Order revoked
1983	731-TA-158	Mexico	Negative <sup>2</sup>	-	-	-	-	-
1983	731-TA-159	Poland	Negative	-	-	-	-	-
1983	731-TA-160	Spain	Affirmative	-	-	-	-	ITA revoked 9/16/85
1984	731-TA-205	E. Germany	Affirmative <sup>2</sup>	-	-	-	-	Petition withdrawn 8/1/85
1985	701-TA-243	Portugal	Negative <sup>2</sup>	-	-	-	-	-
1985	701-TA-244	Venezuela	Affirmative <sup>2</sup>	-	-	-	-	Petition withdrawn 7/24/85
1985	731-TA-256	Poland	Affirmative <sup>2</sup>	-	-	-	-	Petition withdrawn 9/10/85
1985	731-TA-257	Portugal	Affirmative <sup>2</sup>	-	-	-	-	Petition withdrawn 11/20/85
1985	731-TA-258	Venezuela	Affirmative <sup>2</sup>	-	-	-	-	Petition withdrawn 8/30/85
1992	701-TA-314	Brazil	Affirmative	1999	-	-	-	ITA revoked 11/15/99
1992	701-TA-315	France	Affirmative	1999	-	-	-	ITA revoked 11/15/99
1992	701-TA-316	Germany	Affirmative	1999	-	-	-	ITA revoked 11/15/99
1992	701-TA-317	United Kingdom	Affirmative	1999	-	-	-	ITA revoked 11/15/99
1992	731-TA-552	Brazil	Affirmative	1999	-	-	-	ITA revoked 11/15/99
1992	731-TA-553	France	Affirmative	1999	-	-	-	ITA revoked 11/15/99
1992	731-TA-554	Germany	Affirmative	1999	-	-	-	ITA revoked 11/15/99
1992	731-TA-555	United Kingdom	Affirmative	1999	-	-	-	ITA revoked 11/15/99
1992	731-TA-572	Brazil	Negative	-	-	-	-	-
1993	731-TA-646	Brazil	Negative	-	-	-	-	-
1993	731-TA-647	Canada	Affirmative <sup>2</sup>	-	-	-	-	Petition withdrawn 4/18/94
1993	731-TA-648	Japan	Negative	-	-	1	-	-
1993	731-TA-649	Trinidad & Tobago	Negative <sup>2</sup>	-	-	-	-	-
1994	701-TA-359	Germany	Negative <sup>2</sup>	-	-	-	-	-
1994	731-TA-686	Belgium	Affirmative <sup>2</sup>	-	-	-	-	Petition withdrawn 7/7/94
1994	731-TA-687	Germany	Negative <sup>2</sup>	-	-	-	-	-

Table continued on next page.

Table I-1--Continued

Wire rod: Previous and related title VII investigations

Original investigation		Firs	First review Se		nd review			
Date <sup>1</sup>	Number	Country	Outcome	Date <sup>1</sup>	Outcome	Date <sup>1</sup>	Outcome	Current status
1997	701-TA-368	Canada	Negative	-	-	-	-	-
1997	701-TA-369	Germany	Negligible <sup>3</sup>	-	-	-	-	-
1997	701-TA-370	Trinidad & Tobago	Negative	-	-	-	-	-
1997	701-TA-371	Venezuela	Negative	-	-	-	-	-
1997	731-TA-763	Canada	Negative	-	-	-	-	-
1997	731-TA-764	Germany	Negative	-	-	-	-	-
1997	731-TA-765	Trinidad & Tobago	Negative	-	-	-	-	-
1997	731-TA-766	Venezuela	Negative	-	-	-	-	-
2001	701-TA-417	Brazil	Affirmative	2007	Affirmative	2013	Affirmative	Order in effect
2001	701-TA-418	Canada	Affirmative	-	-	-	-	ITA revoked 1/23/04
2001	701-TA-419	Germany	Negative	-	-	-	-	-
2001	701-TA-420	Trinidad & Tobago	Negative <sup>4</sup>	-	-	-	-	-
2001	701-TA-421	Turkey	Negative <sup>4</sup>	-	-	-	-	-
2001	731-TA-953	Brazil	Affirmative	2007	Affirmative	2013	Affirmative	Order in effect
2001	731-TA-954	Canada	Affirmative	2007	Negative	-	-	Order revoked
2001	731-TA-955	Egypt	Negligible <sup>3</sup>	-	-	-	-	-
2001	731-TA-956	Germany	Negligible <sup>3</sup>	-	-	-	-	-
2001	731-TA-957	Indonesia	Affirmative	2007	Affirmative	2013	Affirmative	Order in effect
2001	731-TA-958	Mexico	Affirmative	2007	Affirmative	2013	Affirmative	Order in effect
2001	731-TA-959	Moldova	Affirmative	2007	Affirmative	2013	Affirmative	Order in effect
2001	731-TA-960	South Africa	Negligible <sup>3</sup>	-	-	-	-	-
2001	731-TA-961	Trinidad & Tobago	Affirmative	2007	Affirmative	2013	Affirmative	Order in effect
2001	731-TA-962	Ukraine	Affirmative	2007	Affirmative	2013	Negative	Order revoked
2001	731-TA-963	Venezuela	Negligible <sup>3</sup>	-	-	-	-	-
2005	731-TA-1099	China	Negative <sup>2</sup>	-	-	-	-	-
2005	731-TA-1100	Germany	Negative <sup>2</sup>	-	-	-	-	-
2005	731-TA-1101	Turkey	Negative <sup>2</sup>		-	-	-	-
2014	701-TA-512	China	Affirmative	-	-	-	-	Order in effect
2014	731-TA-1248	China	Affirmative	-	-	-	-	Order in effect

<sup>&</sup>lt;sup>1</sup> "Date" refers to the year in which the investigation or review was instituted by the Commission.

Source: Carbon and Certain Alloy Steel Wire Rod from Brazil, Canada, Indonesia, Mexico, Moldova, Trinidad and Tobago, and Ukraine, Investigation Nos. 701-TA-417 and 731-TA-953, 954, 957-959, 961, and 962 (Review), USITC Publication 4014, June 2008; Carbon and Certain Alloy Steel Wire Rod from China, Germany, and Turkey, Investigation Nos. 731-TA-1099-1101 (Preliminary), USITC Publication 3832, January 2006; Carbon and Certain Alloy Steel Wire Rod from Brazil, Indonesia, Mexico, Moldova, Trinidad and Tobago, and Ukraine, 78 FR 33103, June 3, 2013; and Carbon and Certain Alloy Steel Wire Rod from China, Investigation Nos. 701-TA-512 and 731-TA-1248 (Final), USITC Publication 4509, January 2015.

<sup>&</sup>lt;sup>2</sup> Preliminary determination.

<sup>&</sup>lt;sup>3</sup> The Commission determined subject imports to be negligible, and its investigation was thereby terminated.

<sup>&</sup>lt;sup>4</sup> The Department of Commerce made a negative determination.

## Safeguard investigation

In 1999, the Commission conducted a safeguard investigation under section 202 of the Trade Act of 1974 to determine whether steel wire rod was being imported into the United States in such increased quantities as to be a substantial cause of serious injury, or the threat thereof, to the domestic industry producing an article like or directly competitive with the imported article. The Commission was equally divided in its injury determination. The President considered the determination of the Commissioners voting in the affirmative and issued Proclamation 7273 imposing relief in the form of a Tariff Rate Quota ("TRQ") on imports of steel wire rod for a period of three years and one day, effective March 1, 2000.

Imports of subject products in excess of the quarterly or the annual quota amounts were assessed duties in addition to the column-1 general rates of duty in the amounts of 10 percent ad valorem in the first year of relief (in-quota quantity of 1,580,000 short tons); 7.5 percent ad valorem in the second year of relief (in-quota quantity of 1,611,600 short tons); and 5 percent ad valorem in the third year of relief (in-quota quantity of 1,643,832 short tons). The President subsequently issued Proclamation 7505 effective November 24, 2001, modifying the TRQ, by providing that the in-quota quantity of the TRQ be allocated among these four supplier country groupings: European Community; Commonwealth of Independent States; Trinidad and Tobago; and all other countries.<sup>9</sup>

<sup>&</sup>lt;sup>8</sup> Pursuant to section 311(a) of the North American Free Trade Agreement ("NAFTA") Implementation Act, the Commission made negative findings with respect to imports of wire rod from Canada and Mexico.

<sup>&</sup>lt;sup>9</sup> Carbon and Certain Alloy Steel Wire Rod from Brazil, Canada, Indonesia, Mexico, Moldova, Trinidad and Tobago, and Ukraine, Investigation Nos. 701-TA-417 and 731-TA-953, 954, 957-959, 961, and 962 (Review), USITC Publication 4014, June 2008, pp. I-11-I-12.

#### NATURE AND EXTENT OF SUBSIDIES AND SALES AT LTFV

#### **Subsidies**

On September 5, 2017, Commerce published a notice in the *Federal Register* of its preliminary determination of countervailable subsidies for producers and exporters of product from Turkey. <sup>10</sup> Commerce preliminarily determined the following programs in Turkey to be countervailable: <sup>11</sup>

- Natural Gas for Less than Adequate Remuneration
- Deductions from Taxable Income for Export Revenue
- Rediscount Program
- Minimum Wage Support

Table I-2 presents Commerce's findings of subsidization of wire rod in Turkey.

Table I-2
Wire rod: Commerce's preliminary subsidy determination with respect to imports from Turkey

Entity	Preliminary countervailable subsidy margin (percent)
Habas Sinai Ve Tibbi Gazlar Istih ("Habas")	2.27
Icdas	de minimis
All others	2.27

Source: 82 FR 41929, September 5, 2017.

On September 5, 2017, Commerce published a notice in the *Federal Register* of its preliminary determination of countervailable subsidies for producers and exporters of product from Italy.<sup>12</sup> Commerce preliminarily determined the following programs in Italy to be countervailable:<sup>13</sup>

- Exemptions from General Electricity Network Costs
- Energy Interruptibility Contracts

<sup>10</sup> Carbon and Alloy Steel Wire Rod From the Republic of Turkey: Preliminary Affirmative Countervailing Duty Determination and Preliminary Affirmative Critical Circumstances Determination, in Part, 82 FR 41929 September 5, 2017.

<sup>&</sup>lt;sup>11</sup> DOC, ITA, Decision Memorandum for the Preliminary Determination in the Countervailing Duty Investigation of Carbon and Alloy Steel Wire Rod from the Republic of Turkey, August 25, 2017.

<sup>&</sup>lt;sup>12</sup> Carbon and Alloy Steel Wire Rod From Italy: Preliminary Affirmative Countervailing Duty Determination, 82 FR 41931, September 5, 2017.

<sup>&</sup>lt;sup>13</sup> DOC, ITA, Decision Memorandum for the Preliminary Determination in the Countervailing Duty Investigation of Carbon and Alloy Steel Wire Rod from Italy, August 25, 2017.

Table I-3 presents Commerce's findings of subsidization of wire rod in Italy.

Table I-3
Wire rod: Commerce's preliminary subsidy determination with respect to imports from Italy

Entity	Preliminary countervailable subsidy margin (percent)
Ferriere Nord S.p.A. <sup>1</sup>	1.70
Ferriera Valsider S.p.A.	44.18
All others	1.70

<sup>&</sup>lt;sup>1</sup> Commerce has found the following companies to be cross-owned with Ferriere Nord: FIN FER S.p.A.; Acciaierie di Verona S.p.A.; and SIAT S.p.A.

Source: 82 FR 41931, September 5, 2017.

### Sales at LTFV

On November 28, 2017, Commerce published notices in the *Federal Register* of its final determinations of sales at LTFV with respect to imports from Belarus, Russia, and the United Arab Emirates. <sup>14</sup> Table I-4 presents Commerce's dumping margins with respect to imports of wire rod from Belarus, Russia, and the United Arab Emirates.

Table I-4
Wire rod: Commerce's final weighted-average LTFV margins with respect to imports from Belarus, Russia, and the United Arab Emirates

Entity	Final dumping margin (percent)
Belarus	
Belarus-wide entity <sup>1</sup>	280.22
Russia	
Abinsk Electric Steel Works Ltd JSC NLMK-Ural	756.93
JSC NLMK-Ural	756.93
All others	436.80
United Arab Emirat	es
Emirates Steel Industries PJSC	84.10
All others	84.10

<sup>&</sup>lt;sup>1</sup> Commerce determined that BSW, the sole mandatory respondent in this investigation, did not demonstrate that it was entitled to a separate rate. Accordingly, it considers this company to be part of the Belarus-wide entity.

Source: 82 FR 56214, November 28, 2017.

<sup>&</sup>lt;sup>14</sup> Certain Carbon and Alloy Steel Wire Rod From Belarus, the Russian Federation, and the United Arab Emirates: Affirmative Final Determinations of Sales at Less Than Fair Value and Partial Affirmative Finding of Critical Circumstances, 82 FR 56214, November 28, 2017.

On October 31, 2017, Commerce published notices in the *Federal Register* of its preliminary determinations of sales at LTFV with respect to imports from Italy, Korea, South Africa, Spain, Turkey, Ukraine, and the United Kingdom. <sup>15</sup> Table I-5 presents Commerce's dumping margins with respect to imports of wire rod from Italy, Korea, South Africa, Spain, Turkey, Ukraine, and the United Kingdom.

<sup>&</sup>lt;sup>15</sup> Carbon and Alloy Steel Wire Rod From Italy: Preliminary Affirmative Determination of Sales at Less than Fair Value, 82 FR 50381, October 31, 2017; Carbon and Alloy Steel Wire Rod From Spain: Preliminary Affirmative Determination of Sales at Less Than Fair Value and Preliminary Determination of Critical Circumstances, in Part, 82 FR 50389, October 31, 2017; Carbon and Alloy Steel Wire Rod From the Republic of Korea: Preliminary Affirmative Determination of Sales at Less Than Fair Value, and Preliminary Negative Determination of Critical Circumstances, 82 FR 50386, October 31, 2017; Carbon and Alloy Steel Wire Rod From the Republic of South Africa: Preliminary Affirmative Determination of Sales at Less Than Fair Value, Preliminary Affirmative Determination of Critical Circumstances, and Preliminary Determination of No Shipments, 82 FR 50383, October 31, 2017; Carbon and Alloy Steel Wire Rod From the United Kingdom: Preliminary Affirmative Determination of Sales at Less Than Fair Value, and Preliminary Affirmative Determination of Critical Circumstances, 82 FR 50394, October 31, 2017; Carbon and Alloy Steel Wire Rod From Turkey: Preliminary Affirmative Determination of Sales at Less Than Fair Value, and Preliminary Negative Determination of Critical Circumstances, 82 FR 50377, October 31, 2017; Carbon and Alloy Steel Wire Rod From Ukraine: Preliminary Affirmative Determination of Sales at Less Than Fair Value, 82 FR 50375, October 31, 2017; and Carbon and Alloy Steel Wire Rod From the Republic of Korea: Amended Preliminary Determination of Sales at Less Than Fair Value, 82 FR 56220, November 28, 2017.

Table I-5
Wire rod: Commerce's preliminary weighted-average LTFV margins with respect to imports from Italy, Korea, South Africa, Spain, Turkey, Ukraine, and the United Kingdom

Entity	Preliminary dumping margin (percent)
Italy	
Ferriere Nord S.p.A.	22.06
Ferriera Valsider S.p.A.	22.06
All Others	22.06
Korea	
POSCO	40.80
All others	40.80
South Africa	
ArcelorMittal South Africa Limited, Scaw South Africa (Pty) Ltd. (also known as Scaw Metals Group), and Consolidated Wire Industries	142.26
All others	135.46
Spain	
Global Steel Wire/ CELSA Atlantic SA/ Compania Espanola de Laminacion	20.25
ArcelorMittal Espana S.A	32.64
All others	20.25
Turkey	
Habas Sinai ve Tibbi Gazlar Istihsal Endustrisi A.S.	2.80
Icdas Celik Enerji Tersane ve Ulasim Sanayi A.S.	8.01
All others	5.41
Ukraine	
ArcelorMittal Steel Kryvyi Rih OJSC	44.03
Public Joint Stock Company (PJSC) Yenakiieve Steel	44.03
All others	34.98
United Kingdom	
British Steel Limited	41.96
Longs Steel UK Limited	147.63
All others	41.96

Source: 82 FR 50381, 82 FR 50389, 82 FR 50386, 82 FR 50383, 82 FR 50394, 82 FR 50377, 82 FR 50375, October 31, 2017, and 82 FR 56220, November 28, 2017 (amended for Korea).

#### THE SUBJECT MERCHANDISE

## Commerce's scope

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

The merchandise covered by these investigations are certain hot-rolled products of carbon steel and alloy steel, in coils, of approximately round cross section, less than 19.00 mm in actual solid cross-sectional diameter. Specifically excluded are steel products possessing the above-noted physical characteristics and meeting the Harmonized Tariff Schedule of the United States (HTSUS) definitions for (a) stainless steel; (b) tool steel; (c) high-nickel steel; (d) ball bearing steel; or (e) concrete reinforcing bars and rods. Also excluded are free cutting steel (also known as free machining steel) products (i.e., products that contain by weight one or more of the following elements: 0.1 percent or more of lead, 0.05 percent or more of bismuth, 0.08 percent or more of sulfur, more than 0.04 percent of phosphorous, more than 0.05 percent of selenium, or more than 0.01 percent of tellurium). All products meeting the physical description of subject merchandise that are not specifically excluded are included in this scope.

The products under investigation are currently classifiable under subheadings 7213.91.3011, 213.91.3015, 7213.91.3020, 7213.91.3093; 7213.91.4500, 7213.91.6000, 7213.99.0030, 7227.20.0030, 7227.20.0080, 7227.90.6010, 7227.90.6020, 7227.90.6030, and 7227.90.6035 of the HTSUS. Products entered under subheadings 7213.99.0090 and 7227.90.6090 of the HTSUS also may be included in this scope if they meet the physical description of subject merchandise above. Although the HTSUS subheadings are provided for convenience and customs purposes, the written description of the scope of this proceeding is dispositive. <sup>16</sup>

<sup>&</sup>lt;sup>16</sup> Certain Carbon and Alloy Steel Wire Rod From Belarus, the Russian Federation, and the United Arab Emirates: Affirmative Final Determinations of Sales at Less Than Fair Value and Partial Affirmative Finding of Critical Circumstances, 82 FR 56214, November 28, 2017.

#### Tariff treatment

Based upon the scope set forth by the Department of Commerce, information available to the Commission indicates that the merchandise subject to these investigations is currently imported under the following provisions of the 2017 Harmonized Tariff Schedule ("HTS") of the United States: 7213.91.3011, 7213.91.3015, 7213.91.3020, 7213.91.3093; 7213.91.4500, 7213.91.6000, 7213.99.0030, 7227.20.0030, 7227.20.0080, 7227.90.6010, 7227.90.6020, 7227.90.6030, and 7227.90.6035. The column-1 General duty rate for imports of wire rod under all of these provisions is "free." Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

### THE PRODUCT

# Description and applications<sup>17</sup>

Wire rod is a hot-rolled intermediate steel mill product of circular or approximately circular cross section that typically is produced in nominal fractional diameters up to 47/64 inch (18.7 mm) and sold in irregularly wound coils, primarily for subsequent drawing and finishing by wire drawers. Wire rod sold in the United States is categorized by quality/type and end use. End-use categories are broad descriptions with overlapping metallurgical qualities, chemistries, and physical characteristics. Co

Table I-6 presents quality/type and commodity descriptions for 11 major types of wire rod, as indicated by the Iron and Steel Society. Industrial or standard quality wire rod currently accounts for the majority of wire rod consumed in the United States. It is primarily intended for drawing into industrial (or standard) quality wire that, in turn, is used to manufacture such products as nails, reinforcing wire mesh, and chain link fencing. Most industrial quality wire rod is produced and sold in substantial commercial qualities with a cross-sectional diameter of 7/32 inch or 5.6 mm, although product with a smaller nominal diameter is available. Industrial quality wire rod generally is manufactured from low- or medium-low carbon steel.<sup>21</sup> Other

<sup>&</sup>lt;sup>17</sup> Except as noted, information presented in this section is drawn from *Carbon and Certain Alloy Steel Wire Rod From China, Inv. Nos. 701-TA-512 and 731-TA-1248,* USITC Publication 4509, January 2015, pp. I-15-17.

<sup>&</sup>lt;sup>18</sup> Wire drawers (also referred to as redrawers) manufacture wire and wire products and may be independent of the wire rod manufacturers or affiliated parties.

<sup>&</sup>lt;sup>19</sup> Steel chemistries are designated as "grades" of standardized composition ranges for carbon, nonferrous metals, and nonmetallic elements. See e.g., table 2-1, Standard Steels for Wire Rods and Wire Nonresulfurized Carbon Steels, Manganese Maximum Not Exceeding 1.00 Percent. Iron and Steel Society ("I&SS"), *Steel Products Manual: Carbon Steel Wire and Rods*, August 1993, p. 36.

<sup>&</sup>lt;sup>20</sup> Steel ductility, hardness, and tensile strength are positively correlated with carbon content. Alloying elements can be added at the steel melting stage of the manufacturing process to impart various characteristics to the wire rod.

<sup>&</sup>lt;sup>21</sup> I&SS. Steel Products Manual: Carbon Steel Wire and Rods. August 1993. p. 36.

relatively large-volume qualities of wire rod consumed in the United States include high- and medium-high carbon and cold-heading quality. High- and medium-high carbon wire rod are intended for drawing into wire for such products as strand, cold heading quality, upholstery springs, mechanical springs, wire rope, screens, and pre-stressed concrete wire strand.<sup>22</sup>

Table I-6
Wire rod: Quality/type, end uses, and important characteristics

Quality/type	End uses	Important characteristics
Chain quality	Electric welded chain	Butt-welding properties and uniform internal soundness
Cold-finishing quality	Cold-drawn bars	Good surface quality
Cold-heading quality	Cold-heading, cold-forging, and cold-extrusion products	Internal soundness, good surface quality, may require thermal treatments
Concrete reinforcement	Nondeformed rods for reinforcing concrete (plain round or smooth surface rounds)	Chemical composition is important only insofar as it affects mechanical property
Fine wire	Insect screen, weaving wire, florist wire	Rods must be suitable for drawing into wire sizes as small as 0.035 inch (0.889 mm) without intermediate annealing; internal quality is important
High carbon and medium- high carbon	Strand and rope, tire bead, upholstery springs, mechanical springs, screens, aluminum conductors steel reinforced core, and pre-stressed concrete strand; pipe wrap wire is a subset	Requires thermal treatment prior to drawing; however, it is not intended to be used for music wire or valve spring wire
Industrial (standard) quality	Nails, coat hangers, mesh for concrete reinforcement, fencing	Can only be drawn a limited number of times before requiring thermal treatment
Music spring wire	Springs subject to high stress; valve springs are a subset	Restrictive requirements for chemistry, cleanliness, segregation, decarburization, and surface imperfections
Scrapless nut	Fasteners produced by cold heading, cold expanding, cold punching, and thread tapping	Internal soundness and good surface quality
Tire cord	Tread reinforcement in pneumatic tires	Restrictive requirements for cleanliness, segregation, decarburization, chemistry, and surface imperfections
Welding quality	Wire for gas welding, electric arc welding, submerged arc welding, and metal inert gas welding	Restrictive requirements for uniform chemistry

Source: Iron and Steel Society, *Steel Products Manual: Carbon Steel Wire and Rods*, August 1993, pp. 35-37.

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<sup>&</sup>lt;sup>22</sup> Wire rod with characteristics specified for end use are those where the manufacturing process involve large amounts of cold deformation of the steel such as in recessed quality cold heading; those that are safety critical, such as automotive wheel bolts and tire reinforcing wire; those that have very demanding consistency requirements or unusual steel chemistry requirements, such as certain welding grades; and other applications that put unusual and demanding requirements on the steel.

# Manufacturing processes<sup>23</sup>

The manufacturing process for wire rod consists of four stages: (1) melting and refining to establish the steel's chemical and metallurgical properties; (2) casting the steel into a semifinished shape (billet); (3) hot-rolling the billet into rod; and (4) coiling and controlled cooling of the wire rod. The equipment to produce wire rod is much the same throughout the world and utilizes similar production technology.

## Melting stage

There are two primary process routes to produce the raw steel used to cast billets: the integrated process, which employs blast furnaces and basic oxygen furnaces ("BOFs"), and the nonintegrated (or "minimill") production process which utilizes an electric arc furnace ("EAF"). In both processes, pig iron, ferrous scrap, and/or direct reduced iron ("DRI") are charged into the furnace. In the United States, wire rod producers melt steel for billets from ferrous scrap in an EAF, along with other raw materials that may also be added as part of the EAF charge. Alloy agents are added to the molten steel to impart specific properties to finished steel products. The molten steel is poured or tapped from the furnace into a ladle, an open-topped, refractory-lined vessel that has an off-center opening in its bottom and is equipped with a nozzle. Meanwhile, the primary steelmaking vessel (either the EAF or BOF) may be charged with new materials to begin another refining cycle.

Molten steel typically is further treated at a ladle metallurgy or secondary steel making station, where its chemistry is refined to give the steel those properties required for specific applications. At the ladle metallurgy station, the chemical content (particularly that of carbon and sulfur) is adjusted and alloying agents may be added.<sup>26</sup> The steel may be degassed

(continued...)

<sup>&</sup>lt;sup>23</sup> Except as noted, information in this section is drawn from *Carbon and Certain Alloy Steel Wire Rod From China, Inv. Nos. 701-TA-512 and 731-TA-1248,* USITC Publication 4509, January 2015, pp. I-18-22.

<sup>&</sup>lt;sup>24</sup> Minimills use ferrous scrap as their primary raw material but may add DRI or hot-briquetted iron and/or pig iron, into the mix— which may vary over time and locations— depending on the relative costs of the raw materials, specifications for the end product, and individual furnace configurations. Minimills that produce high quality rod products, such as high carbon, cold heading quality, tire cord quality, and/or other special quality wire rod may use less ferrous scrap and more DRI than other steelmakers, however the production process in general does not change. Despite multiple attempts, ArcelorMittal's Georgetown plant was not able to successful to qualify as a producer of 1080 tire cord wire rod. AWPA's prehearing brief, p. 23.

<sup>&</sup>lt;sup>25</sup> In addition to using the EAF-produced billets, U.S. producers \*\*\*. \*\*\*.

<sup>&</sup>lt;sup>26</sup> Boron can be added as ferroboron to molten steel (in concentrations of 0.0015–0.0030 percent or 15–30 parts per million (ppm)) to increase the hardenability of the steel. However, because of boron's high reactivity with any dissolved oxygen and nitrogen in the molten steel, ferroboron is the last addition at the ladle metallurgy station, under controlled conditions, and only after the molten steel is "killed" (deoxidized or degassed). Shieldalloy Metallurgical Corp., "Boron," *Ferroalloys & Alloying Additives Online Handbook*, November 23, 2000.

(eliminating oxygen and hydrogen) at low pressures.<sup>27</sup> Ladle metallurgy stations are equipped with electric arc power both to adjust the temperature of the molten steel for optimum casting and to allow it to serve as a holding reservoir for the tundish.

Table I-7 lists known U.S. and subject producers of wire rod and the type of production activities in their facilities from publically available sources.

Table I-7
Wire rod: Type of production activity, by firm

Type of production activity	Firm
	ArcelorMittal South Africa <sup>12</sup>
	ArcelorMittal Spain <sup>3</sup>
	ArcelorMittal Ukraine <sup>4</sup>
	British Steel <sup>5</sup>
BOF steelmaking	Emirates Steel <sup>6</sup>
	Isdemir <sup>7</sup>
	NLMK <sup>8</sup>
	POSCO <sup>9</sup>
	Yenakiieve <sup>10</sup>
	ArcelorMittal Spain <sup>11</sup>
	Byelorussian Steel Works <sup>12</sup>
	Charter
	Evraz
EAF steelmaking	Gerdau
	Icdas <sup>13</sup>
	Keystone
	NMLK <sup>14</sup>
	Nucor
Hot-rolling of purchased or	***
imported slabs and billets	Ferriere Nord <sup>15</sup>

Footnotes continued on next page.

(...continued)

According to the Iron & Steel Society, fine-grained, standard killed carbon steels may include 0.0005—0.003 percent (5–30 ppm) boron to enhance the steel's hardenability. Standard boron alloy steels can also contain 0.0005–0.003 percent (5–30 ppm) boron. Iron & Steel Society, Note 4 to "Table 1 Standard Carbon Steels, Cast or Heat Chemical Ranges and Limits, Bars, Wire Rods, Blooms, Billets and Slabs" and footnote "a" to Standard Boron Alloy Steels in "Table 7 Standard Alloy Steels, Cast or Heat Chemical Ranges and Limits, Bars, Wire Rods, Blooms, Billets and Slabs," *Pocketbook of Standard Steels*, July 1996.

<sup>27</sup> Liquid steel absorbs gasses from the atmosphere and from the materials used in the steelmaking process. These gasses, chiefly oxygen and hydrogen, cause embrittlement, voids, and nonmetallic inclusions. Low pressures, such as in a vacuum, aid the removal of hydrogen and the release of oxygen in gas form without the need for additions of deoxidizers such as silicon, aluminum, or titanium, which form nonmetallic inclusions in steel. Additionally, the carbon content may be reduced more readily at low pressure (because it combines with oxygen to form carbon monoxide and is released in gaseous form), resulting in a more ductile steel.

https://arcelormittalsa.com/operations/longsteelproducts/overview.aspx.

https://arcelormittalsa.com/operations/vanderbijlparkworks/overview.aspx.

http://corporate.arcelormittal.com/sustainability/reporting-hub/country-reports/spain.

https://ukraine.arcelormittal.com/index.php?id=240.

https://www.emiratessteel.com/index.php/en/what-we-do/product-range.

https://www.isdemir.com.tr/corporate/products-and-services/products/.

Note.--Additional information on the production activities of U.S. producers are presented in table I-8.

Source: Information from foreign producers were compiled from publicly available information. Information from domestic producers are from: Yucel, Ibrahim. IBIS World Industry Report 33111. "Iron and Steel Manufacturing in the US." October 2016.

## **Casting stage**

Once molten steel with the requisite properties has been produced, it is cast into a form that can enter the rolling process. Continuous (strand) casting is the method primarily used in the United States. In strand casting, the ladle containing molten steel is transferred from the ladle metallurgy station to the caster and the molten steel is poured at a controlled rate into a refractory-lined tundish (reservoir dam), which in turn controls the rate of flow of the molten steel into the molds at the top of the caster. The tundish may have a special design or employ electromagnetic stirring to ensure homogeneity of the steel. The strand caster is designed to produce billets in the desired cross-sectional dimensions, based on the dimensions of the rod and the design of the rolling mill. Billets may be sent directly ("hot-charged") into the rolling mill or, depending upon the rolling mill's schedule, sent to a storage yard. While in storage, billets may be inspected and subjected to one or more surface conditioning operations (e.g.,

<sup>&</sup>lt;sup>1</sup> "Long Steel Products" ArcelorMittal South Africa. Accessed November 27, 2017.

<sup>&</sup>lt;sup>2</sup> "Vanderbijlpark Works Overview" ArcelorMittal South Africa. Accessed November 27, 2017.

<sup>&</sup>quot;Spain" ArcelorMittal Corporate. Accessed November 27, 2017.

<sup>&</sup>quot;Steel Production" PJSC ArcelorMittal Kryviy Rih. Accessed November 27, 2017.

<sup>&</sup>lt;sup>5</sup> "How we make steel" British Steel Ltd. Accessed November 27, 2017. http://britishsteel.co.uk/what-we-do/how-wemake-steel/.

<sup>&</sup>quot;Product Range" Emirates Steel Industries. Accessed November 27, 2017.

<sup>&</sup>quot;Products" Iskenderun Demir ve Celik A.S. Accessed November 27, 2017.

<sup>&</sup>quot;NLMK Production" NLMK Group. Accessed November 27, 2017. https://nlmk.com/en/our-business/production/rawmaterials/.

<sup>&</sup>lt;sup>9</sup> "Products / Technology – Production Process" POSCO. Accessed November 27, 2017.

http://www.posco.com/homepage/docs/eng5/jsp/product/exper/s91c5000090c.jsp?mdex=posco15.

<sup>&</sup>lt;sup>10</sup> "Yenakiieve Iron and Steel Works" PSJC Yenakiieve Steel. Accessed November 27, 2017.

https://emz.metinvestholding.com/en/about/structure.

11 "Spain" ArcelorMittal Corporate. Accessed November 27, 2017.

http://corporate.arcelormittal.com/sustainability/reporting-hub/country-reports/spain. 

12 "About BMZ" Byelorussian Steel Works OJSC, Accessed November 27, 2017.

https://eng.belsteel.com/about/about-bmz.php 13 "Production" Icdas Steel. Accessed November 27, 2017. http://www.icdas.com.tr/pages/5756/3726/f/en-US/Steel.aspx.

<sup>&</sup>lt;sup>14</sup> "NLMK Production" NLMK Group. Accessed November 27, 2017. https://nlmk.com/en/our-business/production/rawmaterials/.

<sup>&</sup>lt;sup>15</sup> "The Pompany" Ferriere Nord SPA. Accessed December 7, 2017. http://www.ferriere.pittini.it/en/company/.

grinding or turning) to prepare them for hot rolling. This preparation is more common with cold-heading quality rods intended to be made into fasteners.<sup>28</sup>

## **Rolling stage**

The rolling process determines the rod's size (diameter) and dimensional precision; depth of decarburization; surface defects and seams; amount of mill scale; structural grain size; and within limits set by the chemistry, tensile strength and other physical properties. Wire rod rolling mills employ relatively standard technology.<sup>29</sup> Final size and weight reflect such factors as billet weight and the capabilities of the wire drawer's equipment and machinery.

Modern rod rolling mills consist of five parts: a roughing mill, an intermediate mill, a pre-finishing mill, a no-twist finishing mill, and a coiler combined with a conveyor cooling bed along which the coiled rod travels prior to being collected, tied, compacted, and readied for shipment. Wire rod mills typically consist of 22 to 29 rolling stands. Metallurgical quality, temperature, and dimensional tolerance usually are inspected in-line.

Upon exiting the reheat furnace, the billet is initially reduced on a multi-strand roughing mill. It then is passed through and successively reduced in size on several more stands, a process termed intermediate rolling. After the last intermediate rolling stand, the rolling mill usually splits into dual lines and the product is passed along to a pre-finishing mill which reduces it further in diameter. Rod mills often employ a "twist" mill for primary and intermediate rolling, but the final rolling is nearly always on a no-twist Morgan vee mill (the rolls in each of approximately five stands are set at a 90-degree angle to allow the rod to be rolled without twisting). This produces a nearly uniform non-oriented grain structure in the steel.

## **Cooling stage**

After exiting the last finishing stand, the rod is coiled into concentric loops and placed on a conveyor for cooling. The specialized Stelmor conveyor deck<sup>30</sup> provides close temperature control by accelerating or retarding the rod's cooling as it is rolled and conveyed along the Stelmor deck. Controlled cooling is accomplished by water quench, forced air drafts, or by

<sup>&</sup>lt;sup>28</sup> The purpose of these surface treatments is to make the steel billet softer and more ductile (annealing); in the case of surface grinding, seam and folds are removed.

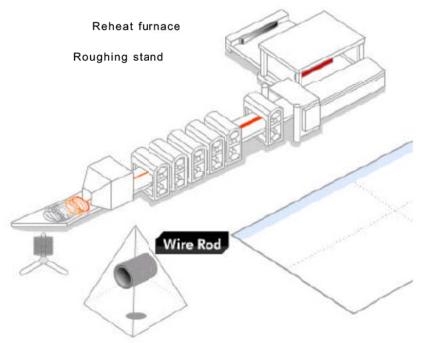
<sup>&</sup>lt;sup>29</sup> The rolling process, however, can be optimized for various quality levels. The rolling process for higher quality steel, such as for cold heading quality and other surface sensitive products, must be designed to maximize surface integrity. This is managed by the number of rolling stands used to get to a specific end diameter, the design of the reductions taken at each step, and the design of the guiding equipment used to keep the steel moving on the proper path through the mill.

<sup>&</sup>lt;sup>30</sup> The Stelmor conveyor deck allows for controlled cooling of the wire rod. The cooling speed imparts certain physical characteristics, thereby enabling producers to produce a wider range of wire rod qualities. Likewise, the Stelmor deck may be optimized for specific end products. For example, \*\*\*. Most, if not all, U.S. wire rod producers have installed controlled cooling capacities.

lowering removable hoods overtop the deck. The speed at which the rod is cooled affects the consistency and formation of its metallurgical structure (grain structure and physical properties such as tensile strength). It also affects scale buildup, which determines yield losses at the wire drawer. The cooling rate may be varied through the use of removable covers (insulating hoods which may be independently raised or lowered) over the deck or blown-air cooling, or a combination of the two, or through varying the speed of the roller table. The end user often specifies the cooling practice of the rod purchased.

At the end of the cooling deck, workers crop the ends of each rod to remove the part of the rod which may be of lower quality due to uneven temperature control; the cropped ends are also used for testing and inspection. The rod is then collected onto a carrier, transferred to a "c" hook, compacted, tied, and readied for shipment, or for further finishing or in-house fabrication. Figure I-1 illustrates the reheat through cooling stages of the wire rod production process.

Figure I-1
Wire rod: Reheat and rolling process



Source: POSCO Web site, <a href="http://www.steel-n.com/esales/general/us/catalog/wire\_rod/">http://www.steel-n.com/esales/general/us/catalog/wire\_rod/</a>, accessed April 7, 2017.

Domestic producers manufacture various types of wire rod on essentially the same equipment, in the same facilities, and with the same production personnel. While changes to production processes are limited, changes in chemical composition, alloying elements and other raw materials, stand fittings, and cooling speed determine the quality of the wire rod produced. The basic equipment, machinery, facilities, and production personnel, however, remain the same for the production of industrial quality, tire cord quality, welding quality, and cold heading quality wire rod.

#### DOMESTIC LIKE PRODUCT ISSUES

The Commission's decision regarding the appropriate domestic products that are "like" the subject imported product is based on a number of factors including: (1) physical characteristics and uses; (2) common manufacturing facilities and production employees; (3) interchangeability; (4) customer and producer perceptions; (5) channels of distribution; and (6) price. Information regarding these factors is discussed below.

The petitioners contend that the domestic like product as all wire rod, including grade 1080 tire cord tire bead wire rod, coextensive with the scope of the investigations.<sup>31</sup> Respondents American Wire Producers Association ("AWPA"), British Steel, Kiswire, and POSCO argue that grade 1080 and higher tire cord and tire bead quality wire rod is a separate domestic like product.<sup>32</sup> The Commission has previously addressed separate like product arguments in prior investigations.

In the 2015 wire rod investigations, which had the same scope as these investigations, no party argued for separate like products and the Commission defined a single domestic like product that was coextensive with the scope of the investigations.<sup>33</sup>

In the 2006 wire rod investigations, which had essentially the same scope as these investigations, German producer Saarstahl argued that tire cord quality wire rod should be considered a separate like product, and respondent Illinois Tool Works (ITW) argued that cold heading quality ("CHQ") wire rod meeting the Industrial Fasteners Institute IFI-140 and ASTM F2282-03 standards should be a separate like product. The Commission defined a single domestic like product, including tire cord quality wire rod and CHQ quality wire rod.<sup>34</sup>

In the 2002 wire rod investigations, in which the scope excluded grade 1080 tire cord and tire bead quality wire rod, the Commission considered arguments regarding certain tire cord, tire bead, CHQ, and clean-steel precision bar-in-coils wire rod each being separate domestic like products. The Commission found a single domestic like product, including the

Wire rod, Grade 1080 and higher for tire cord and bead wire production, with 0.8 percent and higher carbon content, measuring 5.0 mm or more but not more than 6.5 mm in cross-sectional diameter, low manganese content in the range of 0.25 - 0.6 percent, and having no inclusions greater than 20 microns.

Respondent British Steel's prehearing brief, p. 21; respondent Kiswire's posthearing brief, p. 2; respondent POSCO's prehearing brief, p. 1; and Kiswire's comments on draft questionnaires, June 30, 2017, p. 3.

<sup>&</sup>lt;sup>31</sup> Petitioners Gerdau, Keystone, and Charter's prehearing brief, p. 13.

<sup>&</sup>lt;sup>32</sup> British Steel, Kiswire, and POSCO provided the following definition for tire cord and tire bead wire rod they argue should be a separate like product:

<sup>&</sup>lt;sup>33</sup> Carbon and Alloys Steel Wire Rod from China, Inv. Nos 701-TA-512 and 731-TA-1248 (Final), USITC Publication 4509, January 2015, p. 6.

<sup>&</sup>lt;sup>34</sup> Carbon and Certain Alloy Steel Wire Rod from China, Germany, and Turkey, Inv. Nos 731-TA-1099-1101 (Preliminary), USITC Publication 3832, January, 2006, p. 11.

grade 1080 tire cord and grade 1080 tire bead wire rod products that Commerce excluded from the scope of the investigations.<sup>35</sup>

Table I-8 presents information on U.S. producers' reported production activity and table I-9 presents a summary of U.S. producers' and purchasers' responses on the comparability of grade 1080 and higher tire cord and tire bead wire rod and all other in-scope wire rod and appendix D provides U.S. producers' and purchasers' narrative responses to questions on the comparability of these products. <sup>36</sup>

Table I-8
Wire rod: U.S. producers' reported steel production, purchases of inputs, and grade 1080 information

\* \* \* \* \* \* \*

Table I-9
Wire rod: Comparability of grade 1080+ tire bead/tire cord and all other in-scope wire rod

		U.S. p	roducers		U.S. purchasers				
Product pair	F	M	S	N	F	M	S	N	
Physical characteristics and uses	1	5			1	1	1	4	
Interchangeability	1	1	4					7	
Manufacturing facilities and production employees	2	4			1	2	2	1	
Channels of distribution	6				2	2	2	1	
Customer and producer perceptions	2	1	3		1	2	1	4	
Price	2	4				2	3	1	

<sup>&</sup>quot;F" Fully comparable; "M" Mostly comparable; "S" Somewhat comparable; "N" Not at all comparable.

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

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<sup>&</sup>lt;sup>35</sup> Carbon and Certain Alloy Steel Wire Rod from Brazil, Canada, Germany, Indonesia, Mexico, Moldova, Trinidad and Tobago, Turkey, and Ukraine, Inv. Nos. 701-TA-417-421 and 731-TA-953, 954, 956-959, 961, and 962 (Final), USITC Publication 3546, October 2002, pp. 7-13.

<sup>&</sup>lt;sup>36</sup> According to hearing testimony, most domestic wire rod producers are not certified to produce 1080 series steel used in tire cord and other high carbon content alloys. Evraz North America is the exception and is certified to produce 1080 series steel for use in tire cord. Hearing transcript, p. 225 (Cameron). Hearing transcript, pp. 45-49 (Nystrom). Nucor is developing the capacity in its Darlington, South Carolina plant to produce 1080 series steel. Nucor's posthearing brief, pp. 12-13.

## Physical characteristics and uses

Tire cord and tire bead quality wire rod is used to manufacture tire reinforcement products. The grade 1080 and higher tire cord and tire bead quality wire rod is a high carbon wire rod, at or above 0.8 percent, to between 5.0 mm and 6.5 mm in cross-sectional diameter, and free of impurities and defects. Wey technical parameters for tire cord and tire bead include steel cleanliness, segregation, surface quality, decarburization and dimensional tolerances. Low magnesium content of 0.3 to 0.6 percent is necessary to establish sufficient ductility to produce the thin strands required for tire cord and tire bead. Grade 1080 wire rod has a tensile strength of 1,100 megapascals at 5.5 millimeters. This is 10 percent greater than 1,000 megapascals tensile strength of Grade 1070 wire rod.

Wire rod manufacturers must undergo an exacting approval process in order to sell to tire cord manufacturers. <sup>44</sup> The tire cord manufacturing process is highly demanding, converting a 5.5 mm diameter wire rod into a twisted, multi-filament cord, with wire diameters that can be less than 0.20 mm, via multiple drawing, patenting and stranding operations. <sup>45</sup> Tire bead is directly drawn, without any intermediate heat treatment operation to restore ductility, from 5.5 mm to wire dimensions approaching 1.0 mm. <sup>46</sup>

Petitioners argue that carbon content is one characteristic that demonstrates the continuum nature of the product, not a distinguishing factor. They note that other wire rod products than tire cord and tire bead quality wire rod have carbon levels at 0.8 percent or more.<sup>47</sup>

<sup>&</sup>lt;sup>37</sup> Respondent British Steel's prehearing brief, p. 23.

<sup>&</sup>lt;sup>38</sup> Respondent POSCO's postconference brief, p. 7

<sup>&</sup>lt;sup>39</sup> Respondent POSCO's postconference brief, p. 7 and respondent Kiswire's postconference brief, p. 2. Kiswire notes that the standard carbon content for tire cord and tire bead quality wire rod has changed from 0.72-0.82 percent in 2001 to 0.8 percent and above, with some tire producers requiring 0.95 and 1.0 percent carbon content. Respondent Kiswire's posthearing brief, p. 6.

<sup>&</sup>lt;sup>40</sup> Respondent POSCO's postconference brief, pp. 7-8. POSCO contends that the same stringent specifications do not typically exist for other qualities of wire rod.

<sup>&</sup>lt;sup>41</sup> Respondent British Steel's postconference brief, p. 24. British Steel argues that the levels and testing requirements for these parameters are significantly more demanding and extensive than for the commercial carbon counterparts. Cleanliness testing requires \*\*\*. Respondent British Steel's postconference brief, p. 25.

<sup>&</sup>lt;sup>42</sup> Respondent Kiswire's postconference brief, p. 4.

<sup>&</sup>lt;sup>43</sup> "Wire Rod General Characteristics," ArcelorMittal, Accessed November 1, 2017. www.arcelormittal.com.br/pdf/galeria-midia/publicacoes/book-produtos.pdf.

<sup>&</sup>lt;sup>44</sup> Respondent POSCO's postconference brief, p. 9.

<sup>&</sup>lt;sup>45</sup> Respondent British Steel's postconference brief, p. 24 and Respondent Kiswire's postconference brief, p. 3.

<sup>&</sup>lt;sup>46</sup> Respondent British Steel's postconference brief, p. 24.

<sup>&</sup>lt;sup>47</sup> Petitioners Gerdau, Keystone, and Charter's postconference brief, exhibit 1, p. 5, also noting that \*\*\*. Petitioner Nucor included \*\*\*. Petitioner Nucor's postconference brief, exhibit 1-1.

## Manufacturing facilities and production employees

In the United States, \*\*\* wire rod producers (\*\*\*) manufactured and sold tire cord and tire bead wire rod. 48 Of these \*\*\* firms, \*\*\* (\*\*\* reported producing grade 1080 and higher tire cord and tire bead wire rod. \*\*\*. 49 \*\*\*. \*\*\*. Table I-10 presents data on grade 1080 tire cord and tire bead production by firm.

#### Table I-10

Wire rod: \*\*\*'s U.S. production of grade 1080+ tire cord/tire bead, 2014-16, January-September 2016, and January-September 2017

\* \* \* \* \* \* \*

For tire cord and tire bead quality wire rod, the steelmaking process is tightly managed to control the cleanliness of the steel and to engineer the inclusion species for both bead and cord products. This is achieved through the restrictions in the use of alloy materials, <sup>51</sup> and minimization of impurities which, according to respondents, can only be sufficiently controlled for by using steel produced in a BOF. <sup>52 53</sup> Wire rod manufactured from steel produced in an EAF allegedly results in end products containing impurities. <sup>54</sup> According to respondents, the inclusion of these impurities leads to wire rod with a greater likelihood of surface cracking and a higher failure rate (breakage) because of deterioration to its drawability and mechanical descaling, attributes that are unacceptable for auto and tire manufacturers' specifications for the steel cord used in tires. <sup>55</sup>

Petitioners, however, note that the steel billets can be melted in either an EAF<sup>56</sup> or a BOF, and the wire rod producers may produce their own billets or may purchase billets from either an EAF or BOF producer.<sup>57 58</sup> Accordingly, petitioners argue, similarities and differences in production processes are more appropriately addressed starting with the wire rod rolling stage, where the processes for making grade 1080 tire cord and tire bead wire rod are largely identical

<sup>48 \*\*\*</sup> 

<sup>&</sup>lt;sup>49</sup> Comparing responses to questions II-9 and V-2 of U.S. producers' questionnaire.

<sup>&</sup>lt;sup>50</sup> \*\*\*, email message to USITC staff, November 1, 2017.

<sup>&</sup>lt;sup>51</sup> Respondent British Steel's prehearing brief, p. 25.

<sup>52 \*\*\*</sup> 

<sup>&</sup>lt;sup>53</sup> Respondent POSCO's posthearing brief, p. 22. Respondents also note that controlled casting speeds and \*\*\* are needed to produce grade 1080 and higher tire cord and tire bead quality wire rod. Respondent British Steel's postconference brief, p. 26.

<sup>&</sup>lt;sup>54</sup> Respondent POSCO's postconference brief, p. 12 and respondent Kiswire's posthearing brief, p. 4. \*\*\*. Petitioners Gerdau, Keystone, and Charter's posthearing brief, pp. 12-13.

<sup>&</sup>lt;sup>55</sup> Respondent POSCO's postconference brief, p. 12.

<sup>&</sup>lt;sup>56</sup> \*\*\*. Nucor's posthearing brief, exhibit 16, p. 16.

<sup>57</sup> **\*\*\*** 

<sup>58 \*\*\*</sup> 

to the processes for making other wire rod.  $^{59}$  Standards pertaining to grade 1080 tire cord and tire bead reportedly have not changed since 2002; however, increasing efficiency requirements and preferences for larger tires have increased demand for grade 1080 and greater tire cord and tire bead.  $^{60}$   $^{61}$   $^{62}$ 

# Interchangeability

Respondents state that grade 1080 tire cord and tire bead wire rod is not interchangeable with any standard wire rod. Tire cord and tire bead wire rod are designed to stringent specifications for the automotive sector. Standard wire rod cannot be used for the high-strength, low-weight applications for which grade 1080 tire cord and tire bead wire rod is designed and produced. Tire cord is often required to be drawn to filaments 0.15-0.3 mm requiring very clean steel, whereas it is rare for a high carbon grade to be drawn below 1.0 mm. Grade 1070 steel is used in manufacturing, machinery parts, and for reinforcing and binding automobile tires.

Respondents' further state that tire cord and tire bead quality wire rod is solely used to produce tire cord and tire bead for the automotive sector. In contrast, other wire rod can be used in a multitude of other applications.<sup>67</sup> Because of its higher carbon content, higher quality, and higher cost, it is not economically feasible to purchase tire cord or tire bead quality wire rod to use in an industrial application.<sup>68</sup>

Petitioners argue that different products positioned along the wire rod continuum are generally not interchangeable with one another because they would not meet the specification required for the end use. <sup>69</sup>

<sup>&</sup>lt;sup>59</sup> Petitioners Gerdau, Keystone, and Charter's postconference brief, exhibit 1, n. 4, p. 8.

<sup>&</sup>lt;sup>60</sup> Kiswire Posthearing brief, pp. 5-7.

<sup>&</sup>lt;sup>61</sup> Petitioners Gerdau, Keystone, and Charter's posthearing brief, pp. 11-15.

<sup>&</sup>lt;sup>62</sup> Petitioner Nucor's posthearing brief, pp. 23-24.

<sup>&</sup>lt;sup>63</sup> Respondent POSCO's posthearing brief, p. 30.

<sup>&</sup>lt;sup>64</sup> Respondent Kiswire's postconference brief, p. 5.

<sup>&</sup>lt;sup>65</sup> British Steel also notes that in the instances when tire wire manufacturers utilize "high carbon" grades for bead applications, these products have specific product applications that make them dissimilar to the industrial high carbon grades utilized in the making of such products as bedding and seating wire. Respondent British Steel's postconference brief, p. 27.

<sup>&</sup>lt;sup>66</sup> "Wire Rods," Jindal Steel, Accessed November 1, 2017.

www.jindalsteelpower.com/product broucher/wire rod mailable.pdf.

<sup>&</sup>lt;sup>67</sup> Respondent POSCO's postconference brief, p. 8.

<sup>&</sup>lt;sup>68</sup> Respondent POSCO's prehearing brief, p. 23 and respondent Kiswire's postconference brief, p. 5.

<sup>&</sup>lt;sup>69</sup> Petitioners Gerdau, Keystone, and Charter's prehearing brief, p. 10.

#### **Customer and producer perceptions**

As summarized in table I-9, three U.S. producers reported that grade 1080 and higher tire cord and tire bead wire rod and all other in-scope wire rod are fully comparable or mostly comparable, while three reported that they are somewhat comparable, and none reported that they are not at all comparable. Of the eight purchasers that provided responses to these questions, three reported that grade 1080 and higher tire cord and tire bead wire rod and all other in-scope wire rod are fully comparable or mostly comparable, one reported that they are somewhat comparable, and four reported that they are not at all comparable.

According to respondents, tire cord and tire bead wire rod producers and their downstream supply chains consider the product to be distinct from other types of wire rod. Consumers have different product specifications that require producers to employ different manufacturing process routes and controls. 70 POSCO argues that none of the petitioners actively market themselves as producing grade 1080 tire cord or tire bead quality wire rod. 71

Petitioners argue that domestic producers make a large variety of specialized wire rod products, all of which are distinctly different from one another yet appear along the same continuum of wire rod products. 72 Petitioners argue other wire rod products than grade 1080 tire cord and tire bead quality wire rod must also be produced to exacting standards.<sup>73</sup>

#### Channels of distribution

Table I-11 shows the quantity of U.S. producers' and importers' commercial U.S. shipments by channels of distribution of grade 1080 and higher tire cord and tire bead wire rod and all other types of wire rod in 2016. \*\*\* of U.S. producers' commercial U.S. shipments of grade 1080 and higher tire cord and tire bead wire rod was to end users whereas \*\*\* percent of other types of wire rod were also shipped to distributors. Importers' commercial U.S. shipments of \*\*\* grade 1080 and higher wire rod was exclusively to distributors, whereas product from \*\*\* was sold exclusively to end users.

#### Table I-11

Wire rod: Comparability of channels of distribution of grade 1080+ tire cord/tire bead wire rod, other types of wire rod, and all wire rod, 2016

<sup>&</sup>lt;sup>70</sup> Respondent British Steel's prehearing brief, p. 27.

<sup>&</sup>lt;sup>71</sup> Respondent POSCO's posthearing brief, p. 5.

<sup>&</sup>lt;sup>72</sup> Petitioners Gerdau, Keystone, and Charter'sprehearing brief, p. 7. .

<sup>&</sup>lt;sup>73</sup> Petitioners Gerdau, Keystone, and Charter'sprehearing brief, p. 12. Evraz notes that it produces wire rod that must meet demanding requirements and rigorous standards at https://www.evrazna.com/Products/WireRod/tabid/80/Default.asp, accessed April 24, 2017.

Respondents state that tire cord and tire bead quality wire rod is sold exclusively to the automotive sector, <sup>74</sup> namely producers of grade 1080 and higher tire cord and tire bead. <sup>75</sup> Respondents claimed that producers of 1080 tire wire products typically engage directly with manufacturers of wire rod whereas buyers of commodity high carbon grades will also buy from traders. Tire wire product specifications are more technically complex and subject to more formal trial and development programs (due in part to being much more quality/safety critical).<sup>76</sup> In comparison, respondents contend that standard wire rod is bought via a third party, tends to be commodity grade product, and price tends to be a more important factor. 77

Petitioners argue that all wire rod is sold overwhelmingly to end-users. They contend that all wire rod travels through similar channels of distribution. For instance, Heico's witness testified that his company purchases low carbon, high carbon, tire bead, and welding tire rod and respondent Bekaert's witness stated that one-third of his company's wire rod purchases were of tire cord and tire bead wire rod.<sup>78</sup>

#### Price

Table I-12 presents the average unit values of U.S. producers' U.S. shipments and the average unit values of U.S. importers' U.S. shipments of grade 1080 tire cord and tire bead wire rod, all other in-scope wire rod, and all wire rod. Respondents argue that tire cord and tire bead quality wire rod sell at "substantially" higher prices than do standard wire rod products. 79 POSCO stated that its tire cord wire rod is priced approximately 70 percent higher than other wire rod products. Petitioners, however, state that there is a continuum of prices for all wire rod products, with industrial grades at the low end and high-carbon, specialty grades at the high end.80

#### Table I-12

Wire rod: U.S. shipments average unit value, by type, 2014-16, January-September 2016, and January-September 2017

<sup>80</sup> Petitioners Gerdau, Keystone, and Charter's prehearing brief, p. 7.

<sup>&</sup>lt;sup>74</sup> Respondent POSCO's postconference brief, p. 10.

<sup>&</sup>lt;sup>75</sup> Respondent Kiswire's postconference brief, p. 6.

<sup>&</sup>lt;sup>76</sup> Respondent British Steel's prehearingbrief, p. 27. Tire cord and tire bead wire producers must work closely with wire rod mills in relationships that stretch over years. Respondent Kiswire's postconference

<sup>&</sup>lt;sup>77</sup> Respondent British Steel's prehearing brief, p. 27.

<sup>&</sup>lt;sup>78</sup> Petitioners Gerdau, Keystone, and Charter's postconference brief, exhibit 1, p. 7.

<sup>&</sup>lt;sup>79</sup> Respondent British Steel's prehearing brief, p. 28.

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

#### **U.S. MARKET CHARACTERISTICS**

Wire rod is a hot-rolled intermediate steel product used in downstream drawn-wire products destined for the construction, automotive, energy, and agriculture industries. These industries account for the vast majority of U.S. demand for wire rod. Most U.S. producers and importers sell wire rod to wire drawers, for use in an array of downstream wire products. U.S. producers also internally consume wire rod and/or transfer wire rod to related firms. In 2016, internally consumed wire rod accounted for \*\*\* percent of U.S. producers' total shipments and transfers to related firms accounted for \*\*\* percent.

Apparent U.S. consumption of wire rod decreased during 2014-16. Overall, apparent U.S. consumption in 2016 was 2.3 percent lower than in 2014 for the total market and 4.2 percent lower for the merchant market.

#### **U.S. PURCHASERS**

The Commission received 43 usable questionnaire responses from firms that have purchased wire rod since January 2014. Thirty-six responding purchasers are end users, two are distributors, four are trading companies, and two are manufacturers. In general, responding U.S. purchasers were located in the Southeast, Midwest, and Pacific Coast. The largest responding purchasers of wire rod are \*\*\*.

#### **CHANNELS OF DISTRIBUTION**

U.S. producers sold mainly to end users, while importers overall sold to both distributors and end users, varying by subject country, as shown in table II-1. The vast majority of imports from Italy, South Africa, United Arab Emirates, and the United Kingdom were sold to distributors. The vast majority of imports from Russia, Spain, and Ukraine were sold to end users.

#### Table II-1

Wire rod: U.S. producers' and importers' U.S. commercial shipments, by sources and channels of distribution, 2014-16, January to September 2016, and January to September 2017

\* \* \* \* \* \* \*

<sup>1</sup> Of the 43 responding purchasers, 40 purchased the domestic wire rod, 36 purchased imports of the subject merchandise from subject sources, and 30 purchased imports of wire rod from other sources.

<sup>&</sup>lt;sup>2</sup> Five purchasers reported being related to a U.S. producer (\*\*\*) and three purchasers reported being related to a nonsubject foreign producer (\*\*\*). One purchaser, \*\*\*, reported being related to a U.S. importer of wire rod, and three purchasers, \*\*\*, reported being related to a nonsubject exporter of wire rod.

#### **GEOGRAPHIC DISTRIBUTION**

U.S. producers and importers reported selling wire rod to all regions in the contiguous United States, with a greater number of importers selling in the Midwest, Southeast, and Central Southwest (table II-2). For U.S. producers, 16.6 percent of sales were within 100 miles of their production facility, 72.5 percent were between 101 and 1,000 miles, and 10.9 percent were over 1,000 miles. Importers sold 56.9 percent within 100 miles of their U.S. point of shipment, 36.5 percent between 101 and 1,000 miles, and 6.6 percent over 1,000 miles.

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

Region	U.S. producers	Importers
Northeast	6	7
Midwest	7	11
Southeast	7	14
Central Southwest	6	11
Mountain	5	3
Pacific Coast	6	2
Other <sup>1</sup>	2	-
All regions (except Other)	4	2
Reporting firms	8	15

<sup>&</sup>lt;sup>1</sup> All other U.S. markets, including AK, HI, PR, and VI.

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

## **SUPPLY AND DEMAND CONSIDERATIONS**

U.S. supply

## **Domestic production**

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

#### **Industry capacity**

Domestic capacity utilization increased slightly from 75.6 percent in 2014 to 76.6 percent in 2016, with production and capacity decreasing 3.7 percent and 4.9 percent, respectively, between 2014 and 2016. This relatively moderate level of capacity utilization suggests that U.S. producers may have some ability to increase production of wire rod in response to an increase in prices.

#### Alternative markets

U.S. producers' exports accounted for a very small share (\*\*\* percent) of their total shipments during 2014-16. These export levels indicate that U.S. producers have a limited ability to shift shipments between the U.S. market and other markets in response to price changes.

#### **Inventory levels**

U.S. producers' inventories remained largely unchanged between 2014 and 2016. Relative to total shipments, U.S. producers' inventory levels marginally increased from \*\*\* percent in 2014 to \*\*\* percent in 2016. These inventory levels suggest that U.S. producers may have some ability to respond to changes in demand with changes in the quantity shipped from inventories.

#### **Production alternatives**

Five of eight responding U.S. producers stated that they could switch production from wire rod to other products. Other products that producers reportedly can produce on the same equipment as wire rod are rebar, round bar, and mechanical bar.

# Subject imports from subject countries<sup>3</sup>

Table II-3 provides a summary of the supply of wire rod from reporting subject countries; additional data are provided in Part VII. The Commission received no responses to its final phase questionnaire from UAE producers or exporters of wire rod, and as such, the information provided below is based on information obtained during the preliminary phase of the investigation. Reported production capacity in Belarus, Italy<sup>4</sup>, and Russia increased, production capacity in Korea, Spain, Turkey, Ukraine, and the United Kingdom declined, and production capacity stayed constant in South Africa and the United Arab Emirates. Reported capacity utilization increased for five of the subject countries (Korea, South Africa, Turkey, Ukraine, and the United Arab Emirates) and declined for five (Belarus, Italy, Spain, Russia, and the United Kingdom). Industries in all reporting subject countries had capacity utilization rates of more than \*\*\* percent in 2016, except for Russia and the Ukraine, who had rates between \*\*\* and \*\*\* percent. The industries in Italy, Korea, Turkey, the United Arab Emirates, and the United Kingdom had capacity utilization rates of more than \*\*\* percent.

\_

<sup>&</sup>lt;sup>3</sup> For data on the number of responding foreign firms and their share of U.S. imports from each of the subject countries, please refer to Part I, "Summary Data and Data Sources."

<sup>&</sup>lt;sup>4</sup> Production capacity increased from first quarter 2016 to third quarter 2017 based on data provided by \*\*\*.

The industry in South Africa reported inventory-to-total shipment ratios of \*\*\* percent in 2014 and \*\*\* percent in 2016, while the industries in all other subject countries reported smaller inventories-to-total shipments ratios (\*\*\* percent). In 2016, foreign producers' home market shipments accounted for more than \*\*\* percent of their total shipments for all subject countries except Ukraine (\*\*\*), the United Arab Emirates (\*\*\*), and the United Kingdom (\*\*\*), while exports to third-country markets accounted for more than \*\*\* percent of their total shipments for Ukraine, the United Arab Emirates, and the United Kingdom. Producers in Belarus, Italy, Russia, South Africa, Spain, Tukey, Ukraine, and the United Kingdom reported the ability to shift production to alternative products. Main identified products included rebar, hotrolled round steel bars, and free-cutting steel.

#### Table II-3

Wire rod: Foreign industry factors that affect ability to increase shipments to the U.S. market

\* \* \* \* \* \* \*

# **Nonsubject imports**

Nonsubject imports accounted for 60.4 percent of total U.S. imports in 2016. The largest source of nonsubject imports during 2016 was Canada, accounting for 51.6 of nonsubject imports and 31.2 percent of all U.S. imports in 2016.

## **Supply constraints**

No U.S. producers and the vast majority (18 of 21) of responding importers reported no supply constraints between 2014-16. \*\*\* reported late shipments due to internal production issues, and \*\*\* stated that its ability to fulfill orders depends on timing, size of order, and its current available production capacity. Nucor stated that although a mill may have the capacity to fulfill orders, unforeseen time constraints can occur during fulfillment. While some U.S. producers are vertically integrated and internally consume wire rod for their own downstream products, Keystone contends that if the firm's mill were to experience a supply disruption, it would fulfill its external orders before supplying its external needs. Thirteen of 43 responding purchasers reported supply constraints in the wire rod market. \*\*\* reported late shipments and over-booking by Gerdau since 2014, while \*\*\* stated that Gerdau declined to sell total requested tons of wire rod. \*\*\* all pointed to the lack of a domestic supplier of 1080 grade or above tire cord quality rod as a significant supply constraint.

<sup>7</sup> Hearing transcript, p. 121 (Armstrong).

<sup>&</sup>lt;sup>5</sup> Ratios declined from 2014 to 2016 for \*\*\*.

<sup>&</sup>lt;sup>6</sup> Hearing transcript, p. 124 (Nystrom).

#### U.S. demand

Based on available information, the overall demand for wire rod is likely to experience moderate changes in response to changes in price. The main contributing factors are the lack of substitute products and the moderate-to-large cost share of wire rod in most of its immediate end-use products.

#### End uses and cost share

U.S. demand for wire rod depends on the demand for U.S.-produced downstream products. Reported end uses include cold headed parts, cold finished bar, industrial wire, wire mesh, tire bead, staples and nails, floor grating, display racks, shelving, reinforced concrete construction, tire cord, and tire bead. U.S. producers were also asked to list separately the end uses for the wire rod they consumed internally and/or transferred to related firms. \*\*\* reported consuming and/or transferring cold rolled shapes.

Given the wide variety of end uses for wire rod, U.S. producers, importers, and purchasers reported a wide range of cost shares. Although the cost shares were relatively large, they varied depending on the end-use products:

- \*\*\* percent for cold headed parts
- \*\*\* percent for cold finished bar
- \*\*\* percent for display racks
- \*\*\* percent for wire mesh
- \*\*\* percent for drawn wire
- \*\*\* percent for chain link fences
- \*\*\* percent for nails

Eleven of 40 purchasers reported an increase in demand for their end-use products incorporating wire rod, 16 reported a fluctuation in demand for end-use products, 8 reported a decrease in demand for their end-use products, and 5 reported no change in demand for end-use products since 2014. Thirty-one of 39 responding purchasers stated that changes in the demand for end-use products have changed their demand for wire rod.

# **Business cycles**

Seven of 8 U.S. producers, 9 of 22 importers, and 22 of 43 purchasers indicated that the market was subject to business cycles or conditions of competition. Of the 7 producers, 7 importers, and 18 that specifically reported the presence of business cycles, most identified shifts in construction market demand due to changes in weather. Purchaser \*\*\* pointed to the decline in housing construction in parts of the United States that get snow during the winter, and \*\*\* reported lower availability of scrap during January through March.

Four U.S. producers, four importers, and 14 purchasers reported wire rod being subject to distinct conditions of competition. Most responding U.S. producers and purchasers pointed towards the surge in imports to the United States due to a global overcapacity of wire rod.

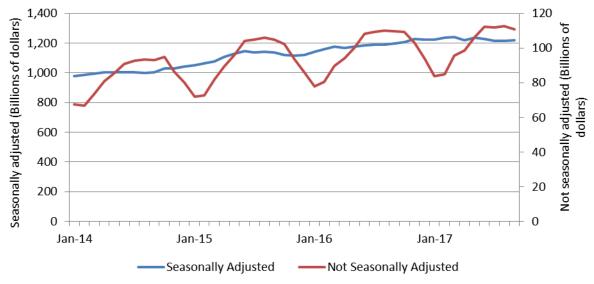
Most importers pointed to increased demand in the automotive industry, along with increased commercial and private miles driven. Importer \*\*\* stated, "\*\*\*."

#### **Demand trends**

U.S. demand for wire rod is driven primarily by the construction and automotive markets. In general, demand for tire cord and tire bead is driven by advances and changes in the automotive industry, while demand for industrial grade products is driven by the construction industry.<sup>8</sup>

Between January 2014 and September 2017, overall construction spending increased. The total value of construction put in place (seasonally adjusted) increased by 24.8 percent between January 2014 and September 2017 (figure II-1).<sup>9</sup>

Figure II-1
Construction spending: Total value of construction put in place in the United States, not seasonally adjusted and seasonally adjusted annual rate, monthly, January 2014-September 2017



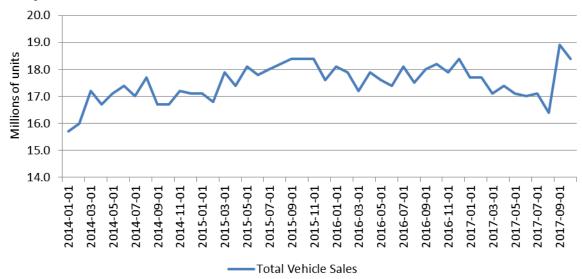
Source: U.S. Census Bureau, retrieved November 2, 2017.

Between January 2014 and October 2017, the total monthly number of vehicles sold in the United States increased. The monthly total vehicle sales (seasonally adjusted) increased by 17.2 percent between January 2014 and October 2017 (figure II-2).

<sup>&</sup>lt;sup>8</sup> Conference transcript, pp. 104-105 (Cameron, Stauffer); \*\*\*'s postconference brief, exhibit 1, p. 10.

<sup>&</sup>lt;sup>9</sup> The total value of construction put in place (not seasonally adjusted) increased by 64.6 percent during the same period. From September 2014 to September 2017, the total value of construction put in place (seasonally adjusted) increased by 21.4 percent.

Figure II-2 Vehicle sales: Total vehicle sales, millions of units, seasonally adjusted annual rate, monthly, January 2014-October 2017



Source: St. Louis FRED, retrieved December 1, 2017.

Most U.S. producers (6 of 8) reported that overall U.S. demand for wire rod had decreased since January 2014 (table II-4). A plurality of importers (8 firms) reported that U.S. demand had increased since 2014, while 6 reported that demand had fluctuated, 3 reported no change, and 2 reported that it had decreased. A plurality of purchasers (12 firms) reported that U.S. demand had increased since 2014, while 10 reported that demand had decreased, 8 reported a fluctuation in demand, and 4 reported no change.

A vast majority of producers reported that demand had decreased outside the United States since 2014, while a plurality of importers reported a fluctuation in demand and a plurality of purchasers reported an increase in demand outside the United States.

Table II-4
Wire rod: Firms' responses regarding U.S. demand and demand outside the United States

Item	Increase	No change	Decrease	Fluctuate
Demand in the United States				
U.S. producers		1	6	1
Importers	8	3	2	6
Purchasers	12	4	10	8
Demand outside the United States				
U.S. producers			5	1
Importers	5		4	9
Purchasers	9	3	5	6

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

## **Substitute products**

The vast majority of producers (6 of 7), all importers, and the vast majority of purchasers (40 of 42) reported that there were no substitutes for wire rod. Those reporting

substitutes identified rebar and wood in construction uses, galvanized wire in fencing products, and drawn wire depending on country source and specific product.

## **SUBSTITUTABILITY ISSUES**

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

#### **Lead times**

Wire rod is primarily produced-to-order. U.S. producers reported that \*\*\* percent of their commercial shipments were produced-to-order, with lead times averaging 28 days. The remaining \*\*\* percent of their commercial shipments came from U.S. inventories, with lead times averaging 5 days. U.S. importers reported that \*\*\* percent of their commercial shipments were produced-to-order, with lead times averaging 101 days. <sup>10</sup> The remaining \*\*\* percent of their commercial shipments came from U.S. inventories with lead times averaging 32 days, and \*\*\* percent their commercial shipments came from foreign inventories with lead times averaging 100 days.

## **Knowledge of country sources**

Thirty-eight purchasers indicated they had marketing/pricing knowledge of domestic product, 9 of Belarusian product, 12 of Italian product, 22 of Korean product, 12 of Russian product, 14 of South African product, 15 of Spanish product, 25 of Turkish product, 17 of Ukrainian product, 9 of Emirati product, 14 of U.K. product, 15 of Canadian product, and 30 of product from other countries.

As shown in table II-5, most purchasers always or usually make purchasing decisions based on the producer, while their customers sometimes or never make purchasing decisions based on the producer. Purchasers pointed to concerns about quality as a reason for purchasing from specific producers. Most purchasers and their customers sometimes or never make purchasing decisions based on country of origin. Of the three purchasers that reported that their customers always make decisions based on the manufacturer, \*\*\* cited that mills must be pre-approved and \*\*\* cited producers' focus on quality.

<sup>&</sup>lt;sup>10</sup> Lead times for produced-to-order shipments typically ranged from 90 to 120 days.

Table II-5
Wire rod: Purchasing decisions based on producer and country of origin

Purchaser/customer decision	Always	Usually	Sometimes	Never
Purchaser makes decision based on producer	13	9	9	11
Purchaser's customers make decision based on producer	3	6	11	18
Purchaser makes decision based on country	7	5	15	16
Purchaser's customers make decision based on country	1	4	15	18

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

## **Factors affecting purchasing decisions**

The most often cited top three factors firms consider in their purchasing decisions for wire rod were price and quality (40 firms each) and availability/supply (20 firms) as shown in table II-6. Quality was the most frequently cited first-most important factor (cited by 22 firms), followed by price (13 firms); quality was the most frequently reported second-most important factor (16 firms), followed by price (13 firms); and availability was the most frequently reported third-most important factor (15 firms), followed by price (14 firms). \*\*\*, a purchaser of tire cord, cited "high quality BOF material for fine drawing applications" as its top factor and stated such material is not available from any domestic supplier. \*\*\* reported the production specifications of grade 1080 and above tire cord as their second—most important purchasing factor.

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

Factor	First	Second	Third	Total
Price / Cost	13	13	14	40
Quality	22	16	2	40
Availability / Supply	1	4	15	20
Traditional Supplier / Relationship	2	3	2	7
Specifications / Grades	2	1	1	4
Other <sup>1</sup>	3	4	7	14

<sup>&</sup>lt;sup>1</sup> Other factors include delivery methods and distance, credit and payment terms, and legal terms.

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

The majority of purchasers (22 of 43) reported that they "usually" purchase the lowest-priced product. When asked if they purchased wire rod from one source although a comparable product was available at a lower price from another source, 30 purchasers reported reasons including country of origin preference, quality, delivery and lead times, "Buy American," and length of testing and approval of mill.

Purchasers noted that there is a difference between the price of wire and the cost to the firm of using wire rod in drawing operations. Many factors affect the cost of wire rod, including scale weight, mill trimming practices, coil size, surface quality, physical properties, and mechanical properties, and all of these factors vary based on producer. <sup>11</sup> Respondents stated

<sup>&</sup>lt;sup>11</sup> Hearing transcript, p. 155 (Moffitt).

that imported wire rod can be damaged due to transport and poor packaging, which causes breaks and slows down the drawing process. This leads to fewer pounds of rod being drawn per hour which increases the end users' costs. <sup>12</sup> Heico stated that due to the larger consignments (5 to 30,000 tons) of imported product and the comingling of different heats, it increases the cost to purchasers because the wire rod must be carried into inventory and sorted internally, taking up time and resources. <sup>13</sup>

# Importance of specified purchase factors

Purchasers were asked to rate the importance on a scale of 1 to 5, with 5 being very important and 1 being not at all important, of 16 factors in their purchasing decisions (table II-7). The factors rated as very important ("5") by more than half of responding purchasers were quality meets industry standards (34 firms), meets firms qualification requirement (33 firms), price (32 firms), availability (31 firms), product consistency (31 firms), and reliability of supply (26 firms).

Table II-7
Wire rod: Importance of purchase factors, as reported by U.S. purchasers, by factor

·		Ratii	ng of import	ance	
	1—not important	2	3	4	5—very important
Factor		Numb	er of firms (	count)	
Availability		1	1	10	31
Delivery terms	2	7	12	11	11
Delivery time		2	14	9	18
Discounts offered	10	4	13	7	9
Extension of credit	8	5	9	11	10
Meets my firm's					
qualification requirement	1		1		33
Minimum quantity					
requirements	11	7	14	6	5
Packaging	3	7	14	9	10
Price	1		4	6	32
Product consistency		1	1	10	31
Product range	8	8	12	8	7
Quality meets industry					
standards	1		3	5	34
Quality exceeds industry					
standards	7	5	9	7	15
Reliability of supply		3	3	11	26
Technical					
support/service	4	7	14	10	8
U.S. transportation costs	4	4	11	8	16

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

<sup>&</sup>lt;sup>12</sup> Hearing transcript, pp. 155-156 (Moffitt).

<sup>&</sup>lt;sup>13</sup> Hearing transcript, p. 156 (Moffitt).

## **Supplier certification**

Thirty-three of 43 responding purchasers require their suppliers to become certified or qualified to sell wire rod to their firm. Purchasers reported that the time to qualify a new supplier ranged from 30 to 180 days. \*\*\*, a purchaser of tire cord, reported that it typically takes \*\*\* for a new tire cord and tire bead supplier to be approved due to "\*\*\*". \*\*\* stated it can take up to two years to approve supplier of tire cord and tire bead due to repeated testing in \*\*\* and multiple trials required by tire maker. Fourteen purchasers reported that both domestic and foreign suppliers, including Charter, Nucor, Gerdau, Keystone, British Steel, and Arcelor Spain, had failed in their attempt to qualify wire rod, or had lost their approved status since 2014.

## Changes in purchasing patterns

Purchasers were asked about changes in their purchasing patterns from different sources since 2014 (table II-8); reasons reported for changes in sourcing included changes in pricing, introduction of duties on Chinese wire rod, and subject countries withdrawing from the U.S. market after the filing of the preliminary investigations. Twenty-five of 43 responding purchasers reported that they had changed suppliers since January 1, 2014. Specifically, firms dropped or reduced purchases from Georgetown Steel, Republic Steel, and POSCO because of mill closures, quality concerns, and supply issues. Firms added or increased purchases from Oklahoma Steel, Tata, and Saarstahl, because of new mills, higher domestic prices, and new specifications. Firms also reported changes in purchasing patterns driven by mill consolidation. Seventeen of 41 purchasers identified new suppliers since January 2014, most commonly Steel Resources and new Nucor mills.

Table II-8
Wire rod: Changes in purchase patterns from U.S., subject, and nonsubject countries

Source of purchases	Did not purchase	Decreased	Increased	Constant	Fluctuated
United States	1	11	8	10	11
Belarus	23		5	1	3
Italy	25	1	4		2
Korea	17	6	2	1	8
Russia	20		7		4
South Africa	22	1	3		5
Spain	18	1	3	1	7
Turkey	12	7	4	2	8
Ukraine	19	1	7		4
United Arab Emirates	24	1	4		2
United Kingdom	23	3	2	1	2
Canada	22	3	5	1	2
All other countries	9	9	6	2	11

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

## Importance of purchasing domestic product

Forty-one of 43 purchasers reported that purchasing U.S.-produced product was not an important purchasing factor. Twenty-three reported that domestic product was required by law (for 1 to 68 percent of their purchases), 14 reported it was required by their customers (for 1 to 71 percent of their purchases), and 5 reported other preferences for domestic product. Reasons cited for preferring domestic product included: customer requirements and sales to federal agencies. Insteel stated that due to concrete construction applications that are regulated under Buy American, it must purchaser domestic wire rod. 14

# Comparisons of domestic products, subject imports, and nonsubject imports

Purchasers were asked a number of questions comparing wire rod produced in the United States, subject countries, and nonsubject countries. First, purchasers were asked for a country-by-country comparison on the same 16 factors for which they were asked to rate the importance (see table II-9 for U.S. vs subject country comparisons and appendix G for subject country and nonsubject country comparisons).

Most purchasers consistently reported that U.S. and subject-country wire rod were comparable or that U.S. wire rod was superior on every factor except for price. <sup>15</sup> The majority of purchasers reported that subject-country wire rod was at least comparable to domestically produced wire rod on the key purchase factors that were considered very important (quality meets industry standards, availability, product consistency, and reliability of supply).

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<sup>&</sup>lt;sup>14</sup> Hearing transcript, p. 184 (Stauffer).

<sup>&</sup>lt;sup>15</sup> Purchasers also reported U.S.-produced wire rod being inferior to Italian product on extension of credit and meeting firm's qualification requirements. Purchasers reported U.S.-produced wire rod being inferior to Korean product on product consistency, quality meeting industry standards, and quality exceeding industry standards.

Table II-9
Wire rod: Purchasers' comparisons between U.S.-produced and imported product

		ed Sta		Unite	d State	s vs.		ted Sta	
	vs.	Belaru	ıs		Italy			s. Kore	a
Factor	S	С	ı	S	С	ı	S	С	I
Availability	5	2	-	4	3	2	14	3	2
Delivery terms	4	2	1	2	3	2	7	8	3
Delivery time	6	1		8	1		16	1	2
Discounts offered	3	4	-	3	2	2	7	6	3
Extension of credit	3	3	1	3	1	3	7	6	5
Meets my firm's qualification requirement	3	2	2	1	3	4	3	9	6
Minimum quantity requirements	5	1	1	2	5	1	9	5	4
Packaging	5	1	1	2	6	1	6	7	6
Price <sup>1</sup>	1	2	4	3	3	3	5	10	5
Product consistency	4	3		3	5	1	3	7	9
Product range	5	1	1	4	1	3	5	6	5
Quality meets industry standards	4	2	1	2	5	2	2	8	9
Quality exceeds industry standards	4	1	2	1	5	2	3	7	8
Reliability of supply	5	1	1	7	1	1	11	3	5
Technical support/service	6	1	-	5	1	2	12	3	3
U.S. transportation costs <sup>1</sup>	2	2	3	4	1	3	8	3	5
	Unit	ed Sta	tes		d State		Uni	ted Sta	ites
		. Russi	а		uth Afr	ica		s. Spai	n
Factor	S	С	ı	S	С	ı	S	С	ı
Availability	7	3	1	7		1	6	4	2
Delivery terms	5	2	3	2	3	2	2	8	1
Delivery time	9	2		7	1		10	1	1
Discounts offered	4	2	2	4	2	1	4	5	1
Extension of credit	4	2	4	3	2	2	3	6	2
Meets my firm's qualification requirement	3	4	2	3	3	2	2	6	3
Minimum quantity requirements	7	3	1	3	4		4	5	2
Packaging	8	2	1	2	4	2	1	7	4
Price <sup>1</sup>	1	4	6	3	5		1	5	6
Product consistency	6	3	2	2	5	1	1	8	3
		1	2	5		1	4	2	5
Product range	6								_
Quality meets industry standards	6	3	2	2	5	1	1	9	2
Quality meets industry standards Quality exceeds industry standards	6 5	3	3	2	4	1 2	3	5	4
Quality meets industry standards Quality exceeds industry standards Reliability of supply	6 5 7	3 1 3	2	2 6	4 2		3 6	5 4	4
Quality meets industry standards Quality exceeds industry standards	6 5	3	3	2	4	2	3	5	4

Table continued.

Table II-9--Continued

Wire rod: Purchasers' comparisons between U.S.-produced and imported product

wire rod: Purchasers comparisons betwe	Unit vs.	ed Stat . Turke	es	Unite U	d State Jkraine	es vs.	Uni vs. L E	ted Sta Jnited A mirate	Arab
Factor	S	С	I	S	С	ı	S	С	ı
Availability	13	6	3	8	4		4		2
Delivery terms	11	7	2	4	3	4	2	2	1
Delivery time	17	3	2	9	2	1	4	1	1
Discounts offered	9	6	2	6	3	1	2	2	
Extension of credit	7	7	4	4	4	3	2	2	
Meets my firm's qualification requirement	7	8	3	5	3	3	1	2	1
Minimum quantity requirements	10	8	1	6	4	2	1	4	
Packaging	10	8	2	7	3	2	2	3	
Price <sup>1</sup>	4	6	11	2	5	5		5	1
Product consistency	12	6	2	9	2	1	3	1	1
Product range	11	5	2	7	2	1	2	2	
Quality meets industry standards	11	7	3	8	2	2	4	1	1
Quality exceeds industry standards	7	8	3	7	2	2	2	1	1
Reliability of supply	12	5	4	7	5		4	1	1
Technical support/service	15	2	1	9	1	1	4		
U.S. transportation costs <sup>1</sup>	8	3	7	4	3	5	2	1	2
	Unit	ed Stat	es				Uni	ted Sta	ites
	vs	. Unite	d	Unite	d State	s vs.	vs.	. All oth	ner
	Ki	ngdom	1	(	Canada	1		sources	3
Factor	S	С	ı	S	С	I	S	С	ı
Availability	6	3	2	4	4	4	10	2	7
Delivery terms	3	6	4		_				1
		-	1	4	7	1	5	10	
Delivery time	6	5		6	4	1 2	5 14	2	2
Delivery time Discounts offered	3	5 5		6	4 8	2	_	2 8	2
Discounts offered Extension of credit	3 2	5 5 7	1	6	4 8 6	1 2	14 5 4	2 8 8	2 2 4
Discounts offered	3	5 5	 1	6	4 8	2 1 2 3	14 5	2 8	2
Discounts offered Extension of credit	3 2	5 5 7	1	6 2 3	4 8 6	1 2	14 5 4	2 8 8	2 2 4
Discounts offered Extension of credit Meets my firm's qualification requirement	3 2 2	5 5 7 6	1 1 2 1 3	6 2 3 1	4 8 6 8	2 1 2 3 3 2	14 5 4 4	2 8 8 6 8	2 2 4 6 4 4
Discounts offered Extension of credit Meets my firm's qualification requirement Minimum quantity requirements	3 2 2 4	5 5 7 6 5	1 1 2 1	6 2 3 1 4	4 8 6 8 5	2 1 2 3 3	14 5 4 4 5	2 8 8 6 8	2 2 4 6 4
Discounts offered Extension of credit Meets my firm's qualification requirement Minimum quantity requirements Packaging	3 2 2 4 2	5 5 7 6 5	1 1 2 1 3	6 2 3 1 4	8 6 8 5 10	2 1 2 3 3 2	14 5 4 4 5 6	2 8 8 6 8	2 2 4 6 4 4
Discounts offered Extension of credit Meets my firm's qualification requirement Minimum quantity requirements Packaging Price <sup>1</sup>	3 2 2 4 2  2 4	5 5 7 6 5 6 7	1 1 2 1 3 4 3	6 2 3 1 4 	4 8 6 8 5 10 4	2 1 2 3 3 2 2 1 3	14 5 4 4 5 6 7	2 8 8 6 8 8 7 5	2 2 4 6 4 4 5 6 7
Discounts offered Extension of credit Meets my firm's qualification requirement Minimum quantity requirements Packaging Price Product consistency	3 2 2 4 2  2	5 5 7 6 5 6 7 6	1 1 2 1 3 4	6 2 3 1 4  6	4 8 6 8 5 10 4 10	2 1 2 3 3 2 2	14 5 4 4 5 6 7	2 8 8 6 8 8 7 5	2 4 6 4 4 5 6 7
Discounts offered Extension of credit Meets my firm's qualification requirement Minimum quantity requirements Packaging Price <sup>1</sup> Product consistency Product range	3 2 2 4 2  2 4	5 5 7 6 5 6 7 6 3	1 1 2 1 3 4 3	6 2 3 1 4  6 1 2	4 8 6 8 5 10 4 10	2 1 2 3 3 2 2 1 3	14 5 4 4 5 6 7 7	2 8 8 6 8 8 7 5	2 2 4 6 4 4 5 6 7
Discounts offered Extension of credit Meets my firm's qualification requirement Minimum quantity requirements Packaging Price <sup>1</sup> Product consistency Product range Quality meets industry standards	3 2 2 4 2  2 4 2	5 5 7 6 5 6 7 6 3 6	1 1 2 1 3 4 3 4	6 2 3 1 4  6 1 2	4 8 6 8 5 10 4 10 7	2 1 2 3 3 3 2 2 1 3 3	14 5 4 4 5 6 7 7 6 5	2 8 8 6 8 8 7 5 5	2 4 6 4 4 5 6 7
Discounts offered Extension of credit Meets my firm's qualification requirement Minimum quantity requirements Packaging Price Product consistency Product range Quality meets industry standards Quality exceeds industry standards	3 2 2 4 2  2 4 2 3	5 5 7 6 5 6 7 6 3 6 5	1 1 2 1 3 4 3 4 3	6 2 3 1 4  6 1 2	4 8 6 8 5 10 4 10 7 9	2 1 2 3 3 2 2 1 3 3 2 2 2 2 2	14 5 4 4 5 6 7 7 6 5	2 8 8 6 8 8 7 5 5 7	2 2 4 6 4 4 5 6 7 7

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.-- Purchasers were asked to rate individual countries on each factor on of 1 to 5 scale, with a rating of 5 indicating that wire rod produced in that country rates very well and 1 indicating that wire rod produced in that country does not rate very well for that factor. For each country pair, if the first listed country's rating was higher than the second country's rating, the first listed country's product was considered superior. If both countries had the same rating, the products were considered comparable. If the first listed country's rating was lower than the second country's rating, the first county's product was considered inferior.

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

# Comparison of U.S.-produced and imported wire rod

In order to determine whether U.S.-produced wire rod can generally be used in the same applications as imports from subject countries. U.S. producers, importers, and purchasers were asked whether the products can always, frequently, sometimes, or never be used interchangeably. As shown in table II-10a and II-10b, almost all U.S. producers stated that domestically wire rod is "always" interchangeable with product from subject countries, while importers and purchasers generally reported that U.S.-produced wire rod is "frequently" interchangeable with that from subject countries.

Table II-10a
Wire rod: Interchangeability between wire rod produced in the United States and in subject countries, by country pair

Country pair		Number of U.S. producers reporting				Number of U.S. importers reporting				Number of purchasers reporting			
	Α	F	S	N	Α	F	S	N	Α	F	S	N	
U.S. vs. subject countries: United States vs. Belarus	6	1			1	4	2		4	5	3	1	
United States vs. Italy	6	1			1	3	2	1	5	6	3	1	
United States vs. Korea	6	1			1	4	1	2	11	8	5	1	
United States vs. Russia	6	1			3	3	1	1	4	7	4		
United States vs. South Africa	6	1			1	4	1		5	9		1	
United States vs. Spain	6	1			1	3	2	1	3	8	3	1	
United States vs. Turkey	6	1			1	4	2	1	8	13	6		
United States vs. Ukraine	6	1			3	3	1		6	9	3	1	
United States vs. UAE	6	1				3	2		4	7	1		
United States vs. UK	6	1			1	3	4		8	3	4	1	

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

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

Table II-10b Wire rod: Interchangeability between wire rod produced in subject countries, by country pair

Country pair	Number of U.S. producers reporting				Number of U.S. importers reporting				Number of purchasers reporting			
	Α	F	S	N	Α	F	S	N	Α	F	S	N
Subject country comparisons:						•						
Belarus. vs. Italy	6	1	0	0	0	1	2	0	4	2	2	
Belarus vs. Korea	6	1	0	0	1	1	1	0	4	1	2	1
Belarus vs. Russia	6	1	0	0	1	2	2	1	4	2	3	
Belarus vs. South Africa	6	1	0	0	0	1	2	0	3	1	1	2
Belarus vs. Spain	6	1	0	0	0	1	3	0	2	1	2	1
Belarus vs. Turkey	6	1	0	0	0	3	2	0	3	4	4	
Belarus vs. Ukraine	6	1	0	0	1	2	2	1	4	3	3	
Belarus vs. UAE	6	1	0	0	0	1	2	0	3	2	1	
Belarus vs. Uk	6	1	0	0	0	2	2	0	4	1	1	2
Italy vs. Korea	6	1	0	0	0	1	2	0	5	5	2	
Italy vs. Russia	6	1	0	0	2	1	1	0	4	4	3	
Italy vs. South Africa	6	1	0	0	0	1	2	0	3	5	2	1
Italy vs. Spain	6	1	0	0	0	1	3	0	4	3		1
Italy vs. Turkey	6	1	0	0	1	2	1	0	3	6	3	1
Italy vs. Ukraine	6	1	0	0	1	1	2	0	3	6	2	
Italy vs. UAE	6	1	0	0	0	1	2	1	3	4	1	1
Italy vs. UK	6	1	0	0	0	2	3	0	6	2		1
Korea vs. Russia	6	1	0	0	1	1	2	0	3	3	4	
Korea vs. South Africa	6	1	0	0	0	3	0	0	3	5	5	
Korea vs. Spain	6	1	0	0	0	2	2	0	2	5	4	
Korea vs. Turkey	6	1	0	0	0	2	2	0	3	7	4	1
Korea vs. Ukraine	6	1	0	0	0	2	2	0	2	6	4	1
Korea vs. UAE	6	1	0	0	0	1	2	0	3	3	2	
Korea vs. UK	6	1	0	0	1	3	1	0	4	5	4	
Russia vs. South Africa	6	1	0	0	1	1	2	0	3	3	1	2
Russia vs. Spain	6	1	0	0	1	1	3	0	2	2	4	1
Russia vs. Turkey	6	1	0	0	2	3	1	0	3	5	5	1
Russia vs. Ukraine	6	1	0	0	2	2	2	0	4	5	4	
Russia vs. UAE	6	1	0	0	1	1	1	1	3	3	1	
Russia vs. UK	6	1	0	0	1	2	2	0	4	1	2	1
South Africa vs. Spain	6	1	0	0	0	1	3	0	2	5	2	
South Africa vs. Turkey	6	1	0	0	0	2	2	0	4	5	2	1
South Africa vs. Ukraine	6	1	0	0	0	2	2	0	2	5	3	1
South Africa vs. UAE	6	1	0	0	0	1	2	0	3	3	1	
South Africa vs. UK	6	1	0	0	0	2	2	0	3	3	2	1

Table continued on next page.

Table II-10b--Continued

Wire rod: Interchangeability between wire rod produced in subject countries, by country pair

Country pair	Number of U.S. producers reporting				Number of U.S. importers reporting				Number of purchasers reporting			
	Α	F	S	N	Α	F	S	N	Α	F	S	N
Subject country comparisons:												
Spain vs. Turkey	6	1	0	0	0	2	2	0	3	5	2	1
Spain vs. Ukraine	6	1	0	0	0	2	2	0	3	4		2
Spain vs. UAE	6	1	0	0	0	1	2	0	3	2		
Spain vs. UK	6	1	0	0	0	3	2	0	4	4	2	1
Turkey vs. Ukraine	6	1	0	0	0	3	2	0	3	8	5	
Turkey vs. UAE	0	1	0	0	0	1	1	1	3	4	3	
Turkey vs. UK	6	1	0	0	0	2	2	0	3	3	5	1
Ukraine vs. UAE	6	1	0	0	0	1	2	0	2	4	4	
Ukraine vs. UK	6	1	0	0	0	2	2	0	5	2	3	1
UAE vs. UK	6	1	0	0	0	2	2	0	4	2	1	

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

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

As can be seen from table II-11, 13 responding purchasers reported that domestically produced product always met minimum quality specifications and 21 reported that U.S.-produced wire rod usually met minimum quality specifications. A plurality of responding purchasers indicated that subject country wire rod usually met minimum quality specifications, except for Korea and the United Kingdom, for which many purchasers reported that the products always met minimum quality standards.

Table II-11
Wire rod: Ability to meet minimum quality specifications, by source<sup>1</sup>

Source	Always	Usually	Sometimes	Rarely or never
United States	13	21	4	3
Belarus	2	5	2	1
Italy	3	7		
Korea	10	10	1	
Russia	3	5	2	2
South Africa	2	9	2	
Spain	5	9	2	
Turkey	7	15	4	
Ukraine	2	7	5	3
United Arab Emirates	3	7		
United Kingdom	6	6	1	
Canada	7	6	1	
Other	9	8	4	

<sup>&</sup>lt;sup>1</sup> Purchasers were asked how often domestically produced or imported Wire rod meets minimum quality specifications for their own or their customers' uses.

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

In addition, producers, importers, and purchasers were asked to assess how often differences other than price were significant in sales of wire rod from the United States, subject, or nonsubject countries. As seen in table II-12, U.S. producers reported the significance of non-price differences as "never" being a factor, while most importers reported that non-price factors are "frequently" or "sometimes" a significant difference. The majority of purchasers stated that non-price differences are either "sometimes" or "never" significant factors. Some non-price factors indicated by responding firms included barge freight vs. truck freight, availability of different size rod, and EAF vs. BOF mills.

Table II-12
Wire rod: Significance of differences other than price between wire rod produced in the United States and in other countries, by country pair

Country pair	Number of U.S. producers reporting				Number of U.S. importers reporting				Number of purchasers reporting			
	Α	F	S	N	Α	F	S	N	Α	F	S	N
U.S. vs. subject countries: United States vs. Belarus				7	1	1	1	2	4	1	6	4
United States vs. Italy			-	7	1	1	1	2	4		6	4
United States vs. Korea				7	2	2	1	2	5	3	8	5
United States vs. Russia				7		3		2	4		7	4
United States vs. South Africa				7		1	1	2	3		7	6
United States vs. Spain				7	1	2		2	2	2	7	5
United States vs. Turkey				7		4	2	2	5	2	12	6
United States vs. Ukraine				7		1	1	2	6	1	6	5
United States vs. UAE				7		1	1	1	4		4	4
United States vs. UK				7	1	1	1	2	3	1	5	6

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

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

## **ELASTICITY ESTIMATES**

This section discusses elasticity estimates; no parties have commented on these estimates.

# U.S. supply elasticity

The domestic supply elasticity <sup>16</sup> for wire rod measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price of wire rod. The elasticity of domestic supply depends on several factors including the level of excess capacity, the ease with which producers can alter capacity, producers' ability to shift to production of other products, the existence of inventories, and the availability of alternate markets for U.S.-produced wire rod. Analysis of these factors above indicates that the U.S. industry has the ability to somewhat increase or decrease shipments to the U.S. market; an estimate in the range of 2 to 4 is suggested.

 $<sup>^{\</sup>rm 16}$  A supply function is not defined in the case of a non-competitive market.

# U.S. demand elasticity

The U.S. demand elasticity for wire rod measures the sensitivity of the overall quantity demanded to a change in the U.S. market price of wire rod. This estimate depends on factors discussed above such as the existence, availability, and commercial viability of substitute products, as well as the component share of the wire rod in the production of any downstream products. Based on the available information, the aggregate demand for wire rod is likely to be moderately inelastic; a range of -0.5 to -0.75 is suggested.

## **Substitution elasticity**

The elasticity of substitution depends upon the extent of product differentiation between the domestic and imported products.<sup>17</sup> Product differentiation, in turn, depends upon such factors as quality (e.g., chemistry, appearance, etc.) and conditions of sale (e.g., availability, sales terms/ discounts/ promotions, etc.). Based on available information, the elasticity of substitution between U.S.-produced wire rod and imported wire rod is likely to be in the range of 3 to 5.

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<sup>&</sup>lt;sup>17</sup> The substitution elasticity measures the responsiveness of the relative U.S. consumption levels of the subject imports and the domestic like products to changes in their relative prices. This reflects how easily purchasers switch from the U.S. product to the subject products (or vice versa) when prices change.

# PART III: U.S. PRODUCERS' PRODUCTION, SHIPMENTS, AND EMPLOYMENT

The Commission analyzes a number of factors in making injury determinations (see 19 U.S.C. §§ 1677(7)(B) and 1677(7)(C)). Information on the subsidies and/or dumping margins was presented in *Part I* of this report and information on the volume and pricing of imports of the subject merchandise is presented in *Part IV* and *Part V*. Information on the other factors specified is presented in this section and/or *Part VI* and (except as noted) is based on the questionnaire responses of nine firms that accounted for virtually all U.S. production of wire rod in 2016.

#### **U.S. PRODUCERS**

The Commission issued a U.S. producer questionnaire to ten firms based on information contained in the petition. Nine firms provided usable data on their productive operations. <sup>1</sup> Table III-1 lists U.S. producers of wire rod, their production locations, positions on the petition, and shares of total production.

<sup>&</sup>lt;sup>1</sup> Republic Steel provided an unusable questionnaire response for the preliminary phase of these investigations and did not provide any response for the final phase. Its 2016 wire rod production data are referenced in footnote 7 of table III-1, but no other data for its operations are included elsewhere in this report. Republic's \*\*\*.

<sup>\*\*\*.\*\*\*.</sup> 

Table III-1 Wire rod: U.S. producers of wire rod, their positions on the petition, production locations, and shares of reported production, 2016

Firm	Position on petition	Production location(s)	Share of production (percent)	Share of 1080+ tire cord/bead production (percent)
ArcelorMittal <sup>1</sup>	***	Georgetown, SC	***	***
Cascade <sup>2</sup>	***	McMinnville, OR City of Industry, CA	***	***
Charter <sup>3</sup>	Petitioner	Saukville, WI Cuyahoga Heights, OH Fostoria, OH	***	***
Evraz <sup>4</sup>	***	Pueblo, Colorado	***	***
Gerdau <sup>5</sup>	Petitioner	Baldwin, FL West Vidor, TX	***	***
Keystone <sup>6</sup>	Petitioner	Peoria, IL	***	***
Mid American	***	Madill, OK	***	***
Nucor	Petitioner	Charlotte, NC Wallingford, CT Norfolk, NE Kingman, AZ Darlington, SC	***	***
Republic <sup>7</sup>	***	Lorain, OH	***	***
Sterling <sup>8</sup>	***	Sterling, IL	***	***
Total	•	•	***	***

<sup>&</sup>lt;sup>1</sup> ArcelorMittal ceased production of wire rod in August 2015 when it closed its operations in Georgetown, South Carolina. ArcelorMittal is \*\*\*.

<sup>2</sup> Cascade is \*\*\*.

<sup>3</sup> Charter is \*\*\*.

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

Formation is 4 Evraz is \*\*\*.

Gerdau is \*\*\*.

Keystone is \*\*\*.

<sup>&</sup>lt;sup>7</sup> Republic \*\*\*. It reported during the preliminary phase producing \*\*\* short tons of wire rod in 2016, accounting for \*\*\* percent of U.S. production. Republic is \*\*\*.

<sup>&</sup>lt;sup>8</sup> Sterling is \*\*\*.

No U.S. producer directly imports the subject merchandise and none purchase the subject merchandise from U.S. importers. However, as indicated in the notes to table III-1, and discussed in greater detail below, \*\*\*, through its parent company \*\*\*, is related to foreign producers of the subject merchandise and to a U.S. importer of subject merchandise, \*\*\*.

Table III-2 presents industry-wide changes for wire rod and table III-3 presents U.S. producers' reported changes in operations since January 1, 2014.

Table III-2
Wire rod: Important industry events since January 1, 2014

Date			
Year	Month	Company / Item	Action
2014	July	Revocation of AD order on wire rod from Ukraine	Following the Commission's negative determination on imports of wire rod from Ukraine, Commerce revoked the antidumping order on imports of wire rod from Ukraine (79 FR 38009, effective date July 30, 2013).
2014	September	Keystone	Modernized its wire-rod mill in Bartonville, Indiana. Specifically, Keystone collaborated with Siemens to upgrade the cooling conveyor at the Bartonville plant. The improvements allow the mill to produce wire rod at new steel grades, with higher tensile strength, and with more uniform quality. <sup>1</sup>
2015	January	Issuance of AD, CVD orders on wire rod China	Commerce issued antidumping and countervailing duty orders on imports of wire rod from China (80 FR 1015 and 80 FR 1018).
2015	April	ArcelorMittal	Idled production at the long product facility in Indiana Harbor, Indiana. <sup>2</sup>
2015	August	ArcelorMittal	Closed the wire rod plant in Georgetown, South Carolina.3
2015	December	Keystone	Expanded and upgraded production operations at its Sherman, Texas plant. The expansion included adding a manufacturing line for welded wire reinforcement mesh. <sup>4</sup>
2016	March	Evraz	Temporarily idled production at its Pueblo, Colorado mill. Reportedly, the idling of the steel mill was due to market factors and low commodity prices. <sup>5</sup>
2016	August	Keystone	Acquired Strand-Tech Martin, Inc. (STM) of Summerville, South Carolina. STM produces PC strand and industrial wire for the construction industry. <sup>6</sup>
2017	April	Liberty House Group	Liberty House announced a preliminary deal to purchase the Georgetown, South Carolina wire rod mill from ArcelorMittal. The agreement is still pending.
2017	May	Gerdau	Sold the former Gerdau wire rod manufacturing facility at Perth Amboy, New Jersey. The plant, idled since June 2009, is set for demolition. The site will be redeveloped into a new industrial park. <sup>8</sup>
2017	August	Nucor	Acquired St. Louis Cold Drawn, Incorporated. St. Louis Cold Drawn, Inc. is a manufacturer of cold drawn products (including wire rod) and special sections that serve the U.S. and Mexican automotive and industrial sectors. St. Louis Cold Drawn Inc. has production facilities in St. Louis, Missouri and Monterrey, Mexico.

Footnotes continued on next page.

https://www.siemens.com/press/en/pressrelease/?press=/en/pressrelease/2014/industry/metals-technologies/imt201409700.htm&content\*\*\*=IMT&content\*\*\*=PDMT.

2 "Indiana Harbor" ArcelorMittal USA. Accessed April 24, 2017. http://usa.arcelormittal.com/our-

nttp://www.postandcourier.com/business/struggiinggeorgetownsteeimiiitosnutdownarceiormittaibiamesuni airly/article\_ee488a73baba5b12a90ff57fe08db5dc.html

<sup>4</sup> "Keystone Consolidated Industries to Expand and Upgrade," Keystone consolidated Industries, Inc., December 12, 2015. Accessed November 27, 2017. <a href="http://www.kci-corp.com/category/news/">http://www.kci-corp.com/category/news/</a>.

<sup>6</sup> "Strand-Tech Martin, Inc. Joins the Keystone Consolidated Family," Keystone Consolidated Industries, Inc., August 5, 2016. Accessed November 27, 2017. http://www.kci-corp.com/category/news/.

http://www.reuters.com/article/uslibertyhousemaarcelormittaidUSKBN17N1E9.

Source: Compiled from publically available sources cited above.

#### Table III-3

Wire rod: U.S. producers' reported changes in operations, since January 1, 2014

\* \* \* \* \* \* \*

# U.S. PRODUCTION, CAPACITY, AND CAPACITY UTILIZATION

Table III-4 and figure III-1 present U.S. producers' production, capacity, and capacity utilization. Total annual capacity to produce wire rod in the United States decreased by 4.9 percent from 2014 to 2016. The decrease in capacity is largely due to ArcelorMittal shuttering its Georgetown, South Carolina plant in August 2015, which more than offset the increase in capacity experienced by \*\*\*. U.S. producers' capacity in January-September 2017 was 0.3 percent lower than in January-September 2016. The decrease is attributable to \*\*\*. \*\*\* was the \*\*\* firm to report an increase in capacity from 2014 to 2016.

U.S. producers' production of wire rod was 3.7 percent lower in 2016 compared to 2014. \*\*\* U.S. producers had lower production volumes in 2016 compared to 2014; \*\*\* experienced collectively a decrease in production of \*\*\* short tons. \*\*\* U.S. producers (\*\*\*) reported greater production volumes in 2016 compared to 2014. Combined, their production increased by \*\*\* short tons from 2014 to 2016. Wire rod production in January-September 2017 was 5.1 percent greater than in January-September 2016.

After decreasing by 0.4 percentage points from 2014 to 2015, capacity utilization increased by 1.4 percentage points from 2015 to 2016 resulting in an overall increase in

<sup>&</sup>lt;sup>1</sup> "Siemens modernizes cooling conveyor of wire-rod mill at Keystone." Siemens AG, September 23, 2014. Accessed November 27, 2017.

 <sup>&</sup>quot;Indiana Harbor" ArcelorMittal USA. Accessed April 24, 2017. <a href="http://usa.arcelormittal.com/our-operations/steelmaking/indiana-harbor">http://usa.arcelormittal.com/our-operations/steelmaking/indiana-harbor</a>.
 "Struggling Georgetown steel mill to shut down ArcelorMittal blames 'unfairly traded' imports; 226 jobs

<sup>&</sup>lt;sup>3</sup> "Struggling Georgetown steel mill to shut down ArcelorMittal blames 'unfairly traded' imports; 226 jobs affected" Post and Courier, May 13, 2015. Accessed April 21, 2017. http://www.postandcourier.com/business/strugglinggeorgetownsteelmilltoshutdownarcelormittalblamesunf

<sup>&</sup>lt;sup>5</sup> Paul, Jesse. "Evraz to temporarily idle about 450 workers at Pueblo steel mill." *The Denver Post*, March 17, 2016. Accessed November 27, 2017. <a href="http://www.denverpost.com/2016/03/17/evraz-to-temporarily-idle-about-450-workers-at-pueblo-steel-mill/">http://www.denverpost.com/2016/03/17/evraz-to-temporarily-idle-about-450-workers-at-pueblo-steel-mill/</a>.

<sup>&</sup>lt;sup>7</sup> Shabalala, Zandi. "Liberty House to buy ArcelorMittal's U.S. Georgetown steel plant" *Reuters*, April 21, 2017. Accessed April 21, 2017.

<sup>&</sup>lt;sup>8</sup> Haydon, Tom. "Perth Amboy steel plant shuts after 30 years." *NJ.com*, June 14, 2009. Accessed November 28, 2017. <a href="http://www.nj.com/news/index.ssf/2009/06/perth\_amboy\_steel\_plant\_shuts.html">http://www.nj.com/news/index.ssf/2009/06/perth\_amboy\_steel\_plant\_shuts.html</a>. "Nucor to Acquire Cold Finish Facilities in Missouri and New Mexico." *PR Newswire*, August 10, 2017. Accessed November 27, 2017. <a href="https://www.prnewswire.com/news-releases/nucor-to-acquire-cold-finish-facilities-in-missouri-and-mexico-300502198.html">https://www.prnewswire.com/news-releases/nucor-to-acquire-cold-finish-facilities-in-missouri-and-mexico-300502198.html</a>.

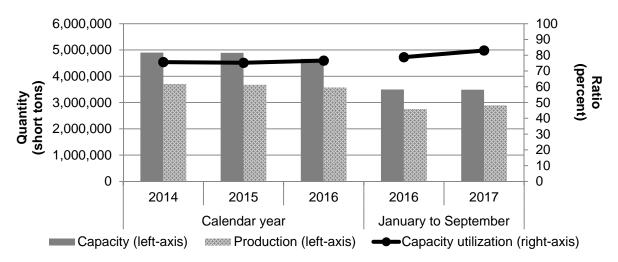
capacity utilization of 0.9 percentage points from 2014 to 2016. \*\*\*. U.S. producers' capacity utilization was 4.2 percentage points higher in January-September 2017 compared to January-September 2016.

Table III-4 Wire rod: U.S. producers' production, capacity, and capacity utilization, 2014-16, January-September 2016, and January-September 2017

		Calendar year	January to September		
ltem	2014	2015	2016	2016	2017
	Capacity (short tons)				
ArcelorMittal	***	***	***	***	***
Cascade	***	***	***	***	***
Charter	***	***	***	***	***
Evraz	***	***	***	***	***
Gerdau	***	***	***	***	***
Keystone	***	***	***	***	***
Mid American	***	***	***	***	***
Nucor	***	***	***	***	***
Sterling	***	***	***	***	***
Total capacity	4,900,953	4,889,826	4,661,502	3,497,913	3,488,453
		Pro	duction (short t	ons)	
ArcelorMittal	***	***	***	***	***
Cascade	***	***	***	***	***
Charter	***	***	***	***	***
Evraz	***	***	***	***	***
Gerdau	***	***	***	***	***
Keystone	***	***	***	***	***
Mid American	***	***	***	***	***
Nucor	***	***	***	***	***
Sterling	***	***	***	***	***
Total capacity	3,707,416	3,677,468	3,570,360	2,754,756	2,895,305
	Capacity utilization (percent)				
ArcelorMittal	***	***	***	***	***
Cascade	***	***	***	***	***
Charter	***	***	***	***	***
Evraz	***	***	***	***	***
Gerdau	***	***	***	***	***
Keystone	***	***	***	***	***
Mid American	***	***	***	***	***
Nucor	***	***	***	***	***
Sterling	***	***	***	***	***
Average capacity utilization	75.6	75.2	76.6	78.8	83.0

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

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



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

## **Alternative products**

Seven U.S. producers reported producing products other than wire rod on the same equipment and machinery used to make wire rod. As shown in table III-5, during 2014-16, wire rod increased as a share of total production, rising from 60.2 percent to 62.9 percent of U.S. producers' production on the shared equipment. Combined, rebar and other bar products accounted for the bulk of the non-wire production made on the shared equipment.

Table III-5
Wire rod: U.S. producers' overall plant capacity and production on the same equipment as subject production, 2014-16, January-September 2016, and January-September 2017

	C	alendar year	January to September		
Item	2014	2015	2016	2016	2017
	<u> </u>	Qua	ntity (short to	ns)	
Overall capacity	7,868,140	7,629,548	7,431,588	5,570,586	5,608,086
Production: Wire rod	3,707,416	3,677,468	3,570,360	2,754,756	2,895,305
Rebar	***	***	***	***	***
Round	***	***	***	***	***
Merchant bar	***	***	***	***	***
Other products	***	***	***	***	***
Out-of-scope production	2,451,982	2,254,116	2,108,017	1,678,152	1,776,720
Total production on same machinery	6,159,398	5,931,584	5,678,377	4,432,908	4,672,025
	Ratios and shares (percent)				
Overall capacity utilization	78.3	77.7	76.4	79.6	83.3
Share of production: Wire rod	60.2	62.0	62.9	62.1	62.0
Rebar	***	***	***	***	***
Round	***	***	***	***	***
Merchant bar	***	***	***	***	***
Other products	***	***	***	***	***
Out-of-scope production	39.8	38.0	37.1	37.9	38.0
Total production on same machinery	100.0	100.0	100.0	100.0	100.0

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

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

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

Table III-6 presents U.S. producers' U.S. shipments, export shipments, and total shipments. U.S. producers' U.S. shipments accounted for nearly all shipments throughout the period for which data were collected. Based on quantity, commercial U.S. shipments accounted for the largest share of U.S. producers' U.S. shipments, but internal consumption and transfers combined accounted for no less than 27.7 percent of the quantity of U.S. producers' total shipments and 26.1 percent of their value. U.S. producers' commercial U.S. shipments decreased by 6.0 percent from 2014 to 2016, while their average unit values decreased by 26.1 percent. The quantity of U.S. producers' commercial U.S. shipments was 6.5 percent higher in January-September 2017 compared to January-September 2016 and their unit values were 14.1 percent higher. The quantity of U.S. producers' internal consumption increased by \*\*\* percent from 2014 to 2016, whereas its unit values decreased by \*\*\* percent. Likewise, the quantity of transfers to related firms increased by \*\*\* percent from 2014 to 2016, while their unit values decreased by \*\*\* percent. The quantity of U.S. producers' internal consumption was lower in

January-September 2017 compared to January-September 2016, whereas U.S. producers' transfers were steady. Unit values of internal consumption and transfers, like commercial U.S. shipments, were higher in interim 2017 compared to interim 2016.

Table III-6 Wire rod: U.S. producers' U.S. shipments, export shipments, and total shipments, 2014-16, January-September 2016, and January-September 2017

		Calendar year	January to September			
Item	2014	2015	2016	2016	2017	
	Quantity (short tons)					
Commercial U.S. shipments	2,627,360	2,591,398	2,469,373	1,876,485	1,998,927	
Internal consumption	***	***	***	***	***	
Transfers to related firms	***	***	***	***	***	
U.S. shipments	3,646,855	3,641,848	3,548,500	2,736,246	2,850,026	
Export shipments	***	***	***	***	***	
Total shipments	***	***	***	***	***	
		Valu	ue (1,000 dolla	ırs)		
Commercial U.S. shipments	1,879,014	1,511,743	1,305,724	996,876	1,211,628	
Internal consumption	***	***	***	***	***	
Transfers to related firms	***	***	***	***	***	
U.S. shipments	2,550,478	2,072,047	1,840,882	1,425,334	1,693,781	
Export shipments	***	***	***	***	***	
Total shipments	***	***	***	***	***	
	Unit value (dollars per short ton)					
Commercial U.S. shipments	715	583	529	531	606	
Internal consumption	***	***	***	***	***	
Transfers to related firms	***	***	***	***	***	
U.S. shipments	699	569	519	521	594	
Export shipments	***	***	***	***	***	
Total shipments	***	***	***	***	***	
		Share o	of quantity (pe	ercent)		
Commercial U.S. shipments	***	***	***	***	***	
Internal consumption	***	***	***	***	***	
Transfers to related firms	***	***	***	***	***	
U.S. shipments	***	***	***	***	***	
Export shipments	***	***	***	***	***	
Total shipments	100.0	100.0	100.0	100.0	100.0	
		Share	cent)			
Commercial U.S. shipments	***	***	***	***	***	
Internal consumption	***	***	***	***	***	
Transfers to related firms	***	***	***	***	***	
U.S. shipments	***	***	***	***	***	
Export shipments	***	***	***	***	***	
Total shipments	100.0	100.0	100.0	100.0	100.0	

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

#### CAPTIVE CONSUMPTION

Section 771(7)(C)(iv) of the Act states that-2

If domestic producers internally transfer significant production of the domestic like product for the production of a downstream article and sell significant production of the domestic like product in the merchant market, and the Commission finds that—

- (I) the domestic like product produced that is internally transferred for processing into that downstream article does not enter the merchant market for the domestic like product,
- (II) the domestic like product is the predominant material input in the production of that downstream article, and

then the Commission, in determining market share and the factors affecting financial performance . . ., shall focus primarily on the merchant market for the domestic like product.

### **Transfers and sales**

As reported in table III-6 above, in any full year, internal consumption accounted for between \*\*\* and \*\*\* percent of U.S. producers' U.S. shipments of wire rod and transfers to related firms accounted for between \*\*\* and \*\*\* percent of U.S. producers' U.S. shipments of wire rod. U.S. producers \*\*\* reported internal consumption of wire rod, with \*\*\*. \*\*\* U.S. producers, \*\*\*, reported transferring wire rod to related firms in 2016 (\*\*\*). \*\*\*. \*\*\* firms reporting transfers in 2016 priced such transfers based on market value or a market index, and \*\*\* relinquished marketing rights. 4

<sup>&</sup>lt;sup>2</sup> Amended by PL 114-27 (as signed, June 29, 2015), Trade Preferences Extension Act of 2015.

<sup>3</sup> \*\*\*.

<sup>&</sup>lt;sup>4</sup> Below is a summary of individual producers' reported practices with respect to transfers to related firms.

<sup>• \*\*\*</sup> 

<sup>• \*\*\*</sup> 

<sup>• \*\*\*</sup> 

<sup>• \*\*\*</sup> 

<sup>• \*\*\*</sup> 

<sup>\*\*\*.</sup> 

## First statutory criterion in captive consumption

The first requirement for application of the captive consumption provision is that the domestic like product that is internally transferred for processing into that downstream article not enter the merchant market for the domestic like product. U.S. producers reported internal consumption of wire rod. \*\*\* reported its internally consumed wire rod is used for the production of \*\*\* and \*\*\* reported that its internally consumed wire rod is used for the production of \*\*\*. \*\*\* reported that \*\*\* of its \*\*\* short tons of internally consumed wire rod is \*\*\*. No U.S. producer reported directing wire rod that was to be internally consumed to the merchant market.<sup>5</sup>

## Second statutory criterion in captive consumption

The second criterion of the captive consumption provision concerns whether the domestic like product is the predominant material input in the production of the downstream article that is captively produced. With respect to the downstream articles resulting from captive production, wire rod reportedly comprises the majority of the finished cost of a number of end-use products: cold rolled shapes, industrial wire, welded wire reinforcement, wire mesh, reinforced concrete construction, display racks, fencing products, wire, floor grating, fabricated wire products, staples/fasteners/nails, and wire panels.<sup>6</sup>

## **U.S. PRODUCERS' INVENTORIES**

Table III-7 presents U.S. producers' end-of-period inventories and the ratio of these inventories to U.S. producers' production, U.S. shipments, and total shipments. The ratios of inventories to production, inventories to U.S. shipments, and inventories to total shipments each increased from 2014 to 2016 but by no more than 0.2 percentage points. These ratios also showed little change in January-September 2017 compared to January-September 2016.

<sup>&</sup>lt;sup>5</sup> U.S. producers' questionnaire responses, II-14.

<sup>&</sup>lt;sup>6</sup> Ibid.

Table III-7
Wire rod: U.S. producers' inventories, 2014-16, January-September 2016, and January-September 2017

		Calendar year			January to September	
Item	2014	2015	2016	2016	2017	
		Qua	antity (short to	ons)		
U.S. producers' end-of-period inventories	270,611	271,472	268,396	270,799	291,976	
		ı	Ratio (percent	)		
Ratio of inventories to U.S. production	7.3	7.4	7.5	7.4	7.6	
U.S. shipments	7.4	7.5	7.6	7.4	7.7	
Total shipments	***	***	***	***	***	

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

## **U.S. PRODUCERS' IMPORTS AND PURCHASES**

No U.S. producer reported directly importing wire rod from any subject country. \*\*\*, however, is related through common ownership by \*\*\* to \*\*\*. \*\*\*. Table III-8 presents U.S. production data for \*\*\* along with \*\*\* data for imports from subject countries.<sup>7</sup>

#### Table III-8

Wire rod: U.S. producers' U.S. production, imports and purchases, 2014-16, January-September 2016, and January-September 2017

\* \* \* \* \* \* \*

## U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

Table III-9 shows U.S. producers' employment-related data. The number of production and related workers ("PRWs") and wages paid decreased while hours worked increased from 2014 to 2016. Hours worked and wages paid were higher in January-September 2017 than in January-September 2016 but lower for the number of PRWs. \*\*\* U.S. producers reported more PRWs in 2016 compared to 2014. \*\*\* reported the largest increase in PRWs (a gain of \*\*\*), consistent with \*\*\*. \*\*\* U.S. producers reported fewer PRWs in 2016 compared to 2014, with \*\*\* accounting for the bulk of the decrease after \*\*\*.

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<sup>&</sup>lt;sup>7</sup> According to \*\*\*.

Table III-9
Wire rod: Average number of production and related workers, hours worked, wages paid to such employees, hourly wages, productivity, and unit labor costs, 2014-16, January-September 2016, and January-September 2017

	Calendar year			January to September	
Item	2014	2015	2016	2016	2017
Production and related workers (PRWs) (number)	2,299	2,410	2,222	2.242	2,238
Total hours worked (1,000 hours)	4,835				3,596
Hours worked per PRW (hours)	2,103	2,049	2,140	1,590	1,607
Wages paid (\$1,000)	170,593	172,268	168,288	124,641	129,142
Hourly wages (dollars per hour)	\$35.28	\$34.89	\$35.40	\$34.96	\$35.91
Productivity (short tons per 1,000 hour)	766.8	744.7	751.0	772.7	805.1
Unit labor costs (dollars per short tons)	\$46.01	\$46.84	\$47.13	\$45.25	\$44.60

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

# PART IV: U.S. IMPORTS, APPARENT U.S. CONSUMPTION, AND MARKET SHARES

#### U.S. IMPORTERS

The Commission issued importer questionnaires to 41 firms believed to be importers of subject wire rod, as well as to all U.S. producers of wire rod. Usable questionnaire responses were received from 23 companies, representing essentially all imports from Belarus, Italy, Korea, Russia, South Africa, Spain, Ukraine, United Arab Emirates, and the United Kingdom in 2016. Questionnaire response data represented approximately \*\*\* percent of imports from Turkey in 2016. Questionnaire response data represent \*\*\* percent of imports from Canada and 43 percent from all other import sources and approximately \*\*\* percent of imports from all nonsubject sources in 2016. Table IV-1 lists all responding U.S. importers of wire rod from the ten subject countries and other sources, their locations, and their shares of U.S. imports from subject sources, nonsubject sources, and total imports in 2016.

<sup>&</sup>lt;sup>1</sup>The Commission issued questionnaires to those firms identified in the petition, along with firms that, based on a review of data provided by U.S. Customs and Border Protection ("Customs"), may have accounted for more than one percent of total imports under HTS statistical reporting numbers 7213.91.3011, 7213.91.3015, 7213.91.3020, 7213.91.3093, 7213.91.4500, 7213.91.6000, 7213.99.0030, 7227.20.0030, 7227.20.0080, 7227.90.6010, 7227.90.6020, 7227.90.6030, and 7227.90.6035 in 2016.

<sup>&</sup>lt;sup>2</sup> The largest importer that did not provide data on its imports from Turkey is \*\*\*.

Table IV-1 Wire rod: U.S. importers, their headquarters, and share of total imports by source, 2016

	Share of		mports by source (percent)		
Firm	Headquarters	Subject	Nonsubject	All import sources	
ArcelorMittal	Chicago, IL	***	***	***	
Braeburn	Sudbury, MA	***	***	***	
British Steel	North Lincolnshire, United Kingdom	***	***	***	
Byram	Pompton Plains, NJ	***	***	***	
Duferco	Matawan, NJ	***	***	***	
ESAB	Annapolis Junction, MD	***	***	***	
Global Steel Wire	Santander, Spain	***	***	***	
Heico	L'Orignal, Ontario, Canada	***	***	***	
Krueger	Elmhurst, IL	***	***	***	
Macsteel	White Plains, NY	***	***	***	
Marubeni-Itochu	New York, NY	***	***	***	
Metal One	Rosemont, IL	***	***	***	
Novex	Paradiso, Switzerland	***	***	***	
O&K	Chicago, IL	***	***	***	
Okaya	Arlington Heights, IL	***	***	***	
POSCO	Johns Creek, GA	***	***	***	
POSCO Daewoo	Teaneck, NJ	***	***	***	
Shinsho	Novi, MI	***	***	***	
Stemcor	New York, NY	***	***	***	
Stena Metal	Southport, CT	***	***	***	
Tata Metals	Schaumburg, IL	***	***	***	
Tata Steel	Schaumburg, IL	***	***	***	
Toyota Tsusho	Georgetown, KY	***	***	***	
Total		***	***	***	

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

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

#### U.S. IMPORTS

Table IV-2 presents data for U.S. imports of wire rod from subject sources, Canada, China, and all other sources, and the ratio of U.S. imports of wire rod to U.S. production of wire rod. In 2014, China was the second largest source of U.S. imports of wire rod. U.S. imports from China fell from 2014 to 2015, when Commerce issued antidumping and countervailing duty orders on wire rod from China.<sup>3</sup> Since 2015, U.S. imports of wire rod from China have been virtually nonexistent.

While total subject imports increased from 2014 to 2015, individual subject sources exhibited somewhat different trends. U.S. imports of wire rod from Belarus, Italy, South Africa, and the United Arab Emirates where either not present in 2014 or appeared only in small volumes. U.S. imports of wire rod from each of these sources, however, were higher in 2016 compared to 2014. In 2014, U.S. imports of wire rod from Russia, Spain, and Ukraine were present in the U.S. market (although representing less than two percent of total imports apiece) and were higher in 2016. U.S. imports of wire rod from Korea, Turkey, and the United Kingdom were present in 2014 (and accounted for four percent or more of total imports), but were lower in 2016.

<sup>&</sup>lt;sup>3</sup> Carbon and Certain Alloy Steel Wire Rod from the People's Republic of China: Amended Final Affirmative Countervailing Duty Determination and Countervailing Duty Order, 80 FR 1018, January 8, 2015; Carbon and Certain Alloy Steel Wire Rod From the People's Republic of China: Antidumping Duty Order, 80 FR 1015, January 8, 2015.

<sup>&</sup>lt;sup>4</sup> On July 3, 2014, Commerce published notice in the Federal Register that it would revoke the outstanding order on wire rod from Ukraine, effective July 30, 2013. *Carbon and Certain Alloy Steel Wire Rod from Ukraine: Revocation of Antidumping Duty Order*, 79 FR 38009, July 3, 2014.

Table IV-2 Wire rod: U.S. imports, by source, 2014-16, January to September 2016, and January to September 2017

		Calendar year			September
Item	2014	2015	2016	2016	2017
		Qua	ntity (short t	ons)	
U.S. imports from					
Belarus	0	9,059	35,381	35,359	27,757
Italy	346	246	33,163	12,007	29,609
Korea	109,026	128,862	101,968	86,481	35,662
Russia	12,329	6,857	103,322	90,154	57,893
South Africa	0	45,451	22,049	22,049	31,156
Spain	31,778	79,976	72,779	49,246	49,338
Turkey	210,096	259,183	97,761	69,753	113,681
Ukraine	14,625	79,053	161,451	130,925	103,482
United Arab Emirates	28	17,673	22,159	22,132	0
United Kingdom	71,379	45,507	51,622	45,494	36,254
Subject sources	449,609	671,866	701,654	563,600	484,832
Canada	524,324	561,752	552,375	421,875	434,431
China	374,785	1,672	81	81	36
All other sources	451,589	553,790	518,471	383,059	552,688
Nonsubject sources	1,350,698	1,117,214	1,070,927	805,016	987,155
All import sources	1,800,307	1,789,080	1,772,581	1,368,616	1,471,988
		Valu	ue (1,000 doll	ars)	
U.S. imports from					
Belarus	0	3,131	11,583	11,571	11,228
Italy	543	291	12,697	4,533	11,948
Korea	69,377	67,290	51,872	42,291	22,203
Russia	7,552	2,230	35,215	30,310	25,484
South Africa	0	18,830	8,000	8,000	14,465
Spain	22,392	52,358	44,566	29,373	32,341
Turkey	124,577	126,483	42,798	29,852	53,301
Ukraine	8,684	35,022	59,507	46,571	45,305
United Arab Emirates	18	6,952	7,631	7,618	0
United Kingdom	46,428	24,795	24,329	21,270	21,427
Subject sources	279,572	337,383	298,198	231,389	237,703
Canada	405,564	358,637	326,208	249,909	295,378
China	196,661	887	56	56	34
All other sources	364,582	420,248	376,912	281,490	360,378
Nonsubject sources	966,807	779,772	703,176	531,455	655,790
All import sources	1,246,379	1,117,155	1,001,373	762,845	893,494

Table IV-2--Continued Wire rod: U.S. imports, by source, 2014-16, January to September 2016, and January to September 2017

	C	Calendar year			January to September	
Item	2014	2015	2016	2016	2017	
		Unit value	r short ton)			
U.S. imports from						
Belarus		346	327	327	405	
Italy	1,570	1,184	383	378	404	
Korea	636	522	509	489	623	
Russia	613	325	341	336	440	
South Africa		414	363	363	464	
Spain	705	655	612	596	656	
Turkey	593	488	438	428	469	
Ukraine	594	443	369	356	438	
United Arab Emirates	635	393	344	344		
United Kingdom	650	545	471	468	591	
Subject sources	622	502	425	411	490	
Canada	773	638	591	592	680	
China	525	530	686	686	928	
All other sources	807	759	727	735	652	
Nonsubject sources	716	698	657	660	664	
All import sources	692	624	565	557	607	
		Share o	of quantity (	percent)		
U.S. imports from						
Belarus		0.5	2.0	2.6	1.9	
Italy	0.0	0.0	1.9	0.9	2.0	
Korea	6.1	7.2	5.8	6.3	2.4	
Russia	0.7	0.4	5.8	6.6	3.9	
South Africa		2.5	1.2	1.6	2.1	
Spain	1.8	4.5	4.1	3.6	3.4	
Turkey	11.7	14.5	5.5	5.1	7.7	
Ukraine	0.8	4.4	9.1	9.6	7.0	
United Arab Emirates	0.0	1.0	1.3	1.6		
United Kingdom	4.0	2.5	2.9	3.3	2.5	
Subject sources	25.0	37.6	39.6	41.2	32.9	
Canada	29.1	31.4	31.2	30.8	29.5	
China	20.8	0.1	0.0	0.0	0.0	
All other sources	25.1	31.0	29.2	28.0	37.5	
Nonsubject sources	75.0	62.4	60.4	58.8	67.1	
All import sources	100.0	100.0	100.0	100.0	100.0	

Table IV-2--Continued Wire rod: U.S. imports, by source, 2014-16, January to September 2016, and January to September 2017

	С	Calendar year			January to September	
Item	2014	2015	2016	2016	2017	
		Share	ercent)			
U.S. imports from						
Belarus		0.3	1.2	1.5	1.3	
Italy	0.0	0.0	1.3	0.6	1.3	
Korea	5.6	6.0	5.2	5.5	2.5	
Russia	0.6	0.2	3.5	4.0	2.9	
South Africa		1.7	0.8	1.0	1.6	
Spain	1.8	4.7	4.5	3.9	3.6	
Turkey	10.0	11.3	4.3	3.9	6.0	
Ukraine	0.7	3.1	5.9	6.1	5.1	
United Arab Emirates	0.0	0.6	0.8	1.0		
United Kingdom	3.7	2.2	2.4	2.8	2.4	
Subject sources	22.4	30.2	29.8	30.3	26.6	
Canada	32.5	32.1	32.6	32.8	33.1	
China	15.8	0.1	0.0	0.0	0.0	
All other sources	29.3	37.6	37.6	36.9	40.3	
Nonsubject sources	77.6	69.8	70.2	69.7	73.4	
All import sources	100.0	100.0	100.0	100.0	100.0	
		Ratio	to U.S. pro	duction		
U.S. imports from			-			
Belarus		0.2	1.0	1.3	1.0	
Italy	0.0	0.0	0.9	0.4	1.0	
Korea	2.9	3.5	2.9	3.1	1.2	
Russia	0.3	0.2	2.9	3.3	2.0	
South Africa		1.2	0.6	0.8	1.1	
Spain	0.9	2.2	2.0	1.8	1.7	
Turkey	5.7	7.0	2.7	2.5	3.9	
Ukraine	0.4	2.1	4.5	4.8	3.6	
United Arab Emirates	0.0	0.5	0.6	0.8	0.0	
United Kingdom	1.9	1.2	1.4	1.7	1.3	
Subject sources	12.1	18.3	19.7	20.5	16.7	
Canada	14.1	15.3	15.5	15.3	15.0	
China	10.1	0.0	0.0	0.0	0.0	
All other sources	12.2	15.1	14.5	13.9	19.1	
Nonsubject sources	36.4	30.4	30.0	29.2	34.1	
All import sources	48.6	48.6	49.6	49.7	50.8	
NoteShares and ratios shown as "0.0" i						

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

Source: Official U.S. import statistics using HTS statistical reporting numbers 7213.91.3011, 7213.91.3015, 7213.91.3020, 7213.91.3093, 7213.91.4500, 7213.91.6000, 7213.99.0030, 7227.20.0030, 7227.20.0080, 7227.90.6010, 7227.90.6020, 7227.90.6030, and 7227.90.6035, accessed November 20, 2017.

#### CRITICAL CIRCUMSTANCES

On September 5, 2017, Commerce issued its preliminary countervailable duty determination that "critical circumstances" exist with regard to imports from certain sources in Turkey of wire rod.<sup>5</sup> Table IV-3 presents monthly data of U.S. imports of wire rod from Turkish suppliers other than Habas and Icdas, which were not excluded from Commerce's critical circumstances determination.

On November 28, 2017, Commerce issued its final antidumping duty determination that "critical circumstances" exist with regard to imports of wire rod from all producers and exporters from Russia. <sup>6</sup> Table IV-4 presents monthly data of U.S. imports of wire rod from Russia.

On October 31, 2017, Commerce issued its preliminary antidumping duty determination that "critical circumstances" exist with regard to imports from South Africa of wire rod. <sup>7</sup> Table IV-5 presents monthly data of U.S. imports of wire rod from South Africa.

On October 31, 2017, Commerce issued its preliminary antidumping duty determination that "critical circumstances" exist with regard to imports from Spain of wire rod. <sup>8</sup> Table IV-6 presents monthly data of U.S. imports of wire rod from Spain.

On October 31, 2017, Commerce issued its preliminary antidumping duty determination that "critical circumstances" exist with regard to imports from the United Kingdom of wire rod. Table IV-7 presents monthly data of U.S. imports of wire rod from the United Kingdom.

In these investigations, if both Commerce and the Commission make affirmative final critical circumstances determinations, certain subject imports may be subject to antidumping

<sup>&</sup>lt;sup>5</sup> Carbon and Alloy Steel Wire Rod From the Republic of Turkey: Preliminary Affirmative Countervailing Duty Determination and Preliminary Affirmative Critical Circumstances Determination, 82 FR 41929, September 5, 2017. When petitioners file timely allegations of critical circumstances, Commerce examines whether there is a reasonable basis to believe or suspect that (1) either there is a history of dumping and material injury by reason of dumped imports in the United States or elsewhere of the subject merchandise, or the person by whom, or for whose account, the merchandise was imported knew or should have known that the exporter was selling the subject merchandise at LTFV and that there was likely to be material injury by reason of such sales; and (2) there have been massive imports of the subject merchandise over a relatively short period.

<sup>&</sup>lt;sup>6</sup> Certain Carbon and Alloy Steel Wire Rod From Belarus, the Russian Federation, and the United Arab Emirates: Affirmative Final Determinations of Sales at Less Than Fair Value and Partial Affirmative Finding of Critical Circumstances, 82 FR 56214, November 28, 2017.

<sup>&</sup>lt;sup>7</sup> Carbon and Alloy Steel Wire Rod From the Republic of South Africa: Preliminary Affirmative Determination of Sales at Less Than Fair Value, Preliminary Affirmative Determination of Critical Circumstances, and Preliminary Determination of No Shipments, 82 FR 50383, October 31, 2017.

<sup>&</sup>lt;sup>8</sup> Carbon and Alloy Steel Wire Rod From Spain: Preliminary Affirmative Determination of Sales at Less Than Fair Value and Preliminary Determination of Critical Circumstances, in Part, 82 FR 50389, October 31, 2017.

<sup>&</sup>lt;sup>9</sup> Carbon and Alloy Steel Wire Rod From the United Kingdom: Preliminary Affirmative Determination of Sales at Less Than Fair Value, and Preliminary Affirmative Determination of Critical Circumstances, 82 FR 50394, October 31, 2017.

duties retroactive by 90 days from the effective dates of Commerce's preliminary affirmative determinations.

At the time of this report, firm-specific import data were not yet available for September 2017.

#### Table IV-3

Wire rod: U.S. imports from Turkey subject to Commerce's preliminary CVD critical circumstance findings, October 2016 through September 2017

\* \* \* \* \* \* \* \*

Table IV-4
Wire rod: U.S. imports from Russia subject to Commerce's final AD critical circumstance findings,
October 2016 through September 2017

Period	Actual monthly quantity (short tons)	Outwardly cumulative subtotals (short tons)	Percentage change from comparable period (percent) <sup>1</sup>
2016			
October	4,578	35,890	
November	8,590	31,313	
December	0	22,722	
2017			
January	1,979	22,722	
February	17,489	20,744	
March	3,255	3,255	
Petition file date: March 28, 2017.			
April	16,705	16,705	413.2
May	6,612	23,317	12.4
June	5,557	28,874	27.1
July	6,297	35,170	54.8
August	0	35,170	12.3
September	0	35,170	(2.0)

Note.--Imports from Russia subject to Commerce's final AD critical circumstance finding relate to imports from all firms.

Source: Official U.S. import statistics using HTS statistical reporting numbers 7213.91.3011, 7213.91.3015, 7213.91.3020, 7213.91.3093, 7213.91.4500, 7213.91.6000, 7213.99.0030, 7227.20.0030, 7227.20.0080, 7227.90.6010, 7227.90.6020 7227.90.6030, and 7227.90.6035, accessed December 4, 2017.

<sup>&</sup>lt;sup>1</sup> The percentage increase or (decrease) over the comparable pre-petition period.

Table IV-5
Wire rod: U.S. imports from South Africa subject to Commerce's preliminary AD critical circumstance findings, October 2016 through September 2017

Period	Actual monthly quantity (short tons)	Outwardly cumulative subtotals (short tons)	Percentage change from comparable period (percent) <sup>1</sup>
2016			
October		4,930	
November		4,930	
December		4,930	
2017			
January		4,930	
February	3,231	4,930	
March	1,699	1,699	
Petition file date: March 28, 2017.			
April	2,281	2,281	34.2
May	21,774	24,055	387.9
June	2,171	26,226	432.0
July		26,226	432.0
August		26,226	432.0
September		26,226	432.0

Note.--Imports from South Africa subject to Commerce's preliminary AD critical circumstance findings relate to imports from all firms.

Source: Official U.S. import statistics using HTS statistical reporting numbers 7213.91.3011, 7213.91.3015, 7213.91.3020, 7213.91.3093, 7213.91.4500, 7213.91.6000, 7213.99.0030, 7227.20.0030, 7227.20.0080, 7227.90.6010, 7227.90.6020, 7227.90.6030, and 7227.90.6035, accessed December 4, 2017.

## Table IV-6

Wire rod: U.S. imports from Spain subject to Commerce's preliminary AD critical circumstance findings, October 2016 through September 2017

\* \* \* \* \* \* \* \*

<sup>&</sup>lt;sup>1</sup> The percentage increase or (decrease) over the comparable pre-petition period.

Table IV-7
Wire rod: U.S. imports from United Kingdom subject to Commerce's preliminary AD critical circumstance findings, October 2016 through September 2017

Period	Actual monthly quantity (short tons)	Outwardly cumulative subtotals (short tons)	Percentage change from comparable period (percent) <sup>1</sup>
2016			
October	5,117	14,368	
November	747	9,251	
December	263	8,503	
2017			
January	2,902	8,240	
February	226	5,338	
March	5,112	5,112	
Petition file date: March 28, 2017.			
April	6,476	6,476	26.7
May	8,508	14,984	180.7
June	1,517	16,501	100.3
July	6,370	22,871	169.0
August	4,333	27,204	194.1
September	811	28,015	95.0

Note.--Imports from the United Kingdom subject to Commerce's preliminary AD critical circumstance findings relate to imports from all firms.

Source: Official U.S. import statistics using HTS statistical reporting numbers 7213.91.3011, 7213.91.3015, 7213.91.3020, 7213.91.3093, 7213.91.4500, 7213.91.6000, 7213.99.0030, 7227.20.0030, 7227.20.0080, 7227.90.6010, 7227.90.6020, 7227.90.6030, and 7227.90.6035, accessed December 4, 2017.

#### **NEGLIGIBILITY**

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible. <sup>10</sup> Negligible imports are generally defined in the Tariff Act of 1930, as amended, as imports from a country of merchandise corresponding to a domestic like product where such imports account for less than 3 percent of the volume of all such merchandise imported into the United States in the most recent 12-month period for which data are available that precedes the filing of the petition or the initiation of the investigation. However, if there are imports of such merchandise from a number of countries subject to investigations initiated on the same day that individually account for less than 3 percent of the total volume of the subject merchandise, and if the imports from those countries collectively account for more than 7 percent of the volume of all

<sup>&</sup>lt;sup>1</sup> The percentage increase or (decrease) over the comparable pre-petition period.

 $<sup>^{10}</sup>$  Sections 703(a)(1), 705(b)(1), 733(a)(1), and 735(b)(1) of the Act (19 U.S.C. §§ 1671b(a)(1), 1671d(b)(1), 1673b(a)(1), and 1673d(b)(1)).

such merchandise imported into the United States during the applicable 12-month period, then imports from such countries are deemed not to be negligible. <sup>11</sup> Table IV-8 presents data for imports during March 2016-February 2017 for each subject country and its share of total imports.

Table IV-8
Wire rod: U.S. imports in the twelve month period preceding the filing of the petition

		M	arch 2016 to	February 201	7	
	All wii		1080+ tire tire t	cord and	All wire rod except 1080+ tire cord and tire bead	
ltem	Quantity (short tons)	Share of quantity (percent)	Quantity (short tons)	Share of quantity (percent)	Quantity (short tons)	Share of quantity (percent)
Belarus	46,145	2.6	***	***	***	***
Italy	44,558	2.5	***	***	***	***
Korea	86,737	4.9	***	***	***	***
Russia	106,227	6.0	***	***	***	***
South Africa	20,511	1.2	***	***	***	***
Spain	78,836	4.5	***	***	***	***
Turkey	79,977	4.5	***	***	***	***
Turkey excluding ICDAS <sup>1</sup>	***	***	***	***	***	***
Ukraine	164,775	9.3	***	***	***	***
United Arab Emirates	22,159	1.3	***	***	***	***
United Kingdom	46,601	2.6	***	***	***	***
Subject sources	696,525	39.5	***	***	***	***
Individually negligible subject sources	179,973	10.2	***	***	***	***
Canada	545,845	31.0	***	***	***	***
All other sources	520,623	29.5	***	***	***	***
Nonsubject sources	1,066,468	60.5	***	***	***	***
All import sources	1,762,993	100.0	***	***	***	***

<sup>&</sup>lt;sup>1</sup> Commerce made a preliminary countervailing duty determination finding a de minimus subsidy rate for lcdas. Carbon and Alloy Steel Wire Rod From the Republic of Turkey: Preliminary Affirmative Countervailing Duty Determination and Preliminary Affirmative Critical Circumstances Determination, in Part, 82 FR 41929. September 5, 2017.

Source: Compiled from data submitted in response to Commission questionnaires and official U.S. import statistics and Proprietary Customs data using HTS statistical reporting numbers 7213.91.3011, 7213.91.3015, 7213.91.3020, 7213.91.3093, 7213.91.4500, 7213.91.6000, 7213.99.0030, 7227.20.0030, 7227.20.0080, 7227.90.6010, 7227.90.6020, 7227.90.6030, and 7227.90.6035, accessed October 10, 2017.

<sup>&</sup>lt;sup>11</sup> Section 771 (24) of the Act (19 U.S.C § 1677(24)).

#### **CUMULATION CONSIDERATIONS**

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

## **Fungibility**

Table IV-9 presents data for U.S. producers' and importers' U.S. shipments of wire rod by type of wire rod in 2016. Low/medium-low carbon industrial/standard wire rod and high/medium-high carbon industrial/standard wire rod combined accounted for 81.4 percent of U.S. producers' total U.S. shipments. CHQ wire rod accounted for 10.3 percent and other specialty wire rod accounted for 4.5 percent. None of the other three remaining types of wire rod products for which data were collected accounted for more than 1.9 percent of U.S. producers' total shipments.

\*\*\* firms that reported 2016 shipment data by product type shipped both low/medium-low carbon industrial/standard quality wire rod and high/medium-high carbon industrial/standard quality wire rod. \*\*\*. \*\*\* reported shipments of CHQ wire rod but \*\*\* accounted for \*\*\* percent of the shipments of this type of wire rod in 2016.

Low/medium-low carbon industrial/standard wire rod accounted for \*\*\* percent of total U.S. shipments of imported subject wire rod from subject countries in 2016. Each subject source shipped some volume of low/medium-low carbon industrial/standard wire rod. For four of the subject sources (Italy, Russia, Turkey, and Ukraine), it accounted for all U.S. shipments of imports and for Belarus and the United Arab Emirates it accounted for essentially all U.S. shipments of imports. Korea, Spain, and the United Kingdom were the subject sources for tire cord quality or tire bead quality wire rod and CHQ wire rod. Spain, and to a lesser extent the United Kingdom, were the only two subject import sources of specialty alloy wire rod.

Table IV-9 Wire rod: U.S. producers' U.S shipments and U.S. importers' U.S. shipments, by type and source, 2016

	U.S.			U.S. impo	rters' U.S.	shipments		
ltem	producers' U.S. shipments	Belarus	Italy	Korea	Russia	South Africa	Spain	Turkey
				Quantity (s	hort tons)			
Low/medium-low carbon wire rod	1,981,023	***	***	***	***	***	***	***
High/medium-high carbon wire rod	926,364	***	***	***	***	***	***	***
All grades of tire cord and tire bead <sup>1</sup>	***	***	***	***	***	***	***	***
Welding quality wire rod	***	***	***	***	***	***	***	***
Suspension spring wire rod	***	***	***	***	***	***	***	***
Cold heading quality (CHQ) wire rod	368,086	***	***	***	***	***	***	***
Other specialty wire rod	162,125	***	***	***	***	***	***	***
All other wire rod	***	***	***	***	***	***	***	***
Total	3,570,360	50,024	116,858	109,597	38,954	81,376	79,457	116,858
			U.S. impor	ters' U.S. s	hipments			Producers
		United					All	and
		Arab	United	Subject		All other	import	importers
	Ukraine	Emirates	Kingdom	sources	Canada	sources	sources	combined
Item				Quantity (s	hort tons)			
Low/medium-low carbon wire rod	***	***	***	***	***	***	***	***
High/medium-high carbon wire rod	***	***	***	***	***	***	***	***
All grades of tire cord and tire bead <sup>1</sup>	***	***	***	***	***	***	***	***
Welding quality wire rod	***	***	***	***	***	***	***	***
Suspension spring wire rod	***	***	***	***	***	***	***	***
Cold heading quality (CHQ) wire rod	***	***	***	***	***	***	***	***
Other specialty wire rod	***	***	***	***	***	***	***	***
All other wire rod	***	***	***	***	***	***	***	***
Total	155,707	32,111	51,358	749,351	22,652	200,019	972,022	4,542,382

Table IV-9--Continued Wire rod: U.S. producers' U.S shipments and U.S. importers' U.S. shipments, by type and source, 2016

	U.S.			U.S. impo	rters' U.S.	shipments		
	producers' U.S. shipments	Belarus	Italy	Korea	Russia	South Africa	Spain	Turkey
Item			Share	of quantity	down (per	cent)		•
Low/medium-low carbon wire rod	55.5	***	***	***	***	***	***	***
High/medium-high carbon wire rod	25.9	***	***	***	***	***	***	***
All grades of tire cord and tire bead <sup>1</sup>	***	***	***	***	***	***	***	***
Welding quality wire rod	***	***	***	***	***	***	***	***
Suspension spring wire rod	***	***	***	***	***	***	***	***
Cold heading quality (CHQ) wire rod	10.3	***	***	***	***	***	***	***
Other specialty wire rod	4.5	***	***	***	***	***	***	***
All other wire rod	***	***	***	***	***	***	***	***
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
			U.S. impo	rters' U.S. s	hipment			Producers
		United					All	and
		Arab	United	Subject		All other	import	importers
	Ukraine	Emirates	Kingdom	sources	Canada	sources	sources	combined
Item			Share	of quantity	/ down (per	cent)		
Low/medium-low carbon wire rod	***	***	***	***	***	***	***	***
High/medium-high carbon wire rod	***	***	***	***	***	***	***	***
All grades of tire cord and tire bead <sup>1</sup>	***	***	***	***	***	***	***	***
Welding quality wire rod	***	***	***	***	***	***	***	***
Suspension spring wire rod	***	***	***	***	***	***	***	***
Cold heading quality (CHQ) wire rod	***	***	***	***	***	***	***	***
Other specialty wire rod	***	***	***	***	***	***	***	***
All other wire rod	***	***	***	***	***	***	***	***
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

<sup>&</sup>lt;sup>1</sup> Tire cord and tire bead quality wire rod includes grades below 1080. For U.S. producers' U.S. shipments, grade 1080 were approximately \*\*\* percent of tire cord and tire bead quality wire rod. The remaining \*\*\* percent included grades 1065 to 1075 tire cord and tire bead \*\*\*.

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

## Figure IV-1

Wire rod: U.S shipments, by type and source, 2016

\* \* \* \* \* \* \* \*

# **Geographical markets**

Table IV-10 presents data for U.S. imports of wire rod by border of entry. U.S. imports from all ten subject sources entered through the South in 2016. Imports from eight subject sources entered through the East, from three in the North, and from one in the West.

Table IV-10
Wire rod: U.S. imports, by source and by border of entry, 2016

	East	North	South	West	Total
Item		Quai	ntity (short t	ons)	
Belarus	22		35,359		35,381
Italy		4	33,159		33,163
Korea	24,391		64,183	13,393	101,968
Russia	11,667		91,655		103,322
South Africa			22,049		22,049
Spain	9,161	142	63,476		72,779
Turkey	8,989		88,772		97,761
Ukraine	31,059		130,391		161,451
United Arab Emirates	670		21,489		22,159
United Kingdom	20,620	14,499	16,502		51,622
Subject sources	106,580	14,645	567,036	13,393	701,654
Canada	160,340	392,035			552,375
All other sources	154,467	28,079	329,341	6,665	518,552
Nonsubject sources	314,807	420,114	329,341	6,665	1,070,927
All import sources	421,387	434,759	896,377	20,058	1,772,581
		Share	across (pe	rcent)	
Belarus	0.1		99.9		100.0
Italy		0.0	100.0		100.0
Korea	23.9		62.9	13.1	100.0
Russia	11.3		88.7		100.0
South Africa			100.0		100.0
Spain	12.6	0.2	87.2		100.0
Turkey	9.2		90.8		100.0
Ukraine	19.2		80.8		100.0
United Arab Emirates	3.0		97.0		100.0
United Kingdom	39.9	28.1	32.0		100.0
Subject sources	15.2	2.1	80.8	1.9	100.0
Canada	29.0	71.0			100.0
All other sources	29.8	5.4	63.5	1.3	100.0
Nonsubject sources	29.4	39.2	30.8	0.6	100.0
All import sources	23.8	24.5	50.6	1.1	100.0

Table IV-10--Continued
Wire rod: U.S. imports, by source and by border of entry, 2016

	East	North	South	West	Total
ltem		Shar	e down (per	cent)	
Belarus	0.0		3.9		2.0
Italy		0.0	3.7		1.9
Korea	5.8		7.2	66.8	5.8
Russia	2.8		10.2		5.8
South Africa			2.5		1.2
Spain	2.2	0.0	7.1		4.1
Turkey	2.1		9.9		5.5
Ukraine	7.4		14.5		9.1
United Arab Emirates	0.2		2.4		1.3
United Kingdom	4.9	3.3	1.8		2.9
Subject sources	25.3	3.4	63.3	66.8	39.6
Canada	38.1	90.2			31.2
All other sources	36.7	6.5	36.7	33.2	29.3
Nonsubject sources	74.7	96.6	36.7	33.2	60.4
All import sources	100.0	100.0	100.0	100.0	100.0

Source: Official U.S. import statistics using HTS statistical reporting numbers 7213.91.3011, 7213.91.3015, 7213.91.3020, 7213.91.3093, 7213.91.4500, 7213.91.6000, 7213.99.0030, 7227.20.0030, 7227.20.0080, 7227.90.6010, 7227.90.6020 7227.90.6030, and 7227.90.6035, accessed October 10, 2017.

#### Presence in the market

Table IV-11 presents data for monthly U.S. imports of wire rod for the period of January 2014 through September 2017. Imports from Korea, Spain, and the United Kingdom were present in each month during January 2014-September 2017. There were imports from Turkey in eight months in 2014, each month of 2015 and 2016, and in seven months during January-September 2017. Imports of wire rod from Belarus were first present starting in September 2015 but after May 2016 entered sporadically. Small quantities of wire rod were imported from Italy in three months of 2014 and three months of 2015; the bulk of wire rod imports from Italy entered after July 2016. In 2014, there were three months of import entries from Russia, then 19 of 21 months from December 2015 to September 2017. There were no imports of wire rod from South Africa in 2014, but they were present in 9 of the 11 months from August 2015 through June 2016 and from February to June 2017. Imports of wire rod from Ukraine were present in two months of the last quarter of 2014, <sup>12</sup> eight months of 2015, and twelve months of 2016, and six of eight months during January- September 2017. Imports of wire rod from the United Arab Emirates were present in one month of 2014, two months in 2015, seven months

<sup>&</sup>lt;sup>12</sup> On July 3, 2014, Commerce published notice in the Federal Register that it would revoke the outstanding order on wire rod from Ukraine, effective July 30, 2013. *Carbon and Certain Alloy Steel Wire Rod from Ukraine: Revocation of Antidumping Duty Order*, 79 FR 38009, July 3, 2014.

of 2016, but were not present in January-September 2017. Imports from China were present in 2014 but diminished afterwards. <sup>13</sup>

Table IV-11
Wire rod: U.S. imports by source and month of entry, January 2014 through September 2017

Month of	Belarus	Italy	Korea	Russia	South Africa	Spain	Turkey	Ukraine
entry				Quantity	(short tons)			
2014 January			6,031			838		
February			2,645			557		
March			4,599	2,843		1,590		
April		83	6,166	3,136		1,702	895	
May			12,253	6,350		539	3,391	
June		260	28,328			1,051	48,628	
July			4,821			209		
August		3	6,515			7,709	19,589	
September			9,905			4,880	33,597	
October			9,580			921	66,639	2,089
November			10,121			8,377	9,181	12,537
December			8,062			3,405	28,176	

Table continued on next page.

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<sup>&</sup>lt;sup>13</sup> On January 8, 2015, Commerce published notice in the Federal Register of its issuance of countervailing and antidumping duty orders on wire rod from China. *Carbon and Certain Alloy Steel Wire Rod from the People's Republic of China: Amended Final Affirmative Countervailing Duty Determination and Countervailing Duty Order*, 80 FR 1018, January 8, 2015; *Carbon and Certain Alloy Steel Wire Rod From the People's Republic of China: Antidumping Duty Order*, 80 FR 1015, January 8, 2015.

Table IV-11--Continued
Wire rod: U.S. imports by source and month of entry, January 2014 through September 2017

	· ·							
Month of entry	Belarus	Italy	Korea	Russia	South Africa	Spain	Turkey	Ukraine
				Quantity	(short tons)			
2015 January			14,499			13,082	18,310	
February		174	11,886			4,007	63,060	5,438
March			9,811			8,823	31,432	18,588
April			6,987			908	9,677	7,131
May			2,823			11,268	11,425	
June			8,134			5,969	12,949	10,896
July			15,496			22	18,720	
August			32,129		11,025	3,246	8,720	
September	3,377		317		11,128	11,093	35,173	12,470
October		46	15,816		7,665	7,899	29,475	9,882
November		26	2,344			1,994	845	6,265
December	5,682		8,620	6,857	15,634	11,665	19,396	8,382
2016 January	4,622		12,846	1,968	-	3,568	21,831	14,947
February	1,376		5,967	14,594	4,769	1,063	9,252	20,259
March	4,649		12,608	13,808	124	1,001	12,521	13,707
April	6,941	9	14,504	3,619	9,286	2,581	769	16,953
May	2,644		4,084	17,145	4,528	7,507	3,756	14,996
June			11,721	1,902	3,342	9,891	9,967	9,674
July			6,390	7,411		4,810	7,019	6,700
August	15,127	11,998	12,147	17,207		1,838	4,089	19,759
September			6,214	12,500		16,987	547	13,930
October	22	9,195	13,704	4,578		10,286	16,789	18,190
November		11,906	929	8,590		8,751	6,317	4,276
December		55	853			4,496	4,902	8,060
2017 January		11,395	3,382	1,979		9,267	10,143	7,705
February	16,762		201	17,489	3,231	1,422	3,156	30,825
March		3,284	6,961	3,255	1,699	7,949	27,909	26,368
April	23	14,928	3,206	16,705	2,281	9,129	15,946	17,403
May			4,927	6,612	21,774	10,471	3,959	4,964
June	10,973		3,384	5,557	2,171	3,727	51,854	
July		2	4,593	6,297		3,548	-	16,218
August			8,916			3,802		

Table continued on next page.

Table IV-11--Continued
Wire rod: U.S. imports by source and month of entry, January 2014 through September 2017

Month of	United Arab Emirates	United Kingdom	Subject sources	Canada	China	All other sources	Nonsubject sources	Total U.S. imports
Month of entry		<u> </u>			/ (short tons)			
					(			
2014 January		7,217	14,085	43,176	73,199	28,116	144,490	158,576
February		4,999	8,201	33,548	33,256	33,382	100,186	108,386
March		6,272	15,304	40,548	55,262	36,228	132,038	147,342
April		10,300	22,283	46,234	123,328	48,011	217,573	239,856
May		5,010	27,543	44,023	78,364	38,458	160,845	188,388
June		7,380	85,647	47,138	1,865	30,299	79,302	164,949
July		351	5,381	47,947	3,344	44,708	95,999	101,380
August		4,585	38,400	43,082	46	39,619	82,747	121,148
September	28	625	49,036	55,326	5,910	52,716	113,952	162,989
October		13,722	92,951	42,106		35,709	77,815	170,766
November		817	41,032	35,554	59	23,775	59,388	100,420
December		10,104	49,747	45,641	152	40,570	86,363	136,110
2015								
January		264	46,156	41,035		57,597	98,632	144,787
February		94	84,659	47,314		36,156	83,471	168,130
March		777	69,430	46,372	18	35,589	81,980	151,410
April	1,101	6,849	32,653	48,282		46,035	94,317	126,969
May		1,230	26,747	45,377		49,996	95,373	122,120
June		610	38,558	52,975		53,075	106,050	144,608
July		3,875	38,113	46,490	78	32,041	78,608	116,722
August		10,062	65,182	45,668	18	53,883	99,569	164,751
September		176	73,734	47,935	1,530	35,577	85,042	158,776
October		389	71,172	53,448		66,101	119,549	190,721
November		3,751	15,225	48,337	28	42,986	91,351	106,576
December	16,572	17,429	110,238	38,518		44,754	83,272	193,509
2016								
January		360	60,143	42,726	21	41,536	84,283	144,426
February		7,789	65,070	47,395	19	34,255	81,669	146,739
March	27	4,368	62,813	51,545		41,023	92,568	155,381
April	3,349	7,359	65,372	49,016		32,300	81,316	146,688
May	54	7,773	62,488	52,736	37	47,316	100,089	162,576
June	8,065	9,121	63,682	45,283		45,133	90,416	154,099
July	5,189	4,346	41,865	39,692	5	58,480	98,177	140,041
August		3,989	86,154	46,101		40,231	86,332	172,486
September	5,447	388	56,014	47,382		42,786	90,167	146,181
October		5,117	77,881	43,403		46,436	89,839	167,720
November	27	747	41,545	47,845		28,641	76,485	118,031
December		263	18,629	39,251		60,335	99,587	118,215

Table IV-11--Continued
Wire rod: U.S. imports by source and month of entry, January 2014 through August 2017

Month of	United Arab Emirates	United Kingdom	Subject sources	Canada	China	All other sources	Nonsubject sources	Total U.S. imports
entry				Quantity	(short tons)			
2017 January		2,902	46,773	38,939		41,896	80,835	127,608
February		226	73,311	44,652		36,005	80,657	153,968
March		5,112	82,536	61,076	4	47,060	108,140	190,676
April		6,476	86,097	52,989	□Ą	40,969	93,990	180,088
May		8,508	61,215	54,959		76,528	131,487	192,701
June		1,517	79,183	49,485		66,637	116,122	195,304
July		6,370	37,027	39,944		98,956	138,900	175,928
August		4,333	17,051	50,470		77,342	127,812	144,862
September		811	1,640	41,918		67,295	109,213	110,852

Source: Official U.S. import statistics using HTS statistical reporting numbers 7213.91.3011, 7213.91.3015, 7213.91.3020, 7213.91.3093, 7213.91.4500, 7213.91.6000, 7213.99.0030, 7227.20.0030, 7227.20.0080, 7227.90.6010, 7227.90.6020, 7227.90.6030, and 7227.90.6035, accessed December 4, 2017.

#### TOTAL APPARENT U.S. CONSUMPTION

Table IV-12 presents data on total apparent U.S. consumption for wire rod. These data show that total market apparent U.S. consumption, based on quantity, decreased by 2.3 percent from 2014 to 2016 but was 6.7 percent higher in January-September 2017 than in January-September 2016. The quantity of U.S. producers' total U.S. shipments decreased by 2.7 percent from 2014 to 2016 while the quantity of total imports decreased during this period by 1.5 percent. Total subject imports, however, increased from 2014 to 2016 by 56.1 percent. Imports from individual subject sources showed different trends. From 2014 to 2016, imports from Belarus, Italy, Russia, South Africa, Spain, Ukraine, and United Arab Emirates increased, whereas imports from Korea, Turkey, and the United Kingdom decreased. U.S. imports of wire rod from Canada, which had a sizable presence in each year during 2014-16, increased by 5.3 percent, whereas U.S. imports of wire rod from China decreased by 99.6 percent from 2014 to 2015 and were virtually non-existent in 2016. The quantity of apparent U.S. consumption of wire rod in January-September 2017 was 6.7 percent greater than it was in January-September 2016. The quantity of subject imports combined were 3.6 percent lower in January-September 2017 than in January-September 2016.

Table IV-12 Wire rod: U.S. shipments of domestic product, U.S. imports, and apparent U.S. consumption, 2014-16, January to September 2016, and January to September 2017

		Calendar year		January to	September
Item	2014	2015	2016	2016	2017
		Qua	ntity (short to	ons)	
U.S. producers' U.S. shipments	3,646,855	3,641,848	3,548,500	2,736,246	2,850,026
U.S. imports from Belarus		9,059	35,381	35,359	27,757
Italy	346	246	33,163	12,007	29,609
Korea	109,026	128,862	101,968	86,481	35,662
Russia	12,329	6,857	103,322	90,154	57,893
South Africa		45,451	22,049	22,049	31,156
Spain	31,778	79,976	72,779	49,246	49,338
Turkey	210,096	259,183	97,761	69,753	113,681
Ukraine	14,625	79,053	161,451	130,925	103,482
United Arab Emirates	28	17,673	22,159	22,132	
United Kingdom	71,379	45,507	51,622	45,494	36,254
Subject	449,609	671,866	701,654	563,600	484,832
Canada	524,324	561,752	552,375	421,875	434,431
China	374,785	1,672	81	81	36
All other sources	451,589	553,790	518,471	383,059	552,688
Nonsubject sources	1,350,698	1,117,214	1,070,927	805,016	987,155
All import sources	1,800,307	1,789,080	1,772,581	1,368,616	1,471,988
Apparent U.S. consumption	5,447,162	5,430,928	5,321,081	4,104,862	4,322,014

Table IV-12--Continued Wire rod: U.S. shipments of domestic product, U.S. imports, and apparent U.S. consumption, 2014-16, January to September 2016, and January to September 2017

		Calendar year	•	January to	September
Item	2014	2015	2016	2016	2017
		Vali	ue (1,000 dolla	ars)	
U.S. producers' U.S. shipments	2,550,478	2,072,047	1,840,882	1,425,334	1,693,781
U.S. imports from Belarus		3,131	11,583	11,571	11,228
Italy	543	291	12,697	4,533	11,948
Korea	69,377	67,290	51,872	42,291	22,203
Russia	7,552	2,230	35,215	30,310	25,484
South Africa		18,830	8,000	8,000	14,465
Spain	22,392	52,358	44,566	29,373	32,341
Turkey	124,577	126,483	42,798	29,852	53,301
Ukraine	8,684	35,022	59,507	46,571	45,305
United Arab Emirates	18	6,952	7,631	7,618	
United Kingdom	46,428	24,795	24,329	21,270	21,427
Subject	279,572	337,383	298,198	231,389	237,703
Canada	405,564	358,637	326,208	249,909	295,378
China	196,661	887	56	56	34
All other sources	364,582	420,248	376,912	281,490	360,378
Nonsubject sources	966,807	779,772	703,176	531,455	655,790
All import sources	1,246,379	1,117,155	1,001,373	762,845	893,494
Apparent U.S. consumption	3,796,857	3,189,202	2,842,255	2,188,179	2,587,275

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

#### **U.S. MARKET SHARES -TOTAL MARKET**

U.S. market share data based on total apparent U.S. consumption for wire rod are presented in table IV-13. U.S. producers' share of apparent U.S. consumption of wire rod, based on quantity, decreased by 0.3 percentage points from 2014 to 2016 and, based on value, decreased by 2.4 percentage points.

Table IV-13
Wire rod: U.S. consumption and market shares for total market, 2014-16, January to September 2016, and January to September 2017

	Calendar year			January to September		
Item	2014	2015	2016	2016	2017	
	Quantity (short tons)					
Apparent U.S. consumption	5,447,162	5,430,928	5,321,081	4,104,862	4,322,014	
	Share of quantity (percent)					
U.S. producers' U.S. shipments	66.9	67.1	66.7	66.7	65.9	
U.S. imports from						
Belarus	0.0	0.2	0.7	0.9	0.6	
Italy	0.0	0.0	0.6	0.3	0.7	
Korea	2.0	2.4	1.9	2.1	0.8	
Russia	0.2	0.1	1.9	2.2	1.3	
South Africa	0.0	0.8	0.4	0.5	0.7	
Spain	0.6	1.5	1.4	1.2	1.1	
Turkey	3.9	4.8	1.8	1.7	2.6	
Ukraine	0.3	1.5	3.0	3.2	2.4	
United Arab Emirates	0.0	0.3	0.4	0.5	0.0	
United Kingdom	1.3	0.8	1.0	1.1	0.8	
Subject	8.3	12.4	13.2	13.7	11.2	
Canada	9.6	10.3	10.4	10.3	10.1	
China	6.9	0.0	0.0	0.0	0.0	
All other sources	8.3	10.2	9.7	9.3	12.8	
Nonsubject sources	24.8	20.6	20.1	19.6	22.8	
All import sources	33.1	32.9	33.3	33.3	34.1	

Table IV-13--Continued Wire rod: U.S. consumption and market shares for total market, 2014-16, January to September 2016, and January to September 2017

	Calendar year			January to	September	
ltem	2014	2015	2016	2016	2017	
	Value (1,000 dollars)					
Apparent U.S. consumption	3,796,857	3,189,202	2,842,255	2,188,179	2,587,275	
	Share of value (percent)					
U.S. producers' U.S. shipments	67.2	65.0	64.8	65.1	65.5	
U.S. imports from						
Belarus	0.0	0.1	0.4	0.5	0.4	
Italy	0.0	0.0	0.4	0.2	0.5	
Korea	1.8	2.1	1.8	1.9	0.9	
Russia	0.2	0.1	1.2	1.4	1.0	
South Africa	0.0	0.6	0.3	0.4	0.6	
Spain	0.6	1.6	1.6	1.3	1.3	
Turkey	3.3	4.0	1.5	1.4	2.1	
Ukraine	0.2	1.1	2.1	2.1	1.8	
United Arab Emirates	0.0	0.2	0.3	0.3	0.0	
United Kingdom	1.2	0.8	0.9	1.0	0.8	
Subject	7.4	10.6	10.5	10.6	9.2	
Canada	10.7	11.2	11.5	11.4	11.4	
China	5.2	0.0	0.0	0.0	0.0	
All other sources	9.6	13.2	13.3	12.9	13.9	
Nonsubject sources	25.5	24.5	24.7	24.3	25.3	
All import sources	32.8	35.0	35.2	34.9	34.5	

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

Source: Compiled from data submitted in response to Commission questionnaires and official U.S. import statistics using HTS statistical reporting numbers 7213.91.3011, 7213.91.3015, 7213.91.3020, 7213.91.3093, 7213.91.4500, 7213.91.6000, 7213.99.0030, 7227.20.0030, 7227.20.0080, 7227.90.6010, 7227.90.6020 7227.90.6030, and 7227.90.6035, accessed November 20, 2017.

## **MERCHANT U.S. MARKET**

Table IV-14 presents data on apparent U.S. consumption for wire rod in the merchant market.

Table IV-14
Wire rod: Apparent U.S. consumption for the merchant market, 2014-16, January to September 2016, and January to September 2017

	Calendar year			January to September		
Item	2014	2015	2016	2016	2017	
	Quantity (short tons)					
U.S. producers' commercial U.S. shipments	2,627,360	2,591,398	2,469,373	1,876,485	1,998,927	
U.S. imports from Belarus		9,059	35,381	35,359	27,757	
Italy	346	246	33,163	12,007	29,609	
Korea	109,026	128,862	101,968	86,481	35,662	
Russia	12,329	6,857	103,322	90,154	57,893	
South Africa		45,451	22,049	22,049	31,156	
Spain	31,778	79,976	72,779	49,246	49,338	
Turkey	210,096	259,183	97,761	69,753	113,681	
Ukraine	14,625	79,053	161,451	130,925	103,482	
United Arab Emirates	28	17,673	22,159	22,132		
United Kingdom	71,379	45,507	51,622	45,494	36,254	
Subject	449,609	671,866	701,654	563,600	484,832	
Canada	524,324	561,752	552,375	421,875	434,431	
China	374,785	1,672	81	81	36	
All other sources	451,589	553,790	518,471	383,059	552,688	
Nonsubject sources	1,350,698	1,117,214	1,070,927	805,016	987,155	
All import sources	1,800,307	1,789,080	1,772,581	1,368,616	1,471,988	
Apparent U.S. consumption	4,427,667	4,380,478	4,241,954	3,245,101	3,470,915	

Table IV-14--Continued Wire rod: Apparent U.S. consumption for the merchant market, 2014-16, January to September 2016, and January to September 2017

	Calendar year			January to September		
Item	2014	2015	2016	2016	2017	
	Value (1,000 dollars)					
U.S. producers' U.S. shipments	1,879,014	1,511,743	1,305,724	996,876	1,211,628	
U.S. imports from Belarus		3,131	11,583	11,571	11,228	
Italy	543	291	12,697	4,533	11,948	
Korea	69,377	67,290	51,872	42,291	22,203	
Russia	7,552	2,230	35,215	30,310	25,484	
South Africa		18,830	8,000	8,000	14,465	
Spain	22,392	52,358	44,566	29,373	32,341	
Turkey	124,577	126,483	42,798	29,852	53,301	
Ukraine	8,684	35,022	59,507	46,571	45,305	
United Arab Emirates	18	6,952	7,631	7,618		
United Kingdom	46,428	24,795	24,329	21,270	21,427	
Subject	279,572	337,383	298,198	231,389	237,703	
Canada	405,564	358,637	326,208	249,909	295,378	
China	196,661	887	56	56	34	
All other sources	364,582	420,248	376,912	281,490	360,378	
Nonsubject sources	966,807	779,772	703,176	531,455	655,790	
All import sources	1,246,379	1,117,155	1,001,373	762,845	893,494	
Apparent U.S. consumption	3,125,393	2,628,898	2,307,097	1,759,721	2,105,122	

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

Source: Compiled from data submitted in response to Commission questionnaires and official U.S. import statistics using HTS statistical reporting numbers 7213.91.3011, 7213.91.3015, 7213.91.3020, 7213.91.3093, 7213.91.4500, 7213.91.6000, 7213.99.0030, 7227.20.0030, 7227.20.0080, 7227.90.6010, 7227.90.6020 7227.90.6030, and 7227.90.6035, accessed November 20, 2017.

# **U.S. MARKET SHARES – MERCHANT MARKET**

Table IV-15 presents data on U.S. market shares in the merchant market for wire rod.

Table IV-15
Wire rod: Market shares for the merchant market, 2014-16, January to September 2016, and January to September 2017

		Calendar yea	r	January to S	September
Item	2014	2015	2016	2016	2017
		Qua	antity (short t	ons)	
Apparent U.S. consumption	4,427,667	4,380,478	4,241,954	3,245,101	3,470,915
		Share	of quantity (p	ercent)	
U.S. producers' U.S. shipments	59.3	59.2	58.2	57.8	57.6
U.S. imports from Belarus	0.0	0.2	0.8	1.1	0.8
Italy	0.0	0.0	0.8	0.4	0.9
Korea	2.5	2.9	2.4	2.7	1.0
Russia	0.3	0.2	2.4	2.8	1.7
South Africa	0.0	1.0	0.5	0.7	0.9
Spain	0.7	1.8	1.7	1.5	1.4
Turkey	4.7	5.9	2.3	2.1	3.3
Ukraine	0.3	1.8	3.8	4.0	3.0
United Arab Emirates	0.0	0.4	0.5	0.7	0.0
United Kingdom	1.6	1.0	1.2	1.4	1.0
Subject	10.2	15.3	16.5	17.4	14.0
Canada	11.8	12.8	13.0	13.0	12.5
China	8.5	0.0	0.0	0.0	0.0
All other sources	10.2	12.6	12.2	11.8	15.9
Nonsubject sources	30.5	25.5	25.2	24.8	28.4
All import sources	40.7	40.8	41.8	42.2	42.4

Table continued on next page.

Table IV-15--Continued
Wire rod: Market shares for U.S. merchant market, U.S. shipments of imports, and merchant U.S. market, January to September 2016, and January to September 2017

		Calendar yea	r	January to	September	
Item	2014	2015	2016	2016	2017	
		Va	lue (1,000 do	lars)		
Apparent U.S. consumption	3,125,393	2,628,898	2,307,097	1,759,721	2,105,122	
		Shar	ercent)			
U.S. producers' U.S. shipments	60.1	57.5	56.6	56.6	57.6	
U.S. imports from Belarus	0.0	0.1	0.5	0.7	0.5	
Italy	0.0	0.0	0.6	0.3	0.6	
Korea	2.2	2.6	2.2	2.4	1.1	
Russia	0.2	0.1	1.5	1.7	1.2	
South Africa	0.0	0.7	0.3	0.5	0.7	
Spain	0.7	2.0	1.9	1.7	1.5	
Turkey	4.0	4.8	1.9	1.7	2.5	
Ukraine	0.3	1.3	2.6	2.6	2.2	
United Arab Emirates	0.0	0.3	0.3	0.4	0.0	
United Kingdom	1.5	0.9	1.1	1.2	1.0	
Subject	8.9	12.8	12.9	13.1	11.3	
Canada	13.0	13.6	14.1	14.2	14.0	
China	6.3	0.0	0.0	0.0	0.0	
All other sources	11.7	16.0	16.3	16.0	17.1	
Nonsubject sources	30.9	29.7	30.5	30.2	31.2	
All import sources	39.9	42.5	43.4	43.4	42.4	

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

Source: Compiled from data submitted in response to Commission questionnaires and official U.S. import statistics using HTS statistical reporting numbers 7213.91.3011, 7213.91.3015, 7213.91.3020, 7213.91.3093, 7213.91.4500, 7213.91.6000, 7213.99.0030, 7227.20.0030, 7227.20.0080, 7227.90.6010, 7227.90.6020 7227.90.6030, 7227.90.6035 and 7307.21.5000, accessed November 20, 2017.

# **PART V: PRICING DATA**

#### **FACTORS AFFECTING PRICES**

## Raw material costs

The primary raw material inputs for the billets used to produce wire rod are steel scrap (for steel melted in an EAF) or coking coal and iron ore (for steel produced in a BOF). Different types of steel scrap are used depending on the type and quality of wire rod being produced; busheling scrap used for industrial high carbon grades and a larger amount of heavy melt scrap is used for industrial grade wire rod. EAFs, the primary production process used by U.S. producers, use substantially more electricity than BOFs, making energy prices an important factor in raw material costs. U.S. producers' raw material costs accounted for approximately 54 to 64 percent of cost of goods sold in the merchant market during the period for which data were collected.

Steel scrap prices \*\*\* between January 2014 and November 2017, but declined overall during the period (figure V-1). The average prices of no. 1 busheling scrap, no. 1 heavy melt scrap, and shredded auto scrap \*\*\* by \*\*\* percent, \*\*\* percent, and \*\*\* percent, respectively, from January 2014 to December 2015. The average prices of no. 1 busheling scrap, no. 1 heavy melt scrap, and shredded auto scrap \*\*\* by \*\*\* percent, \*\*\* percent, and \*\*\* percent, respectively, from December 2015 to September 2017. From September 2017 to November 2017, prices of no. 1 busheling scrap, no. 1 heavy melt scrap, and shredded auto scrap \*\*\* by \*\*\* percent, \*\*\* percent, and \*\*\* percent, respectively. Overall, during January 2014 to November 2017 prices for these three inputs \*\*\*, respectively.

<sup>&</sup>lt;sup>1</sup> Hearing transcripts, p. 160 (Hughes).

<sup>&</sup>lt;sup>2</sup> Conference transcript, p. 108 (Moffitt).

<sup>&</sup>lt;sup>3</sup> Heavy melt scrap is defined as wrought iron or steel scrap. Busheling scrap is defined as clean steel scrap not exceeding 12 inches in any dimension. Most busheling scrap comes from factory sheet clippings, drops, and stampings. See *Scrap Definitions*, https://www.steelmarketupdate.com/resources/terminology/scrap-definitions, accessed October 26.

https://www.steelmarketupdate.com/resources/terminology/scrap-definitions, accessed October 26, 2017.

<sup>&</sup>lt;sup>4</sup> Carbon and Certain Alloy Steel Wire Rod from Brazil, Canada, Germany, Indonesia, Mexico, Moldova, Trinidad and Tobago, Turkey, and Ukraine, Inv. Nos. 701-TA-417 and 731-TA-953, 954, 957-959, 961, and 962 (Review), USITC Publication 4014, June 2008, p. V-1.

<sup>&</sup>lt;sup>5</sup> Conference transcript, p. 188 (Nystrom).

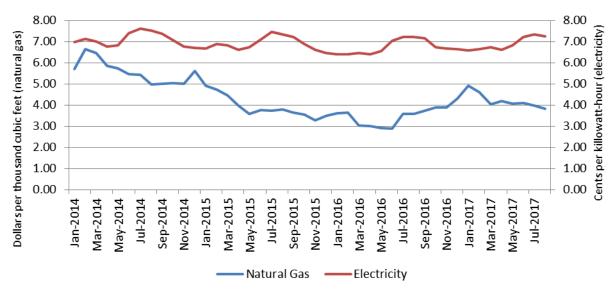
<sup>&</sup>lt;sup>6</sup> U.S. producers' raw material costs accounted for approximately 55 to 65 percent of cost of goods sold in the total market during the period for which data were collected

Figure V-1
Ferrous scrap: Monthly consumer prices, No. 1 busheling scrap, No. 1 heavy melt scrap, and shredded auto scrap, January 2014-November 2017

\* \* \* \* \* \* \*

Between January 2014 and August 2017, the price of natural gas decreased by 32.7 percent, while the price of electricity increased by 3.9 percent (figure V-2).<sup>7</sup>

Figure V-2
Natural gas and electricity: Industrial prices, monthly, January 2014-August 2017



Source: Energy Information Administration, *Natural Gas*, https://www.eia.gov/dnav/ng/hist/n3035us3m.htm, retrieved November 28, 2017; Energy Information Administration, *Electricity Data Browser*, https://www.eia.gov/electricity/data.php, retrieved November 28, 2017.

Most responding U.S. producers (5 of 8) and importers (14 of 18) reported that raw material prices had fluctuated since January 2014. Two U.S. producers and two importers reported that they had decreased, one U.S. producer and one importer reported that they had increased, and one importer reported that prices had not changed. U.S. producers and importers stated that wire rod pricing changes with movements in the scrap market. U.S. producers \*\*\* and importer \*\*\* reported volatility in the scrap market in recent years.

Three U.S. producers and three importers reported that their wire rod prices are indexed to raw material costs. Three U.S. producers and two importers reported using American Metal Market ("AMM") scrap prices as an index for their wire rod prices.

<sup>&</sup>lt;sup>7</sup> As discussed in Part I, the schedule for this proceeding impacts the availability of certain data for the posthearing report, including energy prices for September 2017.

## Transportation costs to the U.S. market

Transportation costs for wire rod shipped from subject countries to the United States during 2016 averaged the following: Belarus, 10.9 percent; Italy, 4.7 percent; Korea, 13.6 percent; Russia, 8.9 percent; South Africa, 13.3 percent; Spain, 14.9 percent; Turkey, 6.1 percent; Ukraine, 8.2 percent; the United Arab Emirates, 9.1 percent; and the United Kingdom, 17.0 percent. These estimates were derived from official import data and represent the transportation and other charges on imports.<sup>8</sup>

# U.S. inland transportation costs

Eight responding U.S. producers and 10 importers reported that they typically arrange transportation to their customers. Most U.S. producers reported that their U.S. inland transportation costs ranged from 4.5 to 6 percent, while the majority of responding importers reported costs of 5 to 12 percent.

## PRICING PRACTICES

# **Pricing methods**

U.S. producers and importers reported using transaction-by-transaction negotiations, contracts, price lists, and indexing to scrap prices. As presented in table V-1, U.S. producers and importers sell primarily on a transaction-by-transaction basis.

Table V-1
Wire rod: U.S. producers' and importers' reported price setting methods, by number of responding firms<sup>1</sup>

Method	U.S. producers	Importers
Transaction-by-transaction	8	18
Contract	2	5
Set price list	1	
Other	2	2
Responding firms	8	21

The sum of responses down may not add up to the total number of responding firms as each firm was instructed to check all applicable price setting methods employed.

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

<sup>8</sup> The estimated transportation costs were obtained by subtracting the customs value from the c.i.f. value of the imports for 2016 and then dividing by the customs value based on the following HTS statistical reporting numbers: 7213.91.3011, 7213.91.3015, 7213.91.3020, 7213.91.3093, 7213.91.4500, 7213.91.6000, 7213.99.0030, 7227.20.0030, 7227.20.0080, 7227.90.6010, 7227.90.6020 7227.90.6030, 7227.90.6035 and 7307.21.5000.

Seven U.S. producers and 17 importers reported that their wire rod prices reflect changes in scrap costs. U.S. producer \*\*\* reported using a base scrap surcharge in its price of wire rod and then adding a separate surcharge that is determined by the current month's market index scrap price minus the base scrap price included in the material price. Keystone stated that when scrap prices were low, it indexed a few contracts to the price of scrap so it could charge higher prices when scrap prices increased. Gerdau stated that changes in wire rod prices were not a reflection of scrap prices, but the firm (Gerdau) trying to "chase the low price imports" from subject countries. Four importers reported using a separate scrap monthly or quarterly surcharge, with \*\*\* stating that it uses a monthly surcharge for only cold heading quality steel.

U.S. producers and importers reported selling the majority of their wire rod in the spot market (table V-2). U.S. producers also used contracts, while importers made substantially less use of contract sales.

Table V-2 Wire rod: U.S. producers' and importers' shares of U.S. commercial shipments by type of sale, 2016

\* \* \* \* \* \* \*

A number of U.S. producers indicated that their contract agreements were less reliable when spot prices were low. Keystone stated that in August 2016 its contract customers indicated that they would not continue to purchase from Keystone unless Keystone offered them lower prices that were available on the spot market. Nucor stated that its contracts were more akin to program pricing and should not be considered binding contracts, and that its contract agreements do not hold up when spot prices are very low. Gerdau stated that it sold less product via contract compared to spot sales over the course of 2014-16 due to low spot prices, noting that its contract prices are negotiated either monthly or quarterly.

According to AWPA, "throughout 2016 and continuing into late 2017, U.S. producers (\*\*\*) have imposed numerous and significant price increases for all of their wire rod products." However, Keystone argues that U.S. producers attempted to increase prices with these announcements, but were met with customer refusals and demands for lower prices. 16

Five purchasers reported that they purchase product daily, 5 purchase weekly, 28 purchase monthly, and 4 purchase quarterly. Forty of 43 responding purchasers reported that

<sup>&</sup>lt;sup>9</sup> Hearing transcript, pp.75-76 (Armstrong).

<sup>&</sup>lt;sup>10</sup> Hearing transcript, p.78 (Canosa).

<sup>&</sup>lt;sup>11</sup> Hearing transcript, p. 56 (Armstrong).

<sup>&</sup>lt;sup>12</sup> Hearing transcript, p. 125 (Nystrom).

<sup>&</sup>lt;sup>13</sup> Conference transcript, p. 186 (Nystrom).

<sup>&</sup>lt;sup>14</sup> Conference transcript, pp. 185-186 (Canosa).

<sup>&</sup>lt;sup>15</sup> AWPA prehearing brief, p. 6.

<sup>&</sup>lt;sup>16</sup> Hearing transcript, pp. 77-78 (Armstrong).

their purchasing frequency had not changed since 2014. Most (34 of 42) purchasers contact 1 to 6 suppliers before making a purchase.

#### Sales terms and discounts

Most U.S. producers (5 of 8) reported typically quoting prices on an f.o.b. basis, while most importers (12 of 17) typically quote prices on a delivered basis. Six U.S. producers reported offering sales terms of net 30 days, one offers net 60 days, two offer 1 percent 10 net 30 days, and two offer ½ percent 10 net 30 days. Twelve importers reported offering sales terms of net 30 days, 9 of net 60 days, and one of net 45 days. \*\*\* reported offering net 90 days for certain customers, and \*\*\* offers net 30 days for their cold-heading quality products. \*\*\* reported that on or after November 1, 2016, non-consignment sales to \*\*\* were net 60 days with a 1 percent discount for early payment.

Most U.S. producers (5 of 8) and importers (17 of 21) reported that they do not have specific discount policies, though several offer discounts. Two U.S. producers reported offering quantity discounts, one reported offering total volume discounts, one reported offering monthly/quarterly volume discounts and cash discounts, one reported offering a net 10 day ½ percent discount for quick payment, and another reported offering "foreign fighter pricing" to compete with lower-cost imports. One importer reported offering quantity discounts, one reported offering total volume discounts, and one reported quarterly volume rebates to certain customers.

# **Price leadership**

Most purchasers reported that Nucor, Keystone, and Gerdau were price leaders. Many purchasers reported that Nucor is the first to announce price increases or decreases in the market.

## **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 wire rod products shipped to unrelated U.S. customers during January 2014 to September 2017.

<u>Product 1.</u>-- Industrial quality wire rod, grade C1006, 5.5 mm (7/32 inch) through 12 mm (15/32 inch) in diameter, for hangers, chain link fencing, collated nails and staples, grates, and other formed products (in green condition, e.g., NOT cleaned, coated, etc.).

<u>Product 2.</u>-- Industrial quality wire rod, grade C1008 through C1010, 5.5 mm (7/32 inch) through 12 mm (15/32 inch) in diameter, for hangers, chain link fencing, collated nails and staples, grates, and other formed products (in green condition, e.g., NOT cleaned, coated, etc.).

<u>Product 3.</u>— Mesh quality wire rod, grades C1006 through C1015, 5.5 mm (7/32 inch) through 14 mm (9/16 inch) in diameter, for the manufacturing of concrete reinforcement products such as wire for A-82 applications (in green condition, e.g., NOT cleaned, coated, etc.).

<u>Product 4.</u>-- Grades C1050 through C1070, 5.5 mm (7/32 inch) through 6.5 mm (1/4 inch) in diameter, for spring applications excluding valve spring (in green condition, e.g., NOT cleaned, coated, etc.).

<u>Product 5.</u>-- Industrial quality wire, grades C1060 through 1065, 5.5mm (7/32 inch) through 17.5 mm (11/16 inch) in diameter, for spring wire rod used in upholstery and mechanical applications, as well as oil-tempered spring applications.

<u>Product 6.</u>-- Suspension spring steel wire rod, grade SAE 9254, 5.5 millimeters (7/32 inch) through 21 millimeters (53/64 inch) in diameter, for use in the production of automotive and railway coil and suspension springs.

Eight U.S. producers and 12 importers provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters. Pricing data for these six products accounted for more than 40 percent of U.S. commercial shipments by U.S. producers and importers of wire rod from all subject sources except the United Kingdom. Specifically, pricing data reported by these firms accounted for 45.3 percent of U.S. producers' shipments of wire rod and the following percentages of U.S. commercial shipments of subject imports in 2016: Belarus, \*\*\* percent; Italy, \*\*\* percent; Korea, \*\*\* percent; Russia, \*\*\* percent; South Africa, \*\*\* percent; Spain, \*\*\* percent; Turkey, \*\*\* percent; Ukraine, \*\*\* percent; the United Arab Emirates, \*\*\* percent; and the United Kingdom, \*\*\* percent.

Price data for products 1-6 are presented in tables V-3 to V-8 and figures V-3 to V-8.

Table V-3
Wire rod: Weighted-average f.o.b. prices and quantities of domestic and imported product 1<sup>1</sup> and margins of underselling/(overselling), by quarters, January 2014-September 2017

<u>g</u> .	ns of unde	Inited State			Belarus	•		Italy	
Period	Price (dollars p short to	per	Quantity hort tons)	Price (dollars per short ton)	Quantity (short tons)	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)	Margin (percent)
<b>2014:</b> JanMar.		663	54,955		***			***	
AprJun.		653	53,629		***			***	
JulSep.		636	56,222		***			***	
OctDec.		622	43,464		***			***	
2015:			,						
JanMar.		570	65,700		***			***	
AprJun.		511	66,729		***			***	
JulSep.		527	84,413		***			***	
OctDec.		473	60,586		***		-	***	
2016:		400	E0 470		***			***	
JanMar.		438	52,470		***			***	
AprJun. JulSep.		483 489	60,328 56,870		***		***	***	***
OctDec.		454	68,320		***		***	***	***
2017:		454	00,320						
JanMar.		503	91,153		***			***	
AprJun.		549	80,272		***		***	***	***
JulSep.		549	76,796		***			***	
		Korea			Russia			South Africa	
	Price	Quantity		Price					
Period	Price (dollars per short ton)	Quantity (short tons)	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)	Margin ( <i>percent</i> )
2014:	(dollars per short ton)	(short tons)	(percent)	(dollars per	Quantity (short tons)		Price (dollars per	Quantity (short tons)	
<b>2014:</b> JanMar.	(dollars per short ton)	(short tons)	(percent)	(dollars per	Quantity (short tons)		Price (dollars per	Quantity (short tons)	
2014: JanMar. AprJun.	(dollars per short ton)	(short tons)	(percent)  ***	(dollars per short ton)	Quantity (short tons)	(percent)	Price (dollars per short ton)	Quantity (short tons)	(percent)
2014: JanMar. AprJun. JulSep.	(dollars per short ton)  ***  ***	(short tons)	(percent)  ***  ***	(dollars per short ton)	Quantity (short tons)  ***  ***	(percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***	(percent)
2014: JanMar. AprJun. JulSep. OctDec.	(dollars per short ton)	(short tons)	(percent)  ***	(dollars per short ton)	Quantity (short tons)	(percent)	Price (dollars per short ton)	Quantity (short tons)	(percent)
2014: JanMar. AprJun. JulSep.	(dollars per short ton)  ***  ***	(short tons)	(percent)  ***  ***	(dollars per short ton)	Quantity (short tons)  ***  ***	(percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***	(percent)
2014: JanMar. AprJun. JulSep. OctDec. 2015:	(dollars per short ton)  ***  ***  ***	(short tons)  ***  ***  ***	***  ***  ***  ***	(dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***	(percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***	(percent)
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar.	(dollars per short ton)  ***  ***  ***  ***	(short tons)  ***  ***  ***  ***	(percent)  ***  ***  ***  ***	(dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***	(percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***	(percent)
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar. AprJun.	(dollars per short ton)  ***  ***  ***  ***	(short tons)  ***  ***  ***  ***  0	(percent)  ***  ***  ***  ***	(dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***	(percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***	(percent)
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar. AprJun. JulSep. OctDec. 2016:	(dollars per short ton)  ***  ***  ***  ***  ***	(short tons)  ***  ***  ***  0  ***	(percent)  ***  ***  ***  ***  ***	(dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***	(percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***	(percent)
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar. AprJun. JulSep. OctDec. 2016: JanMar.	(dollars per short ton)  ***  ***  ***  ***  ***  ***  ***	(short tons)  ***  ***  ***  0  ***	(percent)  ***  ***  ***  ***  ***  ***	(dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	(percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	(percent) ****
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar. AprJun. JulSep. OctDec. 2016:	(dollars per short ton)  ***  ***  ***  ***  ***  ***  ***	(short tons)  ***  ***  ***  0  ***  ***  ***	(percent)  ***  ***  ***  ***  ***  ***  ***	(dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	(percent) ***	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	(percent) ***
2014: JanMar.  AprJun. JulSep. OctDec. 2015: JanMar. AprJun. JulSep. OctDec. 2016: JanMar. AprJun.	(dollars per short ton)  ***  ***  ***  ***  ***  ***  ***	(short tons)  ***  ***  ***  0  ***  ***  ***  ***	(percent)  ***  ***  ***  ***  ***  ***  ***	(dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	(percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	(percent) ***
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar. AprJun. JulSep. OctDec. 2016: JanMar. AprJun. JulSep. OctDec. 2017:	(dollars per short ton)  ***  ***  ***  ***  ***  ***  ***	(short tons)  ***  ***  ***  0  ***  ***  ***  ***	(percent)  ***  ***  ***  ***  ***  ***  ***	(dollars per short ton) ***	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	(percent) ***	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	(percent) ***  ***
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar. AprJun. JulSep. OctDec. 2016: JanMar. AprJun. JulSep. OctDec. 2017: JanMar.	(dollars per short ton)  ***  ***  ***  ***  ***  ***  ***	(short tons)  ***  ***  ***  0  ***  ***  ***  ***	(percent)  ***  ***  ***  ***  ***  ***  ***	(dollars per short ton) ***  ***  ***	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	(percent) ***  ***  ***	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	(percent) ***
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar. AprJun. JulSep. OctDec. 2016: JanMar. AprJun. JulSep. OctDec. 2017:	(dollars per short ton)  ***  ***  ***  ***  ***  ***  ***	(short tons)  ***  ***  ***  0  ***  ***  ***  ***	***  ***  ***  ***  ***  ***  ***  ***  ***	(dollars per short ton) ***  ***	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	(percent) *** *** ***	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	(percent) ***  ***

Table continued on next page.

Table V-3--Continued Wire rod: Weighted-average f.o.b. prices and quantities of domestic and imported product 1<sup>1</sup> and margins of underselling/(overselling), by quarters, January 2014-September 2017

	ns of unde	Inited States			Spain			Turkey		
Period	Price (dollars µ short to		Quantity hort tons)	Price (dollars per short ton)	Quantity (short tons)	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)	Margin (percent)	
<b>2014:</b> JanMar.		663	54,955		***			***		
AprJun.		653	53,629		***		***	***	***	
JulSep.		636	56,222		***		***	***	***	
OctDec.		622	43,464		***		***	***	***	
2015:			,							
JanMar.		570	65,700		***		***	***	***	
AprJun.		511	66,729		***		***	***	***	
JulSep.		527	84,413		***		***	***	***	
OctDec.		473	60,586		***		***	***	***	
2016:										
JanMar.		438	52,470		***		***	***	***	
AprJun.		483	60,328		***		***	***	***	
JulSep.		489	56,870		***		***	***	***	
OctDec.		454	68,320		***		***	***	***	
2017:		500	04.450		***		***	***	***	
JanMar.		503	91,153		***		***	***	***	
AprJun.		549	80,272		***			***		
JulSep.		549	76,796		***		***	***	***	
	l .		United Arab Emirates							
		Ukraine			ed Arab Emir	ates		nited Kingdor	m	
	Price	Quantity	Marain	Price			Price			
Period	Price (dollars per short ton)		Margin ( <i>percent</i> )		Quantity (short tons)	Margin (percent)		Quantity (short tons)	m Margin ( <i>percent</i> )	
2014:	(dollars per	Quantity (short tons)		Price (dollars per	Quantity (short tons)	Margin	Price (dollars per	Quantity (short tons)	Margin	
<b>2014:</b> JanMar.	(dollars per	Quantity (short tons)		Price (dollars per	Quantity (short tons)	Margin	Price (dollars per short ton)	Quantity (short tons)	Margin (percent)	
2014: JanMar. AprJun.	(dollars per short ton) 	Quantity (short tons)	(percent)	Price (dollars per short ton)	Quantity (short tons)	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)	Margin	
2014: JanMar. AprJun. JulSep.	(dollars per short ton)	Quantity (short tons)	(percent) ***	Price (dollars per short ton)	Quantity (short tons)  ***  ***	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***	Margin (percent)	
2014: JanMar. AprJun. JulSep. OctDec.	(dollars per short ton) 	Quantity (short tons)	(percent)	Price (dollars per short ton)	Quantity (short tons)	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)	Margin (percent)	
2014: JanMar. AprJun. JulSep.	(dollars per short ton)	Quantity (short tons)	(percent) ***	Price (dollars per short ton)	Quantity (short tons)  ***  ***	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***	Margin (percent)	
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar.	(dollars per short ton)	Quantity (short tons)  ***  ***  ***	(percent) ***	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***	Margin (percent)  ***	
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar. AprJun.	(dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***	(percent) ***  ***	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***	Margin (percent)  ***	
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar. AprJun. JulSep.	(dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***	(percent) *** *** ***	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***	Margin (percent)	
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar. AprJun. JulSep. OctDec.	(dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***	(percent) ***  ***  ***  ***	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***	Margin (percent)  *** 	
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar. AprJun. JulSep.	(dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***	(percent) ***  ***  ***  ***	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***	Margin (percent)  *** 	
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar. AprJun. JulSep. OctDec. 2016:	(dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	(percent) ***  ***  ***  ***  ***	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	Margin (percent) ***	
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar. AprJun. JulSep. OctDec. 2016: JanMar.	(dollars per short ton) ***  ***  ***  ***  ***  ***	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	(percent) ***  ***  ***  ***  ***  ***	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	Margin (percent)	
2014: JanMar.  AprJun. JulSep. OctDec. 2015: JanMar. AprJun. JulSep. OctDec. 2016: JanMar. AprJun.	(dollars per short ton) ***  ***  ***  ***  ***  ***	Quantity (short tons)	(percent) ***  ***  ***  ***  ***  ***	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	Margin (percent)  ***	
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar. AprJun. JulSep. OctDec. 2016: JanMar. AprJun. JulSep. OctDec. 2017:	(dollars per short ton) ***  ***  ***  ***  ***  ***	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	(percent) ***  ***  ***  ***  ***  ***  ***	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	Margin (percent) ***	
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar. AprJun. JulSep. OctDec. 2016: JanMar. AprJun. JulSep. OctDec. 2017: JanMar.	(dollars per short ton) ***  ***  ***  ***  ***  ***	Quantity (short tons)	(percent) ***  ***  ***  ***  ***  ***  ***	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	Margin (percent) ***	
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar. AprJun. JulSep. OctDec. 2016: JanMar. AprJun. JulSep. OctDec. 2017:	(dollars per short ton)	Quantity (short tons)	(percent) ***  ***  ***  ***  ***  ***  ***	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	Margin (percent) ***	

<sup>&</sup>lt;sup>1</sup> Product 1: Industrial quality wire rod, grade C1006, 5.5 mm (7/32 inch) through 12 mm (15/32 inch) in diameter, for hangers, chain link fencing, collated nails and staples, grates, and other formed products (in green condition, e.g., NOT cleaned, coated, etc.).

Table V-4
Wire rod: Weighted-average f.o.b. prices and quantities of domestic and imported product 2<sup>1</sup> and margins of underselling/(overselling), by quarters, January 2014-September 2017

margi	ns of unde			y quarte	is, varidary	ZOTT OCP				
	U	Inited State	s		Belarus			Italy		
Period	Price (dollars µ short to		Quantity hort tons)	Price (dollars per short ton)	Quantity (short tons)	Margin ( <i>percent</i> )	Price (dollars per short ton)	Quantity (short tons)	Margin (percent)	
2014:										
JanMar.		684	49,961		***			***		
AprJun.		667	50,796		***			***		
JulSep.		651	53,882		***			***		
OctDec.		633	44,654		***			***		
2015:										
JanMar.		565	78,405		***			***		
AprJun.		514	81,459		***			***		
JulSep.		525	75,038	***	***	***		***		
OctDec.		467	69,812	***	***	***	***	***	***	
2016:										
JanMar.		446	51,402	***	***	***		***		
AprJun.		498	52,159	***	***	***		***		
JulSep.		502	48,614		***		***	***	***	
OctDec.		464	44,088		***		***	***	***	
2017:		504	04 400		***		***	***	***	
JanMar.		531	61,488		***		***	***	***	
AprJun.		564	53,899						***	
JulSep.		570	54,878		***			***		
		Korea			Russia		South Africa			
	<b>-</b> ·									
I	Price	Quantity		Price	_		Price			
Period	(dollars per short ton)	Quantity (short tons)	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)	Margin ( <i>percent</i> )	
2014:	(dollars per short ton)	(short		(dollars per short ton)	(short tons)	(percent)	(dollars per short ton)			
<b>2014:</b> JanMar.	(dollars per short ton)	(short tons)		(dollars per short ton)		(percent)	(dollars per short ton)	(short tons)		
2014: JanMar. AprJun.	(dollars per short ton)	(short tons)	(percent)	(dollars per short ton)	(short tons)  ***	(percent)	(dollars per short ton) 	(short tons)  ***	(percent)	
2014: JanMar. AprJun. JulSep.	(dollars per short ton)	(short tons)  ***  ***	(percent)	(dollars per short ton)	(short tons)  ***  ***	(percent)  	(dollars per short ton)	(short tons)  ***  ***	(percent)  	
2014: JanMar. AprJun. JulSep. OctDec.	(dollars per short ton)	(short tons)	(percent)	(dollars per short ton)	(short tons)  ***	(percent)	(dollars per short ton) 	(short tons)  ***	(percent)	
2014: JanMar. AprJun. JulSep.	(dollars per short ton)	(short tons)  ***  ***	(percent)	(dollars per short ton)	(short tons)  ***  ***	(percent)  	(dollars per short ton)	(short tons)  ***  ***	(percent)  	
2014: JanMar. AprJun. JulSep. OctDec. 2015:	(dollars per short ton)	(short tons)  ***  ***  ***	(percent) *** ***	(dollars per short ton)	(short tons)  ***  ***  ***  ***	(percent)	(dollars per short ton)	(short tons)  ***  ***  ***  ***	(percent)	
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar.	(dollars per short ton)	(short tons)  ***  ***  ***  ***	(percent) *** ***	(dollars per short ton)	(short tons)  ***  ***  ***  ***	(percent)	(dollars per short ton)	(short tons)  ***  ***  ***  ***	(percent)	
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar. AprJun.	(dollars per short ton) *** ***	(short tons)  ***  ***  ***  ***  ***	(percent) *** *** ***	(dollars per short ton)	(short tons)  ***  ***  ***  ***  ***	(percent)	(dollars per short ton)	(short tons)  ***  ***  ***  ***  ***	(percent)	
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar. AprJun. JulSep. OctDec.	(dollars per short ton) *** *** *** ***	(short tons)  ***  ***  ***  ***  ***  ***	(percent) *** ***  ***  ***	(dollars per short ton)	(short tons)  ***  ***  ***  ***  ***  ***	(percent)	(dollars per short ton)	(short tons)  ***  ***  ***  ***  ***  ***	(percent) ***	
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar. AprJun. JulSep.	(dollars per short ton) *** *** *** ***	(short tons)  ***  ***  ***  ***  ***  ***	(percent) *** ***  ***  ***	(dollars per short ton)	(short tons)  ***  ***  ***  ***  ***  ***	(percent)	(dollars per short ton)	(short tons)  ***  ***  ***  ***  ***  ***	(percent) ***	
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar. AprJun. JulSep. OctDec. 2016:	(dollars per short ton) *** *** *** ***	(short tons)  ***  ***  ***  ***  ***  ***	(percent) ***  ***  ***  ***  ***	(dollars per short ton)	(short tons)  ***  ***  ***  ***  ***  ***  ***	(percent) ***	(dollars per short ton)	(short tons)  ***  ***  ***  ***  ***  ***  ***	(percent) ***	
2014: JanMar.  AprJun. JulSep. OctDec. 2015: JanMar. AprJun. JulSep. OctDec. 2016: JanMar.	(dollars per short ton) *** ***  ***  ***  ***  ***	(short tons)  ***  ***  ***  ***  ***  ***  ***	(percent) ***  ***  ***  ***  ***  ***	(dollars per short ton)	(short tons)  ***  ***  ***  ***  ***  ***  ***	(percent) ***	(dollars per short ton)	(short tons)  ***  ***  ***  ***  ***  ***  ***	(percent) *** ***	
2014: JanMar.  AprJun. JulSep. OctDec. 2015: JanMar. AprJun. JulSep. OctDec. 2016: JanMar. AprJun.	(dollars per short ton) *** ***  ***  ***  ***  ***	(short tons)  ***  ***  ***  ***  ***  ***  ***	(percent) ***  ***  ***  ***  ***  ***	(dollars per short ton)	(short tons)  ***  ***  ***  ***  ***  ***  ***	(percent) ***	(dollars per short ton)	(short tons)  ***  ***  ***  ***  ***  ***  ***	(percent) ***  ***	
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar. AprJun. JulSep. OctDec. 2016: JanMar. AprJun. JulSep. OctDec. 2017:	(dollars per short ton) ***  ***  ***  ***  ***  ***  ***	(short tons)  ***  ***  ***  ***  ***  ***  ***	(percent) ***  ***  ***  ***  ***  ***  ***	(dollars per short ton) ***  ***  ***	(short tons)  ***  ***  ***  ***  ***  ***  ***	(percent) ***  ***  ***	(dollars per short ton) **** ***	(short tons)  ***  ***  ***  ***  ***  ***  ***	(percent) ***  ***  ***	
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar. AprJun. JulSep. OctDec. 2016: JanMar. AprJun. JulSep. OctDec. 2017: JanMar.	(dollars per short ton) ***  ***  ***  ***  ***  ***  ***	(short tons)  ***  ***  ***  ***  ***  ***  ***	(percent) ***  ***  ***  ***  ***  ***  ***	(dollars per short ton) ***  ***  ***  ***	(short tons)  ***  ***  ***  ***  ***  ***  ***	(percent) ***  ***  ***  ***	(dollars per short ton) ****  ***	(short tons)  ***  ***  ***  ***  ***  ***  ***	(percent) ***  ***	
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar. AprJun. JulSep. OctDec. 2016: JanMar. AprJun. JulSep. OctDec. 2017:	(dollars per short ton) ***  ***  ***  ***  ***  ***  ***	(short tons)  ***  ***  ***  ***  ***  ***  ***	(percent) ***  ***  ***  ***  ***  ***  ***	(dollars per short ton) ***  ***  ***	(short tons)  ***  ***  ***  ***  ***  ***  ***	(percent) ***  ***  ***  ***  ***	(dollars per short ton) ****  ***  ***	(short tons)  ***  ***  ***  ***  ***  ***  ***	(percent) ***  ***  ***	

Table continued on next page.

Table V-4--Continued Wire rod: Weighted-average f.o.b. prices and quantities of domestic and imported product 2<sup>1</sup> and margins of underselling/(overselling), by quarters, January 2014-September 2017

	ns of unde U	Inited States			Spain	•		Turkey	Turkey		
Period	Price (dollars µ short to		Quantity hort tons)	Price (dollars per short ton)	Quantity (short tons)	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)	Margin (percent)		
<b>2014:</b> JanMar.		684	49,961		***			***			
AprJun.		667	50,796		***		***	***	***		
JulSep.		651	53,882		***		***	***	***		
OctDec.		633	44,654		***		***	***	***		
2015:		000	11,001								
JanMar.		565	78,405		***		***	***	***		
AprJun.		514	81,459		***		***	***	***		
JulSep.		525	75,038		***		***	***	***		
OctDec.		467	69,812		***		***	***	***		
2016:											
JanMar.		446	51,402		***		***	***	***		
AprJun.		498	52,159		***		***	***	***		
JulSep.		502	48,614		***		***	***	***		
OctDec.		464	44,088		***		***	***	***		
2017:											
JanMar.		531	61,488		***		***	***	***		
AprJun.		564	53,899		***		***	***	***		
JulSep.		570	54,878		***			***			
	'		<b>United Arab Emirates</b>								
		Ukraine		Unit	ed Arab Emir	ates	Ur	nited Kingdor	m		
	Price	Quantity		Price			Price				
Period	Price (dollars per short ton)		Margin ( <i>percent</i> )		Quantity (short tons)	Margin (percent)		Quantity (short tons)	m Margin ( <i>percent</i> )		
2014:	(dollars per	Quantity (short tons)		Price (dollars per	Quantity (short tons)	Margin	Price (dollars per	Quantity (short tons)	Margin		
<b>2014:</b> JanMar.	(dollars per	Quantity (short tons)		Price (dollars per	Quantity (short tons)	Margin	Price (dollars per	Quantity (short tons)	Margin		
2014: JanMar. AprJun.	(dollars per short ton)	Quantity (short tons)		Price (dollars per short ton)	Quantity (short tons)	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)	Margin (percent)		
2014: JanMar. AprJun. JulSep.	(dollars per short ton) 	Quantity (short tons)	(percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***	Margin (percent)		
2014: JanMar. AprJun. JulSep. OctDec.	(dollars per short ton) 	Quantity (short tons)	(percent)	Price (dollars per short ton)	Quantity (short tons)	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)	Margin (percent) 		
2014: JanMar. AprJun. JulSep.	(dollars per short ton) 	Quantity (short tons)	(percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***	Margin (percent) 		
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar.	(dollars per short ton)	Quantity (short tons)  ***  ***  ***		Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***	Margin (percent)  		
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar. AprJun.	(dollars per short ton) ***	Quantity (short tons)  ***  ***  ***  ***	(percent) ***	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***	Margin (percent)  		
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar.	(dollars per short ton) ***	Quantity (short tons)  ***  ***  ***  ***	(percent) ***	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***	Margin (percent)		
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar. AprJun. JulSep.	(dollars per short ton) ***  ***  ***	Quantity (short tons)  ***  ***  ***  ***  ***	(percent) ***  ***  ***	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***	Margin (percent)		
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar. AprJun. JulSep. OctDec.	(dollars per short ton) ***  ***  ***	Quantity (short tons)  ***  ***  ***  ***  ***	(percent) ***  ***  ***	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***	Margin (percent)		
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar. AprJun. JulSep. OctDec. 2016:	(dollars per short ton)	Quantity (short tons)	(percent) ***  ***  ***  ***	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	Margin (percent)		
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar. AprJun. JulSep. OctDec. 2016: JanMar.	(dollars per short ton) ***  ***  ***  ***  ***	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	(percent) ***  ***  ***  ***  ***	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	Margin (percent)		
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar. AprJun. JulSep. OctDec. 2016: JanMar. AprJun.	(dollars per short ton) ***  ***  ***  ***  ***	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	(percent) ***  ***  ***  ***  ***  ***	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	Margin (percent)		
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar. AprJun. JulSep. OctDec. 2016: JanMar. AprJun. JulSep. OctDec. 2017:	(dollars per short ton) ***  ***  ***  ***  ***	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	(percent) ***  ***  ***  ***  ***  ***	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	Margin (percent)		
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar. AprJun. JulSep. OctDec. 2016: JanMar. AprJun. JulSep. OctDec. 2017: JanMar.	(dollars per short ton) ***  ***  ***  ***  ***	Quantity (short tons)	(percent) ***  ***  ***  ***  ***  ***	Price (dollars per short ton) ***  ***  ***	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	Margin (percent) *** ***	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	Margin (percent)		
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar. AprJun. JulSep. OctDec. 2016: JanMar. AprJun. JulSep. OctDec. 2017:	(dollars per short ton) ***  ***  ***  ***  ***	Quantity (short tons)	(percent) ***  ***  ***  ***  ***  ***	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)  ***  ***  ***  ***  ***  ***  ***	Margin (percent)		

<sup>1</sup> Product 2: Industrial quality wire rod, grade C1008 through C1010, 5.5 mm (7/32 inch) through 12 mm (15/32 inch) in diameter, for hangers, chain link fencing, collated nails and staples, grates, and other formed products (in green condition, e.g., NOT cleaned, coated, etc.).

Table V-5
Wire rod: Weighted-average f.o.b. prices and quantities of domestic and imported product 3<sup>1</sup> and margins of underselling/(overselling), by quarters, January 2014-September 2017

margi	ns of unde	i se iiii ig/(c	verseining)	, by quarte	is, January	2014-Sept	ember 2017			
	ι	Inited State	s		Belarus			Italy		
Period	Price (dollars   short to		Quantity hort tons)	Price (dollars per short ton)	Quantity (short tons)	Margin ( <i>percent</i> )	Price (dollars per short ton)	Quantity (short tons)	Margin (percent)	
2014:										
JanMar.		662	97,103		***			***		
AprJun.		649	127,475		***			***		
JulSep.		639	122,357		***			***		
OctDec.		622	101,598		***			***		
2015:										
JanMar.		572	97,895		***			***		
AprJun.		516	128,833		***			***		
JulSep.		517	134,397		***			***		
OctDec.		464	107,104	***	***	***		***		
2016:										
JanMar.		439	127,173	***	***	***		***		
AprJun.		478	142,655	***	***	***		***		
JulSep.		498	113,376	***	***	***	***	***	***	
OctDec.		457	89,407	***	***	***	***	***	***	
2017:		500	400.000	***	***	***		***		
JanMar.		508	166,008	***	***	***	***	***	***	
AprJun.		559	140,466		***				***	
JulSep.		560	117,174	***	***	***		***		
		Korea			Russia		;	South Africa		
	Price	Quantity		Price			Price			
Period	(dollars per short ton)	(short tons)	Margin (percent)	(dollars per short ton)	Quantity (short tons)	Margin ( <i>percent</i> )	(dollars per short ton)	Quantity (short tons)	Margin ( <i>percent</i> )	
<b>2014:</b> JanMar.		***			***			***		
	***	***	***		***			***		
AprJun.		***			***			***		
JulSep. OctDec.	***	***	***		***			***		
2015:										
JanMar.										
	***	***	***		***			***		
AprJun.	***	***	***		***			***		
AprJun. JulSep.										
-	***	***	***		***			***		
JulSep. OctDec.	***	***	***		***		***	***	***	
JulSep.	***	***	***		***		***	***	***	
JulSep. OctDec. <b>2016:</b>	***	*** ***	***		***	***	***	***	***	
JulSep. OctDec. 2016: JanMar.	***	***  ***  ***	***	 ***	***  ***  ***	 ***	***	***  ***  ***	***	
JulSep. OctDec. 2016: JanMar. AprJun.	***	***  ***  ***	***	***	***  ***  ***  ***	*** ***	*** ***	***  ***  ***  ***	***	
JulSep. OctDec. 2016: JanMar. AprJun. JulSep.	***	***  ***  ***  ***  ***	***	***	***  ***  ***  ***  ***  ***	***  ***  ***	***	***  ***  ***  ***  ***  ***	***	
JulSep. OctDec. 2016: JanMar. AprJun. JulSep. OctDec. 2017: JanMar.	***	***  ***  ***  ***  ***  ***  ***	***	***	***  ***  ***  ***  ***  ***  ***	***  ***  ***	***  ***	***  ***  ***  ***  ***  ***  ***	***	
JulSep. OctDec. 2016: JanMar. AprJun. JulSep. OctDec. 2017:	*** ***	***  ***  ***  ***  ***	***	***  ***  ***	***  ***  ***  ***  ***  ***	***  ***  ***	***  ***	***  ***  ***  ***  ***  ***	***  ***	

Table continued on next page.

Table V-5--Continued Wire rod: Weighted-average f.o.b. prices and quantities of domestic and imported product 3<sup>1</sup> and margins of underselling/(overselling), by quarters, January 2014-September 2017

	United States				Spain			Turkey		
Period	Price (dollars p short to		Quantity chort tons)	Price (dollars per short ton)	Quantity (short tons)	Margin ( <i>percent</i> )	Price (dollars per short ton)	Quantity (short tons)	Margin (percent)	
<b>2014:</b> JanMar.		662	97,103	***	***	***		***		
AprJun.		649	127,475	***	***	***	***	***	***	
JulSep.		639	122,357	***	***	***	***	***	***	
OctDec.		622	101,598	***	***	***	***	***	***	
2015:		V==	,							
JanMar.		572	97,895	***	***	***	***	***	***	
AprJun.		516	128,833	***	***	***	***	***	***	
JulSep.		517	134,397	***	***	***	***	***	***	
OctDec.		464	107,104	***	***	***	***	***	***	
2016:										
JanMar.		439	127,173	***	***	***	***	***	***	
AprJun.		478	142,655	***	***	***	***	***	***	
JulSep.		498	113,376	***	***	***	***	***	***	
OctDec.		457	89,407	***	***	***	***	***	***	
2017:		500	166,000	***	***	***	***	***	***	
JanMar.		508	166,008	***	***	***	***	***	***	
AprJun.		559	140,466		***		***	***	***	
JulSep.		560	117,174							
		Ukraine			ed Arab Emir	ates		nited Kingdo	m	
			Morgin		Quantity	Morain		Quantity	Morgin	
Period	short ton)	tons)	(percent)	short ton)	(short tons)	(percent)	short ton)	(short tons)	(percent)	
2014:		طب طب مد ما م			***			***		
	***	***	***		***			***		
	***	***	***		***			***		
JulSep.	***	***	***		***			***		
OctDec.	***	***	***		***			***		
2016:										
JanMar.	***	***	***	***	***	***		***		
AprJun.	***	***	***		***			***		
JulSep.	***	***	***		***			***		
OctDec.	***	***	***		***			***		
2017:	***	***	***		***			***		
JanMar.										
	***	***	***		***		***	***	***	
2014: JanMar. AprJun. JulSep. OctDec. 2015: JanMar. AprJun.	  *** ***	***  ***  ***  ***	***		***  ***  ***  ***  ***			*** ***  ***  ***	Marg (perc	

<sup>1</sup> Product 3: Mesh quality wire rod, grades C1006 through C1015, 5.5 mm (7/32 inch) through 14 mm (9/16 inch) in diameter, for the manufacturing of concrete reinforcement products such as wire for A-82 applications (in green condition, e.g., NOT cleaned, coated, etc.).

# Table V-6 Wire rod: Weighted-average f.o.b. prices and quantities of domestic and imported product 4<sup>1</sup> and margins of underselling/(overselling), by quarters, January 2014-September 2017 Table V-7 Wire rod: Weighted-average f.o.b. prices and quantities of domestic and imported product 5<sup>1</sup> and margins of underselling/(overselling), by quarters, January 2014-September 2017 Table V-8 Wire rod: Weighted-average f.o.b. prices and quantities of domestic and imported product 61 and margins of underselling/(overselling), by quarters, January 2014-September 2017 Figure V-3 Wire rod: Weighted-average prices and quantities of domestic and imported product 1, by quarters, January 2014-September 2017 Figure V-4 Wire rod: Weighted-average prices and quantities of domestic and imported product 2, by quarters, January 2014-September 2017 Figure V-5 Wire rod: Weighted-average prices and quantities of domestic and imported product 3, by quarters, January 2014-September 2017 Figure V-6 Wire rod: Weighted-average prices and quantities of domestic and imported product 4, by quarters, January 2014-September 2017 Figure V-7 Wire rod: Weighted-average prices and quantities of domestic and imported product 5, by

quarters, January 2014-September 2017

## Figure V-8

Wire rod: Weighted-average prices and quantities of domestic and imported product 6, by quarters, January 2014-September 2017

#### Price trends

In general, prices decreased during January 2014 to September 2017. Generally, domestic prices of all six pricing products decreased during 2014 and 2015 and increased during 2016 and 2017. Table V-9 summarizes the price trends, by country and by product. As shown in the table, domestic price decreases ranged from \*\*\* to \*\*\* percent during January 2014 to September 2017, while import price increases ranged from \*\*\* to \*\*\* percent and decreases ranged from \*\*\* to \*\*\* percent. Generally, prices decreased for all pricing products from the beginning of 2014 to the first quarter of 2016. Prices for products 2, 3, 4, and 6 mostly increased and prices for products 1 and 5 decreased from the second quarter of 2016 through the third quarter of 2017.

#### Table V-9

Wire rod: Summary of weighted-average f.o.b. prices for products 1-6 from the United States and subject countries

\* \* \* \* \* \* \*

# **Price comparisons**

As shown in table V-10a, prices for product imported from subject countries were below those for U.S.-produced product in 170 of 231 instances (1,201,565 short tons); margins of underselling ranged from \*\*\* percent to \*\*\* percent. In the remaining 61 instances (307,579 short tons), prices for subject country product were between \*\*\* percent to \*\*\* percent above prices for the domestic product. Prices for imports from Spain (principally for products other than industrial quality) were more often priced higher than U.S.-produced products, in contrast to the prices of imports from the other subject countries.

Table V-10a
Wire rod: Instances of underselling/overselling and the range and average of margins, by country,
January 2014- September 2017

		U	nderselling		
Country Source	Number of	Quantity <sup>1</sup>	Average margin	Margin range	
	quarters	(short tons)	(percent)	Min	Max
Belarus	12	***	***	***	***
Italy	9	***	***	***	***
Korea	17	***	***	***	***
Russia	18	***	***	***	***
South Africa	16	***	***	***	***
Spain	13	***	***	***	***
Turkey	34	***	***	***	***
Ukraine	35	***	***	***	***
UAE	4	***	***	***	***
UK	12	***	***	***	***
Total, underselling	170	1,201,565	11.8	0.1	42.5
		(0	verselling)		
		1	Average	Margin range	e (percent)
Carrature Carraga	Number of	Quantity <sup>1</sup>	margin		
Country Source	quarters	(short tons)	(percent)	Min ***	Max ***
Belarus	1				
Italy	2	***	***	***	***
Korea	16	***	***	***	***
Russia	0	0			
South Africa	4	***	***	***	***
Spain	26	***	***	***	***
Turkey	8	***	***	***	***
Ukraine	1	***	***	***	***
UAE	0	0			
UK	3	***	***	***	***
Total, overselling	61	307,579	(6.0)	(0.1)	(39.0)

<sup>&</sup>lt;sup>1</sup> These data include only quarters in which there is a comparison between the U.S. and subject product.

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

As show in table V-10b, the average margins of underselling ranged from \*\*\* percent (product 6) to \*\*\* percent (for product 2). The average margins of overselling ranged from \*\*\* percent (for product 1) to \*\*\* percent (for product 4). Each of the six pricing products had larger volumes and a great number of instances of underselling than overselling.

Table V-10b Wire rod: Instances of underselling/overselling and the range and average of margins, by pricing product, January 2014-September 2017

		Ur	nderselling		
	Number of	Quantity <sup>1</sup>	Average margin	Margin range	(percent)
Product	quarters	(short tons)	(percent)	Min	Max
Product 1	39	***	***	***	***
Product 2	51	***	***	***	***
Product 3	44	***	***	***	***
Product 4	20	***	***	***	***
Product 5	9	***	***	***	***
Product 6	7	***	***	***	***
Total, underselling	170	1,201,565	11.8	0.1	42.5
		(0	verselling)		
	N	0	Average	Margin range	(percent)
Product	Number of quarters	Quantity <sup>1</sup> (short tons)	margin (percent)	Min	Max
Product 1	13	***	***	***	***
Product 2	9	***	***	***	***
Product 3	21	***	***	***	***
Product 4	5	***	***	***	***
Product 5	5	***	***	***	***
Product 6	8	***	***	***	***
Total, overselling	61	307,579	(6.0)	(0.1)	(39.0)

<sup>&</sup>lt;sup>1</sup> These data include only quarters in which there is a comparison between the U.S. and subject product.

Source: Compiled from data submitted in response to Commission questionnaires

## **LOST SALES AND LOST REVENUE**

In the preliminary phase of these investigations, the Commission requested that U.S. producers of wire rod report purchasers where they had instances of lost sales or revenue due to competition from imports of wire rod from subject countries during January 2014 to December 2016. Four U.S. producers submitted lost sales and lost revenue allegations. The four responding U.S. producers identified 29 firms where they lost sales or revenue (8 consisting lost sales allegations, 2 consisting of lost revenue allegations, and 18 consisting of both types of allegations).

In the final phase of these investigations, all seven responding U.S. producers reported that they had to either reduce prices or roll back announced price increases, and all seven also reported that they had lost sales.

In the final phase of these investigations, staff issued questionnaires to 91 purchasers and received responses from 43 purchasers. Responding purchasers reported purchasing 3.3 million short tons of wire rod during in 2016 (table V-11 and V-12).

Of the 40 responding purchasers, 26 reported that, since 2014, they had purchased imported wire rod from subject countries instead of U.S.-produced product. Nineteen of these

purchasers reported that subject import prices were lower than U.S.-produced product, and 17 of these purchasers reported that price was a primary reason for the decision to purchase imported product rather than U.S.-produced product. Fourteen purchasers estimated the quantity of wire rod from subject countries purchased instead of domestic product since 2014; quantities ranged from 1,638 short tons to 143,290 short tons (tables V-13 and V-14). Of the 40 responding purchasers, two reported price as the primary reason for purchasing wire rod from Italy and the United Arab Emirates rather than domestic product, compared to 13 purchasers of Turkish wire rod. Volumes ranged from several thousand short tons (Belarus and the United Arab Emirates) to more than 100,000 short tons (Turkey and Ukraine). Purchasers identified quality, availability, and reliability of supply as non-price reasons for purchasing imported rather than U.S.-produced product.

Table V-11
Wire rod: Purchasers' responses to purchasing patterns, by firm

\* \* \* \* \* \* \*

Table V-12
Wire rod: Purchasers' responses regarding purchasing patterns, by subject country

	Number			Comparison years	
Source	of firms reporting	2014	2015	2016	2014-16
		Qua	antity (short to	ns)	Changes (percent)
United States	41	2,191,160	2,225,793	2,087,045	(4.8)
Belarus	***	***	***	***	***
Italy	***	***	***	***	***
Korea	***	***	***	***	***
Russia	***	***	***	***	***
South Africa	***	***	***	***	***
Spain	***	***	***	***	***
Turkey	***	***	***	***	***
Ukraine	***	***	***	***	***
United Arab Emirates	***	***	***	***	***
United Kingdom	***	***	***	***	***
All subject sources	***	***	***	***	***
Canada	***	***	***	***	***
All other countries	***	***	***	***	***
Unknown sources	***	***	***	***	***
All sources	43	3,382,134	3,297,704	3,283,118	(2.9)

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

Table V-13
Wire rod: Purchasers' responses to purchasing subject imports instead of domestic product, by firm

\* \* \* \* \* \* \*

Table V-14
Wire rod: Purchasers' responses to purchasing imported product instead of domestic product, by subject country

Source	Count of purchasers reporting subject instead of domestic	Count of purchasers reporting that imports were priced lower	Count of purchasers reporting that price was a primary reason for subject instead of domestic	Quantity (short tons)	Other reported reasons for purchasing subject instead of domestic
Belarus	4	4	4	***	5
Italy	3	2	2	***	6
Korea	11	8	6	***	10
Russia	9	7	7	***	5
South Africa	5	5	5	***	5
Spain	9	5	4	***	10
Turkey	16	13	13	***	5
Ukraine	9	8	7	***	6
United Arab Emirates	3	3	2	***	7
United Kingdom	7	4	4	***	9

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

Of the 41 responding purchasers, nine reported that U.S. producers had reduced prices in order to compete with lower-priced imports from nine of the ten subject countries (table V-15 and V-16; 24 reported that they did not know). No purchasers reported reduction of U.S. producers' prices in order to compete with lower-priced imports from \*\*\*. The reported estimated price reductions ranged from 5 to 15 percent.

Table V-15
Wire rod: Purchasers' responses to U.S. producer price reductions, by firm

\* \* \* \* \* \* \*

Table V-16
Wire rod: Purchasers' responses to U.S. producer price reductions, by subject country

Source	Count of purchasers reporting U.S. producers reduced prices	Simple average of estimated U.S. price reduction (percent)	Range of estimated U.S. price reductions (percent)
Belarus	3	***	***
Italy		***	***
Korea	2	***	***
Russia	1	***	***
South Africa	2	***	***
Spain	1	***	***
Turkey	6	***	***
Ukraine	4	***	***
United Arab Emirates	1	***	***
United Kingdom	2	***	***
All subject sources	9	8.9	5.0 to 15.0

## PART VI: FINANCIAL EXPERIENCE OF U.S. PRODUCERS

## **BACKGROUND**

Nine U.S. producers provided usable financial data for their total and merchant market operations on wire rod: ArcelorMittal, Cascade, Charter, Evraz, Gerdau, Keystone, Nucor, Mid American, and Sterling.<sup>1</sup> All nine firms reported commercial sales (U.S. shipments and exports) that were the same as their merchant market sales. \*\*\* firms, \*\*\*, reported internal consumption of wire rod to produce wire and wire products, and \*\*\* firms reported transfers of wire rod to affiliates to produce wire and wire products. The reported data are believed to account for almost all known sales by U.S. producers of wire rod.<sup>3</sup>

With respect to their U.S. operations, four producers reported that they purchase inputs from related parties: \*\*\*. 4 5

Three firms, \*\*\*, accounted for approximately \*\*\* percent of merchant market sales value and \*\*\* percent of total market sales of wire rod by U.S. producers in 2016 (based on tables VI-1 and VI-3). Wire rod accounted for an average 64 percent of U.S. producers' 2016 net sales from facilities that produced wire rod and other products, ranging from a low of \*\*\* percent \*\*\* to a high of \*\*\* percent \*\*\*.

As noted previously, ArcelorMittal closed its Georgetown, South Carolina wire rod production plant in August 2015. Although ArcelorMittal's reported data for 2014 and 2015 are included throughout this report and in the aggregated discussions of the U.S. industry, ArcelorMittal is largely excluded from narrative discussions on company-specific financial trends. Additionally, two U.S. producers, \*\*\*, did not report any internal consumption or transfers to related firms from 2014 to September 2017; therefore, these two firms' total market operations were the same as their merchant market operations.

<sup>&</sup>lt;sup>1</sup> ArcelorMittal provided data on its wire rod production from January 2014 to July 2015. Its wire rod plant in Georgetown, South Carolina closed in August 2015. ArcelorMittal's U.S. producer questionnaire, II-2

 $<sup>^2</sup>$  Financial results were reported on the basis of generally accepted accounting principles (GAAP). \*\*\*

<sup>&</sup>lt;sup>3</sup> Republic did not provide a U.S. producer questionnaire in the final phase of these investigations. In the preliminary phase, Republic provided an unusable questionnaire response with incomplete data that did not reconcile. From the information provided in the preliminary phase, Republic reported \*\*\* with 2016 total production of wire rod of \*\*\* short tons and \$\*\*\* in net sales.

<sup>&</sup>lt;sup>4</sup> \*\*\*. \*\*\*. U.S. producers' questionnaires, III-6 and III-7 and \*\*\*, email responses to USITC auditor, April 28, 2017 and November 20, 2017.

<sup>&</sup>lt;sup>5</sup> The Commission's current practice requires that relevant cost information associated with input purchases from related suppliers correspond to the manner in which this information is reported in the U.S. producer's own accounting books and records.

<sup>&</sup>lt;sup>6</sup> ArcelorMittal's plant closure in August 2015 \*\*\*.

## **OPERATIONS ON WIRE ROD**

This section presents the aggregated financial data on the operations of U.S. producers of wire rod. Table VI-1 presents financial data for the total market (commercial sales, transfers, and internal consumption) while table VI-2 presents the corresponding changes in average unit values for the total market. Table VI-3 presents financial data specific to the merchant market (commercial sales, including export sales) while table VI-4 presents the corresponding changes in average unit values for the merchant market.

The U.S. wire rod industry experienced diminished profitability during 2014-16 for total market operations and merchant market operations, with gross profit, operating income, and net income decreasing in absolute terms. All three profitability indicators were higher in January-September 2017 than in January-September 2016 in both total and merchant markets. For both total and merchant market operations, total net sales and cost of goods sold ("COGS") fell steadily from 2014 to 2016. Cash flows decreased irregularly from 2014 to 2016. Total net sales, COGS, and cash flow were higher in January-September 2017 than in January-September 2016 for both total and merchant market operations.

As a ratio to net sales, COGS and operating income decreased while gross profit and selling, general and administrative ("SG&A") expenses increased from 2014 to 2016 for both total and merchant market operations.<sup>7</sup> As a ratio to net sales, net income for total market operations was unchanged in 2016 relative to 2014, but declined for merchant market operations from 2014 to 2016.

On a per-unit basis, total net sales and COGS declined in both markets from 2014 to 2016. The unit values for net sales and average COGS were higher in January-September 2017 than in January-September 2016 in both markets.

# Net sales quantity and value

As shown in table VI-1, total net sales include commercial sales (U.S. commercial shipments and exports), internal consumption, and transfers to related firms. Total net sales declined from 2014 to 2016 in terms of quantity, value, and average unit value but were higher in January-September 2017 than in January-June 2016. Unlike commercials sales, the quantity reported for internal consumption and transfers<sup>8</sup> increased from 2014 to 2016, but the sales values in both categories were lower in 2016 than in 2014 because of the lower average unit values. Commercial sales and transfers to related firms in quantity and value were higher in January-September 2017 than in January-September 2016 while internal consumption were lower in quantity but higher in value.

Merchant market net sales also declined on a quantity, value, and average unit value basis from 2014 to 2016 but were higher in January-September 2017 than in January-September 2016.

-

<sup>&</sup>lt;sup>7</sup> Part of the increase in U.S. producers' profitability over the period \*\*\*.

<sup>&</sup>lt;sup>8</sup> All firms reported internal consumption and transfers to related firms at fair market value.

Table VI-1 Wire rod: Results of operations of U.S. producers for the total market, 2014-16, January to September 2016, and January to September 2017

	C	alendar year	January to September				
ltem	2014	2015	2016	2016	2017		
		Qua	ntity (short to	ns)			
Commercial sales	2,660,268	2,625,649	2,493,495	1,895,668	2,020,557		
Internal consumption <sup>1</sup>	***	***	***	***	**:		
Transfers to related firms <sup>2</sup>	***	***	***	***	**:		
Total net sales	3,680,257	3,676,608	3,573,436	2,755,429	2,871,656		
		Valu	ue (1,000 dolla	ars)			
Commercial sales	1,906,055	1,535,316	1,320,989	1,009,006	1,226,854		
Internal consumption <sup>1</sup>	***	***	***	***	**:		
Transfers to related firms <sup>2</sup>	***	***	***	***	**:		
Total net sales	2,578,070	2,096,056	1,856,769	1,437,464	1,709,007		
Cost of goods sold Raw materials	1,572,584	1,151,436	952,961	730,778	986,458		
Direct labor	127,050	132,395	134,087	98,938	99,970		
Other factory costs	720,783	700,627	630,076	487,551	482,058		
Total COGS	2,420,417	1,984,458	1,717,124	1,317,267	1,568,486		
Gross profit	157,653	111,598	139,645	120,197	140,521		
SG&A expense	82,227	75,825	86,734	65,225	67,706		
Operating income or (loss)	75,426	35,773	52,911	54,972	72,815		
Interest expense	7,542	6,647	(168)	(370)	453		
All other expenses	12,164	12,668	16,484	13,095	10,257		
All other income	6,471	5,682	7,724	6,096	6,378		
Net income or (loss)	62,191	22,140	44,319	48,343	68,483		
Depreciation/amortization	51,317	60,764	65,974	49,144	51,528		
Cash flow	113,508	82,904	110,293	97,487	120,011		
	Ratio to net sales (percent)						
Cost of goods sold Raw materials	61.0	54.9	51.3	50.8	57.7		
Direct labor	4.9	6.3	7.2	6.9	5.8		
Other factory costs	28.0	33.4	33.9	33.9	28.2		
Average COGS	93.9	94.7	92.5	91.6	91.8		
Gross profit	6.1	5.3	7.5	8.4	8.2		
SG&A expense	3.2	3.6	4.7	4.5	4.0		
Operating income or (loss)	2.9	1.7	2.8	3.8	4.3		
Net income or (loss)	2.4	1.1	2.4	3.4	4.0		

Table continued on next page.

**Table VI-1--Continued** Wire rod: Results of operations of U.S. producers for the total market, 2014-16, January to September 2016, and January to September 2017

	С	alendar year	January to September		
Item	2014	2015	2016	2016	2017
		Ratio to	total COGS (p	percent)	
Cost of goods sold					
Raw materials	65.0	58.0	55.5	55.5	62.9
Direct labor	5.2	6.7	7.8	7.5	6.4
Other factory costs	29.8	35.3	36.7	37.0	30.7
Average COGS	100.0	100.0	100.0	100.0	100.0
3		Unit value	e (dollars per	short ton)	
Commercial sales	716	585	530	532	607
Internal consumption <sup>1</sup>	***	***	***	***	***
Transfers to related firms <sup>2</sup>	***	***	***	***	***
Total net sales	701	570	520	522	595
Cost of goods sold					
Raw materials	427	313	267	265	344
Direct labor	35	36	38	36	35
Other factory costs	196	191	176	177	168
Average COGS	658	540	481	478	546
Gross profit	43	30	39	44	49
SG&A expense	22	21	24	24	24
Operating income or (loss)	20	10	15	20	25
Net income or (loss)	17	6	12	18	24
	Number of firms reporting				
Operating losses	6	5	5	1	2
Net losses	6	6	4	3	2
Data	9	9	8	8	8

Note.--Firm-by-firm financial data are presented in appendix F.

Internal consumption was reported by \*\*\*.

Transfers to related firms were reported by \*\*\*.

Table VI-2 Wire rod: Changes in AUVs, total market, between calendar years and between partial year periods

	E	Between partial year period		
Item	2014-16	2014-15	2015-16	2016-17
	Chang	ge in average unit	values (dollars per	short ton)
Commercial sales	(187)	(132)	(55)	75
Internal consumption	***	***	***	***
Transfers to related firms	***	***	***	***
Total net sales	(181)	(130)	(51)	73
Cost of goods sold Raw materials	(161)	(114)	(46)	78
Direct labor	3	1	2	(1)
Other factory costs	(20)	(5)	(14)	(9)
Average COGS	(177)	(118)	(59)	68
Gross profit	(4)	(12)	9	5
SG&A expense	2	(2)	4	(0)
Operating income or (loss)	(6)	(11)	5	5
Net income or (loss)	(4)	(11)	6	6

Source: Calculated from data in table VI-1.

Table VI-3 Wire rod: Results of operations of U.S. producers for the merchant market, 2014-16, January to September 2016, and January to September 2017

	C	alendar year	January to September			
ltem	2014	2015	2016	2016	2017	
		Qua	ntity (short to	ons)		
Commercial sales	2,666,397	2,625,649	2,493,495	1,895,668	2,020,557	
	Value (1,000 dollars)					
Commercial sales	1,910,147	1,535,316	1,320,989	1,009,006	1,226,854	
Cost of goods sold Raw materials	1,148,371	848,083	666,856	501,908	695,296	
Direct labor	107,522	111,181	113,262	83,500	84,822	
Other factory costs	539,153	506,415	450,124	346,100	347,297	
Total COGS	1,795,046	1,465,679	1,230,242	931,508	1,127,415	
Gross profit	115,101	69,637	90,747	77,498	99,439	
SG&A expense	62,466	56,377	65,610	49,074	51,463	
Operating income or (loss)	52,635	13,260	25,137	28,424	47,976	
Interest expense	5,494	5,121	(1,065)	(1,062)	(193)	
All other expenses	6,872	7,535	12,460	10,054	7,403	
All other income	6,139	5,057	7,373	5,849	6,153	
Net income or (loss)	46,408	5,661	21,115	25,281	46,919	
Depreciation/amortization	40,841	47,919	52,481	38,749	40,475	
Cash flow	87,249	53,580	73,596	64,030	87,394	
		Ratio to	o net sales (pe	ercent)		
Cost of goods sold Raw materials	60.1	55.2	50.5	49.7	56.7	
Direct labor	5.6	7.2	8.6	8.3	6.9	
Other factory costs	28.2	33.0	34.1	34.3	28.3	
Average COGS	94.0	95.5	93.1	92.3	91.9	
Gross profit	6.0	4.5	6.9	7.7	8.1	
SG&A expense	3.3	3.7	5.0	4.9	4.2	
Operating income or (loss)	2.8	0.9	1.9	2.8	3.9	
Net income or (loss)	2.4	0.4	1.6	2.5	3.8	

Table continued on next page.

Table VI-3--Continued Wire rod: Results of operations of U.S. producers for the merchant market, 2014-16, January to September 2016, and January to September 2017

	Calendar year			January to September		
Item	2014	2015	2016	2016	2017	
		Ratio to	total COGS (p	percent)		
Cost of goods sold Raw materials	64.0	57.9	54.2	53.9	61.7	
Direct labor	6.0	7.6	9.2	9.0	7.5	
Other factory costs	30.0	34.6	36.6	37.2	30.8	
Average COGS	100.0	100.0	100.0	100.0	100.0	
	Unit value (dollars per short ton)					
Commercial sales	716	585	530	532	607	
Cost of goods sold Raw materials	431	323	267	265	344	
Direct labor	40	42	45	44	42	
Other factory costs	202	193	181	183	172	
Average COGS	673	558	493	491	558	
Gross profit	43	27	36	41	49	
SG&A expense	23	21	26	26	25	
Operating income or (loss)	20	5	10	15	24	
Net income or (loss)	17	2	8	13	23	
	Number of firms reporting					
Operating losses	5	6	6	2	2	
Net losses	5	6	5	3	2	
Data	9	9	8	8	8	

Note.--Firm-by-firm financial data are presented in appendix F.

Table VI-4 Wire rod: Changes in AUVs for the merchant market, between calendar years and between partial year periods

	Between cale	endar years	Between partial year period		
Item	2014-16	2014-15	2015-16	2016-17	
	average unit val	ues (dollars per s	short ton)		
Commercial sales	(187)	(132)	(55)	75	
Cost of goods sold Raw materials	(163)	(108)	(56)	79	
Direct labor	5	2	3	(2)	
Other factory costs	(22)	(9)	(12)	(11)	
Average COGS	(180)	(115)	(65)	67	
Gross profit	(7)	(17)	10	8	
SG&A expense	3	(2)	5	(0)	
Operating income or (loss)	(10)	(15)	5	9	
Net income or (loss)	(9)	(15)	6	10	

Source: Calculated from data in table VI-3.

## **Operating costs and expenses**

As shown in table VI-1 for total market operations, raw material costs represent the single largest component of total COGS, at 65.0 percent in 2014, 58.0 percent in 2015, and 55.5 percent in 2016 with similar ratios in the merchant market. As a ratio to total COGS, raw materials costs were higher in January-September 2017 than in January-September 2016 for both markets. As shown in table F-1, average raw material costs, direct labor, and other factory costs varied from company to company. These cost differences may reflect underlying differences in input costs such as types of scrap or conversion costs (labor and other factory costs). The sales mix may also account for some of the cost differences. Table F-1 also shows that all U.S. producers experienced continuous declines in per-unit raw material costs from 2014 to 2016 but that such costs were higher in January-September 2017 than in January-September 2016. In the merchant market, raw material costs paralleled the total market; declining as a share of total COGS, net sales value, and on a per-unit basis from 2014 to 2016 but higher in January-September 2017 than in January-September 2016.

For both total and merchant market operations, direct labor and other factory costs rose relative to net sales from 2014 to 2016 but were lower in January-September 2017 than in January-September 2016. On a per-unit basis, raw materials, direct labor, and other factory costs were generally higher in the merchant market than in the total market for wire rod. Company-by-company reporting was slightly mixed, with several companies reporting the same

<sup>9</sup> One firm, \*\*\*, reported non-recurring charges that were included in raw material costs. These costs were \$\*\*\* inventory write-off in 2015 and a \$\*\*\* in inventory adjustments in 2016. \*\*\*'s U.S. producer questionnaire, III-11.

per-unit costs for raw materials (\*\*\*) and direct labor (\*\*\*) in their total and merchant market operations.<sup>10</sup>

As shown in tables VI-1 and VI-3, the industry's SG&A expense ratios (i.e., total SG&A expenses divided by total revenue) increased during 2014-16, from 3.2 percent in 2014 to 4.7 percent in 2016 for total market operations and 3.3 percent in 2014 to 5.0 percent in 2016 for merchant market operations. SG&A expense ratio were lower in January-September 2017 than in January-September 2016 for both total and merchant market operations.

## **Profitability**

Table VI-1 shows that total market operations for wire rod generated higher operating profits in 2016 than in 2015 largely as a result of \*\*\* and \*\*\*'s improving financial performance, but operating profits declined from 2014 to 2016. Individually, as shown in table F-1, the majority of reporting firms experienced operating losses 2014, 2015, and 2016. \*\*\* reported the highest amount of operating losses in 2014 of \$\*\*\*, increased its operating losses substantially to \$\*\*\* in 2015, and losses of \$\*\*\* in 2016. \*\*\* reported higher operating profits and operating margins in January-September 2017 than in January-September 2016. In contrast, \*\*\* led the industry in profitability in absolute dollars, with operating income ranging from \$\*\*\* for \*\*\* and \$\*\*\* for \*\*\*. Operating margins ranged from \*\*\* from 2014 to 2016. \*\*\* reported higher operating margins in January-September 2017 than in January-September 2016 while \*\*\* reported lower operating margins for the same period. \*\*\* Net income showed a similar trend as operating income, declining from 2014 to 2016 but was higher in January-September 2017 than in January-September 2016 for total market operations.

As presented in table VI-3, operating profit for the merchant market followed a similar trend as the total market, decreasing from 2014 to 2016 but higher in January-September 2017 than in January-September 2016. Individually, as presented in table F-2, the majority of firms also reported operating losses in 2016; although firms were split on those that reported

Two firms, \*\*\*, reported non-recurring charges that were included in other factory costs. \*\*\* reported other factory costs related to shutdown expenses of \$\*\*\* in 2014, \$\*\*\* in 2015, \$\*\*\* in 2016, and \$\*\*\* in January-September 2017. \*\*\* also reported accelerated depreciation expenses of \$\*\*\* in 2014, \$\*\*\* in 2015, \$\*\*\* in 2016, and \$\*\*\* in January-September 2017. \*\*\* reported non-recurring charges for an environmental project as other factory costs of \*\*\*. \*\*\*'s U.S. producer questionnaires, III-11.

<sup>&</sup>lt;sup>11</sup> Two firms, \*\*\*, reported non-recurring charges that were included in SG&A expenses. \*\*\* reported SG&A expenses related to doubtful accounts of \$\*\*\* in 2014 and \$\*\*\* in 2016; software write-off expenses of \$\*\*\* in 2015; and management consulting fees of \$\*\*\* in 2016. \*\*\* reported non-recurring charges for natural gas payments of \$\*\*\* in 2014, \$\*\*\* in 2016, and \$\*\*\* in January-September 2017. \*\*\* also reported a one-time depreciation allocation of \$\*\*\* in January-September 2017. \*\*\*'s U.S. producer questionnaires, III-11.

<sup>12 \*\*\*. \*\*\*.</sup> 

<sup>13 \*\*\*. \*\*\*.</sup> 

operating income and those that reported operating losses in 2014 and 2015. \*\*\* also led the industry in profitability for the merchant market. Operating margins were lower for the merchant market than for the total market. Net income for the merchant market also had a similar trend as operating income, declining from 2014 to 2016 but higher in January-September 2017 than in January-September 2016 for merchant market operations.

## **VARIANCE ANALYSES**

Variance analyses for the total market and merchant market operations of U.S. producers of wire rod are presented in tables VI-5 and VI-6, respectively. <sup>15</sup> The information for these variance analyses are derived from tables VI-1 and VI-3. As shown in table VI-5, the decline in operating income from 2014 to 2016 for the total wire rod market is primarily attributable to an unfavorable price variance despite a favorable net cost/expense variance (i.e., prices declined more than costs and expenses). As shown in table VI-6, the merchant market experienced a similar trend for 2014 to 2016. For January-September 2017 compared to January-September 2016, higher operating income gains in both the total and merchant markets is primarily attributable to a favorable price variance despite an unfavorable net cost/expense variance (i.e., prices increased more than cost and expenses).

<sup>14 \*\*\* \*\*\*</sup> 

<sup>&</sup>lt;sup>15</sup> The Commission's variance analysis is calculated in three parts: sales variance, cost of sales variance (COGS variance), and SG&A expense variance. Each part consists of a price variance (in the case of the sales variance) or a cost or expense variance (in the case of the COGS and SG&A expense variance), and a volume variance. The sales or cost/expense variance is calculated as the change in unit price or per-unit cost/expense times the new volume, while the volume variance is calculated as the change in volume times the old unit price or per-unit cost/expense. Summarized at the bottom of the table, the price variance is from sales; the cost/expense variance is the sum of those items from COGS and SG&A variances, respectively, and the volume variance is the sum of the volume components of the net sales, COGS, and SG&A expense variances. The overall volume component of the variance analysis is generally small.

Table VI-5 Wire rod: Variance analysis on the operations of U.S. producers for the total market, between calendar years and between partial year periods

	Betwe	een calendar :	years	Between partial year period
Item	2014-16	2014-15	2015-16	2016-17
		Value (1,00	00 dollars)	
Net sales:				
Price variance	(646,471)	(479,458)	(180,468)	210,909
Volume variance	(74,830)	(2,556)	(58,819)	60,634
Net sales variance	(721,301)	(482,014)	(239,287)	271,543
COGS:				
Cost variance	633,039	433,559	211,647	(195,655)
Volume variance	70,254	2,400	55,687	(55,564)
COGS variance	703,293	435,959	267,334	(251,219)
Gross profit variance	(18,008)	(46,055)	28,047	20,324
SG&A expenses:				
Cost/expense variance	(6,894)	6,320	(13,037)	270
Volume variance	2,387	82	2,128	(2,751)
Total SG&A expense variance	(4,507)	6,402	(10,909)	(2,481)
Operating income variance	(22,515)	(39,653)	17,138	17,843
Summarized (at the operating income level) as:				
Price variance	(646,471)	(479,458)	(180,468)	210,909
Net cost/expense variance	626,146	439,880	198,610	(195,385)
Net volume variance	(2,189)	(75)	(1,004)	2,319

Table VI-6 Wire rod: Variance analysis on the operations of U.S. producers for the merchant market, between calendar years and between partial year periods

	Rotwe	een calendar y	voars	Between partial year period
ltem	2014-16	2014-15	2015-16	2016-17
item	2014-10	Value (1,00		2010-17
Net sales:		Value (1,00	o donars,	
Price variance	(465,295)	(345,640)	(137,052)	151,373
Volume variance	(123,863)	(29,191)	(77,275)	66,475
Net sales variance	(589,158)	(374,831)	(214,327)	217,848
COGS:				
Cost variance	448,405	301,935	161,667	(134,538)
Volume variance	116,399	27,432	73,770	(61,369)
COGS variance	564,804	329,367	235,437	(195,907)
Gross profit variance	(24,354)	(45,464)	21,110	21,941
SG&A expenses:				
Cost/expense variance	(7,195)	5,134	(12,071)	844
Volume variance	4,051	955	2,838	(3,233)
Total SG&A expense variance	(3,144)	6,089	(9,233)	(2,389)
Operating income variance	(27,498)	(39,375)	11,877	19,552
Summarized (at the operating income level) as:				
Price variance	(465,295)	(345,640)	(137,052)	151,373
Net cost/expense variance	441,210	307,069	149,596	(133,694)
Net volume variance	(3,413)	(804)	(667)	1,873

## CAPITAL EXPENDITURES AND RESEARCH AND DEVELOPMENT EXPENSES

Table VI-7 presents capital expenditures and research and development ("R&D") expenses by firm. In 2016, \*\*\* accounted for the largest share of total capital expenditures (\*\*\* percent), <sup>16</sup> followed by \*\*\* (\*\*\* percent), <sup>17</sup> \*\*\* (\*\*\* percent), <sup>18</sup> and \*\*\* (\*\*\* percent). <sup>19</sup> The remaining U.S. producers accounted for the following shares: \*\*\* (\*\*\* percent), <sup>20</sup> \*\*\* (\*\*\* percent), \*\*\* (\*\*\* percent), <sup>21</sup> and \*\*\* (\*\*\* percent). <sup>22</sup> While the U.S. industry's total capital expenditures were at their highest level in 2014 and subsequently declined, table VI-7 shows that the directional pattern of company-specific capital expenditures were mixed; \*\*\*. Total capital expenditures were higher in January-September 2017 than in January-September 2016. \*\*\*

<sup>&</sup>lt;sup>16</sup> \*\*\*. \*\*\*'s U.S. producer questionnaire, III-14 (note 1).

<sup>17</sup> \*\*\*. \*\*\*'s U.S. producer questionnaire, II-2 and III-14 (note 1).

<sup>18</sup> \*\*\*. \*\*\*'s U.S. producer questionnaire, III-14 (note 1).

<sup>19</sup> \*\*\*. \*\*\*'s U.S. producer questionnaire, III-14 (note 1).

<sup>20</sup> \*\*\*. \*\*\*'s U.S. producer questionnaire, III-14 (note 1).

<sup>&</sup>lt;sup>21</sup> \*\*\*. \*\*\*'s U.S. producer questionnaire, III-14 (note 1). \*\*\*. \*\*\*.

<sup>22</sup> \*\*\*. \*\*\*'s U.S. producer questionnaire, III-14 (note 1).

Table VI-7 Wire rod: Capital expenditures and R&D expenses for U.S. producers, by firm, 2014-16, January to September 2016, and January to September 2017

	endar year	January to September				
2014	2015	2016	2016	2017		
C	apital exper	nditures (1,0	00 dollars)			
***	***	***	***	***		
***	***	***	***	***		
***	***	***	***	***		
***	***	***	***	***		
***	***	***	***	***		
***	***	***	***	***		
***	***	***	***	***		
***	***	***	***	***		
***	***	***	***	***		
90,906	68,673	52,873	33,847	41,560		
R&D expenses (1,000 dollars)						
***	***	***	***	***		
***	***	***	***	***		
***	***	***	***	***		
***	***	***	***	***		
***	***	***	***	***		
***	***	***	***	***		
***	***	***	***	***		
***	***	***	***	***		
***	***	***	***	***		
***	***	***	***	***		
	***  ***  ***  ***  ***  ***  90,906   ***  ***  ***  ***  ***  ***  ***	Capital exper  ***	Capital expenditures (1,0  ***	Capital expenditures (1,000 dollars)  ***		

# **ASSETS AND RETURN ON ASSETS**

Table VI-8 presents data on the U.S. producers' total assets and their return on assets ("ROA"). ROA is calculated as the ratio of operating income (or loss) to total assets. Aggregated for producers of wire rod, ROA declined from 2014 to 2016, reflecting the same trend as operating income. Without including ArcelorMittal's now closed wire rod plant, \*\*\*.

Table VI-8 Wire rod: U.S. producers' total assets and return on assets, by firm, 2014-16, January to September 2016, and January to September 2017

		Calendar years		
Firm	2014	2015	2016	
	Total net assets (1,000 dollars)			
ArcelorMittal <sup>1</sup>	***	***	***	
Cascade	***	***	***	
Charter	***	***	***	
Evraz	***	***	***	
Gerdau	***	***	***	
Keystone	***	***	***	
Mid American	***	***	***	
Nucor	***	***	***	
Sterling	***	***	***	
Total net assets	1,306,576	1,179,883	1,270,548	
	Operating return on assets (percent)			
ArcelorMittal <sup>2</sup>	***	***	***	
Cascade	***	***	***	
Charter	***	***	***	
Evraz	***	***	***	
Gerdau	***	***	***	
Keystone	***	***	***	
Mid American	***	***	***	
Nucor	***	***	***	
Sterling	***	***	***	
Average operating return on assets	5.8	3.0	4.2	

<sup>1 \*\*\*</sup> 

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

<sup>&</sup>lt;sup>2</sup> Average operating return on assets for 2016 does not include ArcelorMittal's assets for its idle plant in Georgetown, South Carolina.

#### **CAPITAL AND INVESTMENT**

The Commission requested U.S. producers of wire rod to describe any actual or potential negative effects of imports of wire rod from Belarus, Italy, Korea, Russia, South Africa, Spain, Turkey, Ukraine, United Arab Emirates, and the United Kingdom on their firms' growth, investment, ability to raise capital, development and production efforts, or the scale of capital investments. Table VI-9 tabulates the responses of eight current U.S. producers and table VI-10 presents the detailed narrative responses regarding actual and anticipated negative effects of subject imports.

Table VI-9
Wire rod: Actual and anticipated negative effects of imports on investment and growth and development

Item	No	Yes
Negative effects on investment	0	7
Cancellation, postponement, or rejection of expansion projects		3
Denial or rejection of investment proposal		1
Reduction in the size of capital investments		4
Return on specific investments negatively impacted		5
Other		2
Negative effects on growth and development	0	6
Rejection of bank loans		0
Lowering of credit rating		1
Problem related to the issue of stocks or bonds		1
Ability to service debt		1
Return on specific investments		3
Other		4
Anticipated negative effects of imports	0	8

Note.--ArcelorMittal is not a current U.S. producer of wire rod \*\*\*.

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

# Table VI-10

Wire rod: Narratives relating to actual and anticipated negative effects of imports on investment and growth and development, since January 1, 2014

# PART VII: THREAT CONSIDERATIONS AND INFORMATION ON NONSUBJECT COUNTRIES

Section 771(7)(F)(i) of the Act (19 U.S.C. § 1677(7)(F)(i)) provides that—

In determining whether an industry in the United States is threatened with material injury by reason of imports (or sales for importation) of the subject merchandise, the Commission shall consider, among other relevant economic factors<sup>1</sup>--

- (I) if a countervailable subsidy is involved, such information as may be presented to it by the administering authority as to the nature of the subsidy (particularly as to whether the countervailable subsidy is a subsidy described in Article 3 or 6.1 of the Subsidies Agreement), and whether imports of the subject merchandise are likely to increase,
- (II) any existing unused production capacity or imminent, substantial increase in production capacity in the exporting country indicating the likelihood of substantially increased imports of the subject merchandise into the United States, taking into account the availability of other export markets to absorb any additional exports,
- (III) a significant rate of increase of the volume or market penetration of imports of the subject merchandise indicating the likelihood of substantially increased imports,
- (IV) whether imports of the subject merchandise are entering at prices that are likely to have a significant depressing or suppressing effect on domestic prices, and are likely to increase demand for further imports,
- (V) inventories of the subject merchandise,

<sup>1</sup> Section 771(7)(F)(ii) of the Act (19 U.S.C. § 1677(7)(F)(ii)) provides that "The Commission shall consider {these factors} . . . as a whole in making a determination of whether further dumped or subsidized imports are imminent and whether material injury by reason of imports would occur unless an order is issued or a suspension agreement is accepted under this title. The presence or absence of any factor which the Commission is required to consider . . . shall not necessarily give decisive guidance with respect to the determination. Such a determination may not be made on the basis of mere

conjecture or supposition."

- (VI) 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,
- (VII) in any investigation under this title which involves imports of both a raw agricultural product (within the meaning of paragraph (4)(E)(iv)) and any product processed from such raw agricultural product, the likelihood that there will be increased imports, by reason of product shifting, if there is an affirmative determination by the Commission under section 705(b)(1) or 735(b)(1) with respect to either the raw agricultural product or the processed agricultural product (but not both),
- (VIII) the actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product, and
- (IX) any other demonstrable adverse trends that indicate the probability that there is likely to be material injury by reason of imports (or sale for importation) of the subject merchandise (whether or not it is actually being imported at the time).<sup>2</sup>

Information on the nature of the subsidies was presented earlier in this report; information on the volume and pricing of imports of the subject merchandise is presented in *Parts IV* and *V*; and information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts is presented in *Part VI*. Information on inventories of the subject merchandise; foreign producers' operations, including the potential for "product-shifting;" any other threat indicators, if applicable; and any dumping in third-country markets, follows. Also presented in this section of the report is information obtained for consideration by the Commission on nonsubject countries.

<sup>&</sup>lt;sup>2</sup> Section 771(7)(F)(iii) of the Act (19 U.S.C. § 1677(7)(F)(iii)) further provides that, in antidumping investigations, ". . . the Commission shall consider whether dumping in the markets of foreign countries (as evidenced by dumping findings or antidumping remedies in other WTO member markets against the same class or kind of merchandise manufactured or exported by the same party as under investigation) suggests a threat of material injury to the domestic industry."

#### THE INDUSTRY IN BELARUS

The Commission issued a foreign producer's or exporter's questionnaire to one firm believed to produce and/or export wire rod from Belarus,<sup>3</sup> and the Commission received a usable response from this firm: Byelorussian Steel Works. Byelorussian Steel Works' estimated exports to the United States accounted for \*\*\* percent of U.S. imports of wire rod from Belarus in 2016. According to estimates requested of Byelorussian Steel Works, its production of wire rod accounts for \*\*\* percent of overall production of wire rod in Belarus.

Byelorussian Steel Works began operations in 1984. In that year, production began at the company's electric steel melting facilities and rolling mill, and production began at the first of the company's three wire shops in 1987. The company's production capabilities currently include steel melting, rolling, pipe-rolling, and the production of steel cord and wire.

#### **Changes in operations**

Byelorussian Steel Works reported \*\*\*.

# Operations on wire rod

Table VII-1 presents information on the wire rod operations of the responding producer and exporter in Belarus. Capacity in Belarus increased by \*\*\* percent from 2014 to 2016 and is projected to increase by an additional \*\*\* percent from 2016 to 2018. Production in Belarus increased by \*\*\* percent from 2014-2016 and is projected to increase by an additional \*\*\* percent during 2016-18. The capacity utilization rate decreased from \*\*\* percent in 2014 to \*\*\* percent in 2016, and is expected to rise to \*\*\* percent in 2017.

Home market shipments accounted for the largest, but a decreasing, share of total shipments from 2014 to 2016. Internal consumption and transfers decreased by \*\*\* percent from 2014 to 2016, whereas commercial shipments decreased by \*\*\* from 2014 to 2015 but were slightly greater in 2016 compared to 2014. While home market shipments decreased, export shipments increased in both absolute terms (from \*\*\* short tons in 2014 to \*\*\* short tons in 2016) and in relative terms (accounting for \*\*\* percent of total shipments in 2014 then increasing to \*\*\* percent in 2015 and \*\*\* percent in 2016). In 2016, \*\*\* percent of total shipments of wire rod from Belarus were exported to the United States, and \*\*\* percent were exported to other markets. Exports of wire rod from Belarus to the United States increased \*\*\* short tons from 2014 to 2016.

https://www.eng.belsteel.com/about/aboutbmz.php, accessed April 20, 2017.

<sup>&</sup>lt;sup>3</sup> These firms were identified through a review of information submitted in the petition and contained in \*\*\* records.

<sup>&</sup>lt;sup>4</sup> Byelorussian Steel Works, "About Us: History, 1999-1982," https://www.eng.belsteel.com/about/1999-1982.php, accessed on April 20, 2017.

<sup>&</sup>lt;sup>5</sup> Byelorussian Steel Works, "About us: About BMZ,"

# Table VII-1

Wire rod: Data for producer in Belarus, 2014-16, January to September 2016, January to September 2017, and projections for calendar years 2017 and 2018

\* \* \* \* \* \* \* \*

# **Alternative products**

As shown in table VII-2, the responding Belarussian firm produced \*\*\* on the same equipment and machinery used to produce wire rod. Wire rod accounted for \*\*\* of overall production of product made on the same equipment and machinery in 2016, down from \*\*\* in 2014. At the same time, overall capacity utilization decreased from \*\*\* percent in 2014 to \*\*\* percent in 2015, then increased to \*\*\* percent in 2016.

Byelorussian Steel Works reported that \*\*\*.

#### Table VII-2

Wire rod: Belarussian producer's overall capacity and production on the same equipment as subject production, 2014-16, January to September 2016, and January to September 2017

Table VII-3 presents Belarus export data for wire rod as reported in the GTA database.

Table VII-3 Wire rod: Exports from Belarus, 2014-16

	Calendar year			
Destination market	2014	2015	2016	
	Quantity (short tons)			
Belarus exports to the United States		28,868	49,325	
Belarus exports to other major destination markets				
Netherlands		45,335	112,617	
Lithuania	5,442	26,846	22,902	
Canada			15,321	
Belgium		10,357	14,417	
Poland		27,213	8,953	
Hungary		5,249	8,624	
Germany	43	5,792	6,719	
Russia	844	1,283	5,641	
All other destination markets	2,319	49,238	11,078	
Total Belarus exports	8,648	200,181	255,596	
	Value (1,000 dollars)			
Belarus exports to the United States		7,916	13,239	
Belarus exports to other major destination markets				
Netherlands		12,290	29,181	
Lithuania	2,815	9,496	6,096	
Canada			4,172	
Belgium		2,801	3,464	
Poland		9,371	2,737	
Hungary		1,590	2,506	
Germany	25	1,748	1,954	
Russia	522	487	2,093	
All other destination markets	1,097	15,991	3,082	
Total Belarus exports	4,459	61,689	68,523	

**Table VII-3--Continued** 

Wire rod: Exports from Belarus, 2014-16

		Calendar year		
Destination market	2014	2015	2016	
	Unit value (dollars per short ton)			
Belarus exports to the United States		274	268	
Belarus exports to other major destination markets Netherlands		271	259	
	 547			
Lithuania	517	354	266	
Canada			272	
Belgium		270	240	
Poland		344	306	
Hungary		303	291	
Germany	565	302	291	
Russia	619	379	371	
All other destination markets	473	325	278	
Total Belarus exports	516	308	268	
	Share of quantity (percent)			
Belarus exports to the United States		14.4	19.3	
Belarus exports to other major destination markets Netherlands		22.6	44.1	
Lithuania	62.9	13.4	9.0	
Canada			6.0	
Belgium		5.2	5.6	
Poland		13.6	3.5	
Hungary		2.6	3.4	
Germany	0.5	2.9	2.6	
Russia	9.8	0.6	2.2	
All other destination markets	26.8	24.6	4.3	
Total Belarus exports	100.0	100.0	100.0	

Source: Official exports statistics under HS subheading 7213.91, 7227.20, and 7227.90 as reported by Belarus Customs in the IHS/GTA database, accessed October 10, 2017.

#### THE INDUSTRY IN ITALY

The Commission issued foreign producers' or exporters' questionnaires to nine firms believed to produce and/or export wire rod from Italy, and the Commission received usable responses from four of these firms: Acciaierie Bertoli Safau S.p.A. ("ABS"), Acciaierie Di Verona S.p.A. ("ADV"), Ferriere Nord S.p.A. ("Ferriere Nord"), and Ori Martin S.p.A. ("Ori Martin"). These firms' exports to the United States accounted for \*\*\* of U.S. imports of wire rod from Italy in 2016. According to estimates requested of the responding Italian producers, their production of wire rod accounts for \*\*\* of overall production of wire rod in Italy. Table VII-4 presents information on the wire rod operations of the responding producers and exporters in Italy.

Table VII-4
Wire rod: Summary data for producers in Italy, 2016

\* \* \* \* \* \* \*

# **Changes in operations**

Producers in Italy reported \*\*\* since January 1, 2014. Specifically, \*\*\*.

# Operations on wire rod

Table VII-5 presents information on the wire rod operations of the responding producers and exporters in Italy. Wire rod production capacity totaled \*\*\* short tons in 2016, and is projected to increase by \*\*\* percent from 2016 to 2017 and to not change from 2017 to 2018. Production of wire rod totaled \*\*\* short tons in 2016, and is projected to increase by \*\*\* percent from 2016 to 2017 before decreasing by \*\*\* percent in 2018. Capacity utilization was \*\*\* percent in 2016 and is projected to be \*\*\* percent in 2017 before decreasing to \*\*\* percent in 2018.

Total shipments of Italian wire rod totaled \*\*\* short tons in 2016, and are projected to increase by \*\*\* percent from 2016 to 2017 before decreasing by \*\*\* percent in 2018. Total home market shipments accounted for \*\*\* percent of total shipments in 2016, with internal consumption and transfers accounting for the majority of these shipments. Exports of wire rod from Italy to the United States totaled \*\*\* short tons in 2016, accounting for \*\*\* percent of total shipments of Italian wire rod in that year.

<sup>&</sup>lt;sup>6</sup> These firms were identified through a review of information submitted in the petition and contained in \*\*\* records.

# Table VII-5

Wire rod: Data for producers in Italy, 2014-16, January to September 2016, January to September 2017, and projections for calendar years 2017 and 2018

\* \* \* \* \* \* \*

# **Alternative products**

As shown in table VII-6, responding Italian firms produced other products on the same equipment and machinery used to produce wire rod. These products included \*\*\*. Wire rod was the predominant product made on the shared equipment, accounting for at least \*\*\* percent of total production throughout 2014-16. Other products accounted for the second-largest share, with \*\*\* of production on the shared equipment during the period.

# Table VII-6

Wire rod: Italian producers' overall capacity and production on the same equipment as subject production, 2014-16, January to September 2016, January to September 2017

Table VII-7 presents Italian export data for wire rod as reported in the GTA database.

Table VII-7 Wire rod: Exports from Italy, 2014-16

		Calendar year		
Destination market	2014	2015	2016	
	Quantity (short tons)			
Italy exports to the United States	343	370	47,865	
Italy exports to other major				
destination markets	440.750	440.004	107.010	
Austria	113,759	116,894	127,042	
Algeria	397,334	373,946	118,951	
Germany	70,185	62,692	101,049	
Slovenia	54,865	60,550	58,917	
France	28,831	25,955	51,817	
Mexico			43,994	
Slovakia	8,230	12,776	29,573	
Czech Republic	16,316	14,885	26,761	
All other destination markets	107,081	105,774	205,592	
Total Italy exports	796,943	773,843	811,560	
	Value (1,000 dollars)			
Italy exports to the United States	530	380	17,268	
Italy exports to other major destination markets				
Austria	64,615	47,658	48,206	
Algeria	217,589	152,639	41,467	
Germany	54,056	35,409	47,693	
Slovenia	30,418	25,696	23,321	
France	25,015	18,334	27,797	
Mexico			15,889	
Slovakia	4,843	5,131	11,310	
Czech Republic	9,470	6,483	10,390	
All other destination markets	75,479	57,850	93,293	
Total Italy exports	482,016	349,581	336,634	

**Table VII-7--Continued** 

Wire rod: Exports from Italy, 2014-16

		Calendar year		
Destination market	2014	2015	2016	
	Unit value (dollars per short ton)			
Italy exports to the United States	1,546	1,025	361	
Italy exports to other major				
destination markets				
Austria	568	408	379	
Algeria	548	408	349	
Germany	770	565	472	
Slovenia	554	424	396	
France	868	706	536	
Mexico			361	
Slovakia	589	402	382	
Czech Republic	580	436	388	
All other destination markets	705	547	454	
Total Italy exports	605	452	415	
	Share of quantity (percent)			
Italy exports to the United States	0.0	0.0	5.9	
Italy exports to other major				
destination markets				
Austria	14.3	15.1	15.7	
Algeria	49.9	48.3	14.7	
Germany	8.8	8.1	12.5	
Slovenia	6.9	7.8	7.3	
France	3.6	3.4	6.4	
Mexico			5.4	
Slovakia	1.0	1.7	3.6	
Czech Republic	2.0	1.9	3.3	
All other destination markets	13.4	13.7	25.3	
Total Italy exports	100.0	100.0	100.0	

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

Source: Official exports statistics under HS subheading 7213.91, 7227.20, and 7227.90 as reported by Italy Customs in the IHS/GTA database, accessed October 10, 2017.

#### THE INDUSTRY IN KOREA

The Commission issued a foreign producer's or exporter's questionnaire to one firm believed to produce and/or export wire rod from Korea, and the Commission received a usable response from that firm: POSCO. POSCO's estimated exports to the United States accounted for the percent of U.S. imports of wire rod from Korea in 2016. According to estimates requested of POSCO, its production of wire rod accounts for the percent of overall production of wire rod in Korea.

POSCO, which was established on April 1, 1968, manufactures a variety of steel products predominantly for the domestic market. The company supplies product to customers in the automotive, engineering, home appliance, machinery, and shipbuilding industries. POSCO's efforts to produce tire cord first began in 1995, and after more than five years, the company achieved production techniques that enabled the consistent manufacture of high-quality output. The firm indicted that tire bead and tire cord with a minimum grade of 1080 is its most difficult-to-produce product.

# **Changes in operations**

Producers in Korea reported \*\*\*.

# Operations on wire rod

Table VII-8 presents information on the wire rod operations of the responding producer and exporter in Korea. Capacity in Korea decreased by \*\*\* percent from 2014 to 2015, and increased \*\*\* percent from 2015 to 2016. Capacity is projected to decrease \*\*\* percent from 2016 to 2017 and \*\*\* in 2018. Production in Korea increased by \*\*\* percent from 2014 to 2016, and is expected to decrease by \*\*\* percent from 2016 to 2017 and \*\*\* in 2018. The capacity utilization rate increased from \*\*\* percent in 2014 to \*\*\* percent in 2016, and is projected to be \*\*\* percent in both 2017 and 2018.

Korea's home market shipments of wire rod increased by \*\*\* percent in absolute terms from 2014 to 2016, and accounted for \*\*\* percent of that country's total wire rod shipments in 2016. Korean home market shipments are projected to decrease \*\*\* percent from 2016 to 2017, and increase \*\*\* percent from 2017 to 2018. Commercial shipments were larger than internal consumption and transfers throughout 2014-16, with commercial shipments accounting for \*\*\* percent of home market shipments in 2016.

Export shipments increased by \*\*\* percent from 2014 to 2015, then decreased by \*\*\* percent from 2015 to 2016. In 2016, \*\*\* percent of total shipments of wire rod from Korea

<sup>&</sup>lt;sup>7</sup> These firms were identified through a review of information submitted in the petition and contained in \*\*\* records.

<sup>&</sup>lt;sup>8</sup> Reuters, "Profile: Posco (PKX.N),"

http://in.reuters.com/finance/stocks/companyProfile?symbol=PKX.N, accessed April 25, 2017.

<sup>&</sup>lt;sup>9</sup> Hearing transcript, pp. 166, 169 (Rhee)

were exported to the United States, and \*\*\* percent were exported to other markets. Exports of wire rod from Korea to the United States increased \*\*\* percent from 2014 to 2015, then decreased \*\*\* percent from 2015 to 2016.

# **Table VII-8**

Wire rod: Data for producer in Korea, 2014-16, January to September 2016, January to September 2017, and projections for calendar years 2017 and 2018

\* \* \* \* \* \* \* \*

# **Alternative products**

As shown in table VII-9, the responding Korean firm produced \*\*\* on the same equipment and machinery used to produce wire rod. \*\*\*

# Table VII-9

Wire rod: Korean producer's overall capacity and production on the same equipment as subject production, 2014-16, January to September 2016, and January to September 2017

Table VII-10 presents Korean export data for wire rod as reported in the GTA database.

Table VII-10 Wire rod: Exports from Korea, 2014-16

		Calendar year		
Destination market	2014	2015	2016	
	Quantity (short tons)			
Korea exports to the United States	119,885	133,202	104,903	
Korea exports to other major				
destination markets	445.050	404.000	450.050	
Vietnam	115,059	124,903	159,658	
Malaysia	173,292	129,537	129,570	
China	103,828	74,684	103,790	
Taiwan	100,545	87,912	92,505	
Japan	83,832	98,116	90,692	
Thailand	35,506	67,507	80,224	
Turkey	20,994	18,937	33,536	
Slovenia	12,782	15,864	23,344	
All other destination markets	126,794	187,928	107,177	
Total Korea exports	892,517	938,588	925,397	
	Value (1,000 dollars)			
Korea exports to the United States	66,819	56,448	41,166	
Korea exports to other major				
destination markets Vietnam	70,984	64,262	72,010	
Malaysia	100,089	62,411	52,965	
China	75,925	53,688	69,017	
Taiwan	52,952	36,761	35,479	
Japan	51,720	47,114	43,046	
Thailand	26,015	34,008	35,650	
Turkey	12,831	9,024	15,225	
Slovenia	9,402	8,951	12,473	
All other destination markets	75,777	79,929	44,627	
Total Korea exports	542,513	452,596	421,658	

**Table VII-10--Continued** 

Wire rod: Exports from Korea, 2014-16

		Calendar year		
Destination market	2014	2015	2016	
	Unit value (dollars per short ton)			
Korea exports to the United States	557	424	392	
Korea exports to other major				
destination markets				
Vietnam	617	514	451	
Malaysia	578	482	409	
China	731	719	665	
Taiwan	527	418	384	
Japan	617	480	475	
Thailand	733	504	444	
Turkey	611	477	454	
Slovenia	736	564	534	
All other destination markets	598	425	416	
Total Korea exports	608	482	456	
	Share of quantity (percent)			
Korea exports to the United States	13.4	14.2	11.3	
Korea exports to other major				
destination markets				
Vietnam	12.9	13.3	17.3	
Malaysia	19.4	13.8	14.0	
China	11.6	8.0	11.2	
Taiwan	11.3	9.4	10.0	
Japan	9.4	10.5	9.8	
Thailand	4.0	7.2	8.7	
Turkey	2.4	2.0	3.6	
Slovenia	1.4	1.7	2.5	
All other destination markets	14.2	20.0	11.6	
Total Korea exports	100.0	100.0	100.0	

Source: Official exports statistics under HS subheading 7213.91, 7227.20, and 7227.90 as reported by Korea Customs in the IHS/GTA database, accessed October 10, 2017.

#### THE INDUSTRY IN RUSSIA

The Commission issued a foreign producer's or exporter's questionnaires to four firms believed to produce and/or export wire rod from Russia. A usable response to the Commission's questionnaire was received from one firm: NLMK Ural. This firm's estimated exports to the United States accounted for approximately \*\*\* percent of U.S. imports of wire rod in 2016. According to estimates requested of the responding Russian producer, its production of wire rod accounts for approximately \*\*\* percent of overall production of wire rod in Russia.

NLMK Ural was established in 2000 with the merging of two steelmaking firms that had been in business since the mid-1700s. In December 2010, the company began operations at a rolling shop that produces wire rod, among other products. In addition to wire rod, the company also produces rebar in coils and bars and continuous cast billet.<sup>11</sup>

# **Changes in operations**

The responding producer in Russia reported \*\*\*.

# Operations on wire rod

Table VII-11 presents information on the wire rod operations of the responding producer and exporter in Russia. Capacity in Russia decreased \*\*\* during 2014-15, then increased by \*\*\* percent from 2015 to 2016, totaling \*\*\* short tons by the end of the period. Capacity is projected to \*\*\* in 2017 and 2018. Production in Russia decreased by \*\*\* percent from 2014 to 2015, increased by \*\*\* percent from 2015 to 2016, and is projected to increase by \*\*\* percent during 2016-18. The capacity utilization rate fluctuated between \*\*\* percent during 2014-16, and is projected to exceed \*\*\* percent in both 2017 and 2018.

Home market shipments of wire rod decreased by \*\*\* percent in absolute terms from 2014 to 2016, and accounted for \*\*\* percent of that country's total wire rod shipments in 2014 and 2015, before decreasing to \*\*\* in 2016. Russian home market shipments are projected to increase \*\*\* percent from 2016 to 2018, and account for less than \*\*\* percent of total wire rod shipments in 2017 and 2018. Commercial shipments accounted for \*\*\* of home market shipments throughout 2014-16.

Export shipments decreased by \*\*\* percent from 2014 to 2015, then increased by \*\*\* percent from 2015 to 2016. In 2016, \*\*\* percent of total shipments of wire rod from Russia were exported to the United States, and \*\*\* percent were exported to other markets. Exports of wire rod from Russia to the United States were \*\*\* in 2014 to 2015, and totaled \*\*\* in 2016.

<sup>&</sup>lt;sup>10</sup> These firms were identified through a review of information submitted in the petition and contained in \*\*\* records.

<sup>&</sup>lt;sup>11</sup> NLMK Ural, "About NLMK-Ural," https://ural.nlmk.com/en/about/, accessed October 23, 2017.

# Table VII-11

Wire rod: Data for producer in Russia, 2014-16, January to September 2016, January to September 2017, and projections for calendar years 2017 and 2018

\* \* \* \* \* \* \*

# **Alternative products**

As shown in table VII-12, the responding Russian firm produced \*\*\* on the same equipment and machinery used to produce wire rod. Wire rod accounted for \*\*\* of production on the shared equipment and machinery throughout 2014-16.

#### Table VII-12

Wire rod: Russian producer's overall capacity and production on the same equipment as subject production, 2014-16, January to September 2016, and January to September 2017

Table VII-13 presents Russian export data for wire rod as reported in the GTA database.

Table VII-13 Wire rod: Exports from Russia, 2014-16

		Calendar year	
Destination market	2014	2015	2016
	Quantity (short tons)		
Russia exports to the United			
States	12,723	8,825	95,309
Russia exports to other major destination markets			
Taiwan	82,238	67,354	126,372
Belgium	47	5,417	105,155
Lithuania	85,136	100,233	102,409
Kazakhstan	109,150	112,906	98,853
Uzbekistan	67,160	65,879	58,822
Netherlands			55,708
Spain		13,399	34,386
Italy	20,326	39,008	33,261
All other destination markets	222,706	241,027	332,671
Total Russia exports	599,486	654,048	1,042,946
	Value (1,000 dollars)		
Russia exports to the United States	6,085	2,520	28,663
Russia exports to other major destination markets			
Taiwan	37,312	21,474	35,627
Belgium	24	1,888	36,720
Lithuania	41,032	36,384	31,529
Kazakhstan	56,158	36,779	30,999
Uzbekistan	37,778	24,082	21,118
Netherlands			15,368
Spain		4,073	10,606
Italy	10,187	13,656	9,534
All other destination markets	115,394	85,539	103,253
Total Russia exports	303,968	226,396	323,415

**Table VII-13--Continued** 

Wire rod: Exports from Russia, 2014-16

Triio rou. Exporto irom Rusola, Es		Calendar year		
Destination market	2014	2015	2016	
	Unit value (dollars per short ton)			
Russia exports to the United				
States	478	286	301	
Russia exports to other major				
destination markets	45.4	0.40	200	
Taiwan	454	319	282	
Belgium	506	349	349	
Lithuania	482	363	308	
Kazakhstan	515	326	314	
Uzbekistan	563	366	359	
Netherlands			276	
Spain		304	308	
Italy	501	350	287	
All other destination markets	518	355	310	
Total Russia exports	507	346	310	
	Share of quantity (percent)			
Russia exports to the United				
States	2.1	1.3	9.1	
Russia exports to other major				
destination markets				
Taiwan	13.7	10.3	12.1	
Belgium	0.0	0.8	10.1	
Lithuania	14.2	15.3	9.8	
Kazakhstan	18.2	17.3	9.5	
Uzbekistan	11.2	10.1	5.6	
Netherlands			5.3	
Spain		2.0	3.3	
Italy	3.4	6.0	3.2	
All other destination markets	37.1	36.9	31.9	
Total Russia exports	100.0	100.0	100.0	

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

Source: Official exports statistics under HS subheading 7213.91, 7227.20, and 7227.90 as reported by Russia Customs in the IHS/GTA database, accessed October 11, 2017.

#### THE INDUSTRY IN SOUTH AFRICA

The Commission issued a foreign producer's or exporter's questionnaire to one firm believed to produce and/or export wire rod from South Africa, 12 and the Commission received a usable response from that firm: ArcelorMittal South Africa. This firm's estimated exports to the United States accounted for \*\*\* percent of U.S. imports of wire rod from South Africa in 2016. According to estimates requested of the responding South African producer, its production of wire rod accounts for \*\*\* percent of overall production of wire rod in South Africa.

ArcelorMittal South Africa is the leading steel producer in South Africa. The company supplies more than 60 percent of South Africa's steel and exports to countries both within and outside the Sub-Saharan African region. ArcelorMittal South Africa—which is based in Vanderbijlpark, South Africa—is a subsidiary of Luxembourg-incorporated ArcelorMittal.

#### **Changes in operations**

The producer in South Africa reported \*\*\*.

<sup>&</sup>lt;sup>12</sup> These firms were identified through a review of information submitted in the petition and contained in \*\*\* records.

<sup>&</sup>lt;sup>13</sup> ArcelorMittal, "South Africa," http://corporate.arcelormittal.com/sustainability/localpicture/south-africa, accessed April 21, 2017.

<sup>&</sup>lt;sup>14</sup> ArcelorMittal, "Corporate Governance,"

http://corporate.arcelormittal.com/investors/corporategovernance, accessed April 21, 2017.

# Operations on wire rod

Table VII-14 presents information on the wire rod operations of the responding producer and exporter in South Africa. Capacity in South Africa \*\*\* from 2014 to 2016, and is projected to \*\*\*. Production in South Africa increased \*\*\* percent from 2014 to 2015 and decreased \*\*\* percent from 2015 to 2016. Production is projected to decrease a further \*\*\* percent from 2016 to 2017 but increase 27.5 percent from 2017 to 2018. The capacity utilization rate increased from \*\*\* percent in 2014 to \*\*\* percent in 2015, then decreased to \*\*\* percent in 2016.

Home market shipments increased by \*\*\* percent in absolute terms from 2014 to 2016, but decreased as a share of total shipments from \*\*\* percent to \*\*\* percent from 2014 to 2015 before increasing to \*\*\* percent in 2016. Commercial shipments accounted for \*\*\* home market shipments throughout 2014-16. Export shipments fluctuated during the period, increasing \*\*\* percent from 2014 to 2015, then decreasing \*\*\* percent in 2016. In 2016, \*\*\* percent of total shipments of wire rod from South Africa were exported to the United States, and \*\*\* percent were exported to other markets. Exports of wire rod from South Africa to the United States increased \*\*\* short tons from 2014 to 2015, then decreased to \*\*\* short tons in 2016.

#### Table VII-14

Wire rod: Data for producer in South Africa, 2014-16, January to September 2016, January to September 2017, and projections for calendar years 2017 and 2018

\* \* \* \* \* \* \*

#### Alternative products

As shown in table VII-15, the responding South African firm produced \*\*\* products on the same equipment and machinery used to produce wire rod. Wire rod accounted for the largest, but a decreasing, share of overall production of product on this equipment and machinery from 2014 to 2016. ArcelorMittal South Africa reports \*\*\*.

#### Table VII-15

Wire rod: South African producer's overall capacity and production on the same equipment as subject production, 2014-16, January to September 2016, and January to September 2017

Table VII-16 presents South African export data for wire rod as reported in the GTA database.

Table VII-16
Wire rod: Exports from South Africa, 2014-16

		Calendar year		
Destination market	2014	2015	2016	
	Quantity (short tons)			
South Africa exports to the United States		17,324	24,578	
South Africa exports to other major destination markets				
Kenya	7,180	16,609	4,890	
Zambia	3,929	4,216	4,483	
Zimbabwe	2,821	4,075	4,216	
Swaziland	1,410	3,563	2,820	
Tanzania	239	8,608	1,324	
Botswana	236	173	1,055	
Uganda	26,094	11,490	729	
Burundi		809	510	
All other destination markets	2,456	8,113	3,195	
Total South Africa exports	44,366	74,981	47,800	
	Value (1,000 dollars)			
South Africa exports to the United States		5,001	6,231	
South Africa exports to other major destination markets				
Kenya	4,508	6,615	1,270	
Zambia	2,408	2,326	1,927	
Zimbabwe	2,001	1,964	1,960	
Swaziland	1,361	2,003	1,473	
Tanzania	135	2,756	353	
Botswana	164	115	589	
Uganda	13,011	3,830	170	
Burundi		263	118	
All other destination markets	1,938	2,862	1,571	
Total South Africa exports	25,525	27,735	15,662	

**Table VII-16--Continued** 

Wire rod: Exports from South Africa, 2014-16

		Calendar year		
Destination market	2014	2015	2016	
	Unit value (dollars per short ton)			
South Africa exports to the United				
States		289	254	
South Africa exports to other major				
destination markets	200			
Kenya	628	398	260	
Zambia	613	552	430	
Zimbabwe	709	482	465	
Swaziland	965	562	522	
Tanzania	563	320	267	
Botswana	692	663	558	
Uganda	499	333	233	
Burundi		325	232	
All other destination markets	789	353	492	
Total South Africa exports	575	370	328	
	Share of quantity (percent)			
South Africa exports to the United				
States		23.1	51.4	
South Africa exports to other major				
destination markets				
Kenya	16.2	22.2	10.2	
Zambia	8.9	5.6	9.4	
Zimbabwe	6.4	5.4	8.8	
Swaziland	3.2	4.8	5.9	
Tanzania	0.5	11.5	2.8	
Botswana	0.5	0.2	2.2	
Uganda	58.8	15.3	1.5	
Burundi		1.1	1.1	
All other destination markets	5.5	10.8	6.7	
Total South Africa exports	100.0	100.0	100.0	

Source: Official exports statistics under HS subheading 7213.91, 7227.20, and 7227.90 as reported by South Africa Customs in the IHS/GTA database, accessed October 11, 2017.

#### THE INDUSTRY IN SPAIN

The Commission issued foreign producers' or exporters' questionnaires to four firms believed to produce and/or export wire from Spain, <sup>15</sup> and the Commission received usable responses from each of these firms: ArcelorMittal Spain, Celsa Atlantic, Compañía Española de Laminación, and Global Steel Wire. These firms' estimated exports to the United States accounted for \*\*\* percent of U.S. imports of wire rod from Spain in 2016. According to estimates requested of the responding Spainish producers, their production of wire rod accounts for \*\*\* percent of overall production of wire rod in Spain. Table VII-17 presents information on the wire rod operations of the responding producers and exporters in Spain.

ArcelorMittal Spain, part of Luxembourg-based ArcelorMittal, is Spain's largest producer of steel. The company produces both flat and long products, with its long products manufacturing primarily geared toward industry and construction markets. <sup>16</sup> Compañía Española de Laminación, Global Steel Wire, and Celsa Atlantic are all part of Celsa Group, based in Barcelona, Spain. Compañía Española de Laminación (or Celsa Barcelona), which was established in 1967, manufactures a number of steel products in addition to wire rod. Global Steel Wire and Celsa Atlantic were acquired by Celsa Group in 1987 and 2007, respectively. Global Steel Wire focuses on wire rod production, while Celsa Atlantic produces wire rod and reinforcing steel bars and coil. <sup>17</sup>

Table VII-17

Wire rod: Summary data for producers in Spain, 2016

\* \* \* \* \* \* \*

# **Changes in operations**

Producers in Spain reported one operational and organizational change since January 1, 2014. Specifically, \*\*\*.

# Operations on wire rod

Table VII-18 presents information on the wire rod operations of the responding producers and exporters in Spain. Capacity in Spain varied only slightly throughout 2014-16, totaling \*\*\* in each year during the period; it is projected to total \*\*\* in both 2017 and 2018.

<sup>&</sup>lt;sup>15</sup> These firms were identified through a review of information submitted in the petition and contained in \*\*\* records.

<sup>&</sup>lt;sup>16</sup> ArcelorMittal, "Spain," <a href="http://corporate.arcelormittal.com/sustainability/local-picture/spain">http://corporate.arcelormittal.com/sustainability/local-picture/spain</a>, accessed April 25, 2017; ArcelorMittal, "Luxembourg,"

http://corporate.arcelormittal.com/sustainability/local-picture/luxembourg, accessed April 25, 2017.

<sup>&</sup>lt;sup>17</sup> Celsa Group, "Celsa Group: Who We Are,"

http://www.celsagroup.com/secciones/about/who.aspx, accessed April 25, 2017; Celsa Group, "Contact," <a href="http://www.celsagroup.com/secciones/contact/contact.aspx">http://www.celsagroup.com/secciones/contact/contact.aspx</a>, accessed April 25, 2017.

Production in Spain decreased by \*\*\* percent from 2014 to 2015, then increased \*\*\* percent from 2015 to 2016. Production is projected to increase 16.0 percent from 2016 to 2018. The capacity utilization rate was \*\*\* percent or greater in each year during 2014-16, and is projected to be \*\*\* percent, respectively, in 2017 and 2018.

Spain's home market shipments of wire rod decreased by \*\*\* percent from 2014 to 2015 and increased by \*\*\* percent in 2016, accounting for \*\*\* percent of total shipments in that year. While commercial shipments and internal consumption and transfers fluctuated in opposite directions during 2014-16, each one accounted for \*\*\* percent of total shipments by 2016. Export shipments of wire rod from Spain decreased by \*\*\* percent from 2014 to 2015, then increased by \*\*\* percent from 2015 to 2016. In 2016, \*\*\* percent of total shipments of wire rod from Spain were exported to the United States, and \*\*\* percent were exported to other markets. Exports of wire rod from Spain to the United States increased \*\*\* percent from 2014 to 2016. Such exports are projected to decrease by \*\*\* percent from 2016 to 2018.

#### Table VII-18

Wire rod: Data for producers in Spain, 2014-16, January to September 2016, January to September 2017, and projections for calendar years 2017 and 2018

\* \* \* \* \* \* \*

# **Alternative products**

As shown in table VII-19, some responding Spanish firms produced other products on the same equipment and machinery used to produce wire rod. These products include \*\*\*. Wire rod represented the largest share of overall production of product on this equipment and machinery from 2014 to 2016, accounting for \*\*\* percent of such production in each year during the period. Overall utilization of this production capacity decreased from \*\*\* percent to \*\*\* percent from 2014 to 2016, and is expected to \*\*\* in 2017 and increase to \*\*\* percent in 2018.

# Table VII-19

Wire rod: Spanish producers' overall capacity and production on the same equipment as subject production, 2014-16, January to September 2016, and January to September 2017

Table VII-20 presents Spanish export data for wire rod as reported in the GTA database.

Table VII-20 Wire rod: Exports from Spain, 2014-16

	Calendar year		
Destination market	2014	2015	2016
	Quantity (short tons)		
Spain exports to the United States	58,092	78,177	86,340
Spain exports to other major			
destination markets	400 450	400.000	000 0 40
France	120,453	122,926	223,346
Turkey	199,040	211,928	204,682
Italy	90,058	101,474	84,014
Portugal	83,815	67,348	67,122
Germany	78,014	61,817	51,013
Algeria	83,478	43,141	12,576
Netherlands	1,404	11,538	8,555
United Kingdom	20,768	18,175	8,073
All other destination markets	68,176	45,488	31,066
Total Spain exports	803,297	762,012	776,787
	Value (1,000 dollars)		
Spain exports to the United States	36,737	42,638	41,412
Spain exports to other major destination markets			
France	88,674	68,819	105,929
Turkey	117,575	97,821	85,096
Italy	61,270	54,406	39,860
Portugal	50,882	29,869	27,733
Germany	68,360	46,406	33,419
Algeria	46,537	18,190	4,158
Netherlands	1,394	9,751	6,490
United Kingdom	14,139	8,935	4,502
All other destination markets	48,561	22,937	16,259
Total Spain exports	534,129	399,772	364,857

**Table VII-20--Continued** 

Wire rod: Exports from Spain, 2014-16

	Calendar year		
Destination market	2014	2015	2016
	Unit value (dollars per short ton)		
Spain exports to the United States	632	545	480
Spain exports to other major			
destination markets			
France	736	560	474
Turkey	591	462	416
Italy	680	536	474
Portugal	607	444	413
Germany	876	751	655
Algeria	557	422	331
Netherlands	993	845	759
United Kingdom	681	492	558
All other destination markets	712	504	523
Total Spain exports	665	525	470
	Share of quantity (percent)		
Spain exports to the United States	7.2	10.3	11.1
Spain exports to other major			
destination markets			
France	15.0	16.1	28.8
Turkey	24.8	27.8	26.3
Italy	11.2	13.3	10.8
Portugal	10.4	8.8	8.6
Germany	9.7	8.1	6.6
Algeria	10.4	5.7	1.6
Netherlands	0.2	1.5	1.1
United Kingdom	2.6	2.4	1.0
All other destination markets	8.5	6.0	4.0
Total Spain exports	100.0	100.0	100.0

Source: Official exports statistics under HS subheading 7213.91, 7227.20, and 7227.90 as reported by Spain Customs in the IHS/GTA database, accessed October 11, 2017.

#### THE INDUSTRY IN TURKEY

The Commission issued foreign producers' or exporters' questionnaires to eight firms believed to produce and/or export wire rod from Turkey, <sup>18</sup> and usable responses to the Commission's questionnaire were received from five firms: EGE, Icdas, Isdemir, Kroman, and Habas. These firms' estimated exports to the United States accounted for approximately \*\*\* percent of U.S. imports of wire rod from Turkey in 2016. According to estimates requested of the responding Turkish producers, their production of wire rod accounts for approximately \*\*\* percent of overall production of wire rod in Turkey. Table VII-21 presents information on the wire rod operations of the responding producers and exporters in Turkey.

Table VII-21
Wire rod: Summary data for producers in Turkey, 2016

\* \* \* \* \* \* \* \*

# **Changes in operations**

\*\*\*.

# Operations on wire rod

Table VII-22 presents information on the wire rod operations of the responding producers in Turkey. Wire rod production capacity decreased by \*\*\* percent from 2014 to 2016 and is projected to increase \*\*\* percent from 2016 to 2017 before decreasing \*\*\* in 2018. Wire rod production volume decreased by \*\*\* percent from 2014 to 15, then increased by \*\*\* percent from 2015 to 2016. Production is expected to increase \*\*\* percent during 2016-18. Capacity utilization fluctuated during 2014-2016, and is projected to increase to \*\*\* percent in 2017 and \*\*\* percent in 2018 as production is expected to grow more quickly than capacity in the near term.

Home market shipments – almost of which were commercial shipments - as a share of total shipments fluctuated between \*\*\* percent and \*\*\* percent during 2014-16. From 2014 to 2016, exports to the United States and to markets other than the United States fluctuated in opposite directions, and this trend is projected to continue during 2017-18. Exports to the United States accounted for \*\*\* of total exports throughout 2014-16, and are expected to account for \*\*\* percent of total exports by 2018. Regional and domestic market strength reportedly has had a negative impact on Turkish producers' incentive to export wire rod to the United States. <sup>19</sup>

<sup>&</sup>lt;sup>18</sup> These firms were identified through a review of information submitted in the petition and contained in \*\*\* records.

<sup>&</sup>lt;sup>19</sup> Hearing transcript, pp. 177-178 (Noonan).

# Table VII-22

Wire rod: Data for producers in Turkey, 2014-16, January to September 2016, January to September 2017, and projections for calendar years 2017 and 2018

\* \* \* \* \* \* \*

# **Alternative products**

As shown in table VII-23, responding Turkish firms produced \*\*\* products on the same equipment and machinery used to produce wire rod. Specifically, \*\*\*. Wire rod accounted for between \*\*\* percent of production of all products made on the shared equipment during 2014-16.

#### Table VII-23

Wire rod: Turkish producers' overall capacity and production on the same equipment as subject production, 2014-16, January to September 2016, and January to September 2017

Table VII-24 presents Turkish export data for wire rod as reported in the GTA database.

Table VII-24 Wire rod: Exports from Turkey, 2014-16

	Calendar year			
Destination market	2014	2015	2016	
	Quantity (short tons)			
Turkey exports to the United				
States	285,415	210,117	85,229	
Turkey exports to other major destination markets				
Egypt	15,972	77,950	136,144	
Netherlands			70,106	
Libya	74,281	42,138	48,831	
Morocco	61,996	18,596	47,958	
Spain	25,884	33,974	45,624	
Iraq	43,485	30,238	32,966	
Portugal	99	103	29,590	
Israel	3,065	12,850	28,753	
All other destination markets	211,384	125,833	209,615	
Total Turkey exports	721,580	551,798	734,816	
	Value (1,000 dollars)			
Turkey exports to the United States	149,383	82,093	30,617	
Turkey exports to other major destination markets				
Egypt	7,906	27,497	44,875	
Netherlands			27,124	
Libya	40,079	17,136	17,058	
Morocco	32,736	7,345	16,960	
Spain	13,435	12,055	17,120	
Iraq	23,763	11,829	11,762	
Portugal	60	44	11,039	
Israel	1,678	5,007	10,247	
All other destination markets	116,098	51,060	76,790	
Total Turkey exports	385,138	214,066	263,591	

**Table VII-24--Continued** 

Wire rod: Exports from Turkey, 2014-16

	Calendar year		
Destination market	2014	2015	2016
	Unit value (dollars per short ton)		
Turkey exports to the United			
States	523	391	359
Turkey exports to other major			
destination markets	495	353	330
Egypt	490	303	
Netherlands			387
Libya	540	407	349
Morocco	528	395	354
Spain	519	355	375
Iraq	546	391	357
Portugal	611	429	373
Israel	547	390	356
All other destination markets	549	406	366
Total Turkey exports	534	388	359
	Share of quantity (percent)		
Turkey exports to the United			
States	39.6	38.1	11.6
Turkey exports to other major			
destination markets	2.2	444	40.5
Egypt	2.2	14.1	18.5
Netherlands			9.5
Libya	10.3	7.6	6.6
Morocco	8.6	3.4	6.5
Spain	3.6	6.2	6.2
Iraq	6.0	5.5	4.5
Portugal	0.0	0.0	4.0
Israel	0.4	2.3	3.9
All other destination markets	29.3	22.8	28.5
Total Turkey exports	100.0	100.0	100.0
Note Change and notice above as 10	01		th   O OF

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

Source: Official exports statistics under HS subheading 7213.91, 7227.20, and 7227.90 as reported by Turkey Customs in the IHS/GTA database, accessed October 11, 2017.

#### THE INDUSTRY IN UKRAINE

The Commission issued foreign producers' or exporters' questionnaires to two firms believed to produce and/or export wire rod from Ukraine. Usable responses to the Commission's questionnaire were received from both of these firms: ArcelorMittal Kryvyi Rih and Yenakiieve Iron and Steel Works. These firms' estimated exports to the United States accounted for approximately \*\*\* percent of U.S. imports of wire rod from Ukraine in 2016. According to estimates requested of the responding Ukrainian producers, their production of wire rod accounts for approximately \*\*\* percent of overall production of wire rod in Ukraine. Table VII-25 presents information on the wire rod operations of the responding producers and exporters in Ukraine.

Until recently, Yenakiieve Iron and Steel Works (owned by the Metinvest Group) manufactured a number of metal products including angles, beams, billets, channels, rails, and reinforcing bars. In March 2017, Metinvest lost control of this enterprise due to political conflict, and no longer operates these facilities. ArcelorMittal Kryvyi Rih is part of Luxembourg-based ArcelorMittal, which is among Ukraine's leading foreign investors. The company's operations in Ukraine range from the mining of iron ore to the manufacture of various steel products. The Ukrainian government's loss of control of part of the Donbas region—which is home to enterprises that support the country's steel industry—has compelled ArcelorMittal Kryvyi Rih to source a large amount of production inputs from foreign suppliers. As such, the firm's finished products have risen in price and decreased in competitiveness. Overall, Ukraine's steel production from January-September 2017 posted a year-on-year decrease of 13.5 percent. As 50 percent.

Table VII-25
Wire rod: Summary data for producers in Ukraine, 2016

<sup>&</sup>lt;sup>20</sup> These firms were identified through a review of information submitted in the petition and contained in \*\*\* records.

<sup>&</sup>lt;sup>21</sup> Metal Bulletin, "PJSC, Yenakiieve Iron & Steel Works/Yenakiieve Steel (Metinvest Group)," company database, <a href="http://www.mbdatabase.com/Basic-Information/PJSC-Yenakiieve-Iron-Steel-Works-Yenakiieve-Steel-Metinvest-Group/46767/1">https://emz.metinvest-Group/46767/1</a>, accessed April 27, 2017; Metinvest, "Metinvest Announces Loss of Control Over Operations in Temporarily Non-controlled Territory," <a href="https://emz.metinvestholding.com/en/press/news/show/7394">https://emz.metinvestholding.com/en/press/news/show/7394</a>, accessed April 27, 2017.

<sup>&</sup>lt;sup>22</sup> ArcelorMittal, "ArcelorMittal Kryvyi Rih," <a href="http://ukraine.arcelormittal.com/index.php?id=8">http://ukraine.arcelormittal.com/index.php?id=8</a>, accessed April 27, 2017.

<sup>&</sup>lt;sup>23</sup> Hearing transcript, pp. 17-18 (Tarasiuk).

# **Changes in operations**

One producer in Ukraine reported a change in its operations since January 1, 2014. Yenakiieve Iron and Steel Works reported that \*\*\*. The company indicates that \*\*\*. ArcelorMittal Kryvyi Rih reported \*\*\*.

# Operations on wire rod

Table VII-26 presents information on the wire rod operations of the responding producers and exporters in Ukraine. Capacity in Ukraine decreased by \*\*\* percent from 2014 to 2016, and is projected to decrease a further \*\*\* percent from 2016 to 2017 and \*\*\* from 2017 to 2018. Production in Ukraine decreased \*\*\* percent from 2014 to 2015, then increased \*\*\* percent from 2015 to 2016. Production is projected to decrease \*\*\* percent from 2016 to 2017, and \*\*\* in 2018. The capacity utilization rate increased from \*\*\* percent in 2014 to \*\*\* percent in 2016, and is projected decrease to \*\*\* percent in 2017 and \*\*\* in 2018.

Ukraine's home market shipments of wire rod decreased \*\*\* percent from 2014 to 2015, then increased by \*\*\* percent from 2015 to 2016. Commercial shipments represented the larger share of Ukrainian home markets shipments of wire rod throughout 2014-16, accounting for \*\*\* percent of home market shipments in each year during the period.

Export shipments accounted for \*\*\* percent of Ukraine's total shipments of wire rod during 2014-16, with \*\*\* percent in 2016. In absolute terms, export shipments fluctuated, decreasing \*\*\* percent from 2014 to 2015, then increasing \*\*\* percent from 2015 to 2016. In 2016, \*\*\* percent of total shipments of wire rod from Ukraine were exported to the United States, and \*\*\* percent were exported to other markets. Exports of wire rod from the Ukraine to the United States increased from \*\*\* short tons in 2014 to \*\*\* short tons in 2016. Ukrainian exports of wire rod to the United States are projected to decrease by \*\*\* percent from 2016 to 2017, and decrease \*\*\* in 2018.

#### Table VII-26

Wire rod: Data for producers in Ukraine, 2014-16, January to September 2016, January to September 2017, and projections for calendar years 2017 and 2018

# **Alternative products**

As shown in table VII-27, responding Ukrainian firms produced \*\*\* on the same equipment and machinery used to produce wire rod. Wire rod accounted for \*\*\* percent of overall production of product made on this equipment in each year from 2014 to 2016. Overall capacity utilization increased from \*\*\* percent in 2014 to \*\*\* percent in 2016. Yenakiieve Iron and Steel Works reported that it produced \*\*\* from 2014-16, which accounted for \*\*\* percent of production on the shared equipment during that time period. ArcelorMittal Kryvyi Rih reported that \*\*\*.

#### Table VII-27

Wire rod: Ukrainian producers' overall capacity and production on the same equipment as subject production, 2014-16, January to September 2016, and January to September 2017

Table VII-28 presents Ukrainian export data for wire rod as reported in the GTA database.

Table VII-28 Wire rod: Exports from Ukraine, 2014-16

•	Calendar year		
Destination market	2014	2015	2016
	Quantity (short tons)		
Ukraine exports to the United States	21,153	99,218	141,598
Ukraine exports to other major destination markets			
Israel	178,470	143,081	169,713
Netherlands	71	35,053	128,872
Romania	90,840	83,433	126,898
Egypt	29,529	19,386	112,316
Poland	74,176	50,061	104,874
Bulgaria	59,271	82,356	75,739
Senegal	73,020	83,745	75,000
Colombia	136	21,661	58,909
All other destination markets	705,770	539,835	298,508
Total Ukraine exports	1,232,435	1,157,827	1,292,428
	Value (1,000 dollars)		
Ukraine exports to the United States	10,690	36,864	46,162
Ukraine exports to other major destination markets			
Israel	85,585	52,027	53,615
Netherlands	34	12,035	43,548
Romania	45,822	32,701	43,568
Egypt	14,434	6,309	35,577
Poland	38,350	17,427	35,529
Bulgaria	28,608	30,148	24,118
Senegal	36,314	30,912	24,461
Colombia	66	7,228	17,646
All other destination markets	344,637	192,495	91,407
Total Ukraine exports	604,540	418,146	415,631

**Table VII-28--Continued** 

Wire rod: Exports from Ukraine, 2014-16

	Calendar year		
Destination market	2014	2015	2016
	Unit v	alue (dollars per sho	ort ton)
Ukraine exports to the United			
States	505	372	326
Ukraine exports to other major			
destination markets	480	364	316
1010.01			
Netherlands	476	343	338
Romania	504	392	343
Egypt	489	325	317
Poland	517	348	339
Bulgaria	483	366	318
Senegal	497	369	326
Colombia	485	334	300
All other destination markets	488	357	306
Total Ukraine exports	491	361	322
	Sha	are of quantity (perce	ent)
Ukraine exports to the United			
States	1.7	8.6	11.0
Ukraine exports to other major			
destination markets	14.5	12.4	13.1
Netherlands	0.0	3.0	10.0
Romania	7.4	7.2	9.8
Egypt	2.4	1.7	8.7
Poland	6.0	4.3	8.1
Bulgaria	4.8	7.1	5.9
Senegal	5.9	7.2	5.8
Colombia	0.0	1.9	4.6
All other destination markets	57.3	46.6	23.1
Total Ukraine exports	100.0	100.0	100.0

Source: Official exports statistics under HS subheading 7213.91, 7227.20, and 7227.90 as reported by Ukraine Customs in the IHS/GTA database, accessed October 11, 2017.

#### THE INDUSTRY IN THE UNITED ARAB EMIRATES

The Commission received no responses to its final phase questionnaire from United Arab Emirates producers or exporters of wire rod, and as such, the information provided below is based on information obtained during the preliminary phase of the investigations.

During the preliminary phase of the investigations, the Commission issued foreign producers' or exporters' questionnaires to three firms believed to produce and/or export wire rod from the United Arab Emirates. A useable response to the Commission's questionnaire was received from one firm: Emirates Steel. This firm's exports to the United States accounted for \*\*\* percent of U.S. imports of wire rod from the United Arab Emirates during 2014-16. According to estimates requested of the responding United Arab Emirates producer, its production of wire rod accounts for all production of wire rod in the United Arab Emirates.

Emirates Steel, which is located outside of Abu Dhabi, is a subsidiary of United Arab Emirates-based holding company Senaat. Senaat established Emirates Steel in 1998, and the company has expanded twice since the commissioning of its first plant in October 2001.<sup>25</sup>

#### **Changes in operations**

Emirates Steel, the only reporting producer in the United Arab Emirates, reported no operational and organizational changes since January 1, 2014. The firm indicated that \*\*\*.

#### Operations on wire rod

Table VII-29 presents information on the wire rod operations of the responding producer and exporter in the United Arab Emirates. Capacity in the United Arab Emirates \*\*\* from 2014 to 2016, and is projected to \*\*\* in 2017 and 2018. Production in the United Arab Emirates increased by \*\*\* percent from 2014 to 2016. Production is projected to increase a further \*\*\* percent from 2016 to 2107, and decrease by \*\*\* percent from 2017 to 2018. The capacity utilization rate increased from \*\*\* percent in 2014 to \*\*\* percent in 2016, and is projected to \*\*\* percent in 2017 and 2018.

Home market shipments fluctuated in both absolute terms and as a share of total shipments, and accounted for \*\*\* of total shipments throughout 2014 to 2016. While internal consumption and transfers increased by \*\*\* percent in absolute terms from 2014 to 2016, commercial shipments accounted for \*\*\* percent of total home market shipments throughout the period. Export shipments increased \*\*\* percent in absolute terms from 2014 to 2016 but

<sup>&</sup>lt;sup>24</sup> These firms were identified through a review of information submitted in the petition and contained in proprietary Customs records.

https://www.emiratessteel.com/index.php/en/who-we-are/about-emirates-steel, accessed April 21, 2017; Emirates Steel, "Who We Are; Milestones," <a href="https://www.emiratessteel.com/index.php/en/who-we-are/milestones">https://www.emiratessteel.com/index.php/en/who-we-are/milestones</a>, accessed April 21, 2017; Senaat, "About Senaat," <a href="https://www.senaat.co/about-senaat">http://www.senaat.co/about-senaat</a>, accessed April 21, 2017.

fluctuated in relative terms, increasing from \*\*\* percent of total shipments in 2014 to \*\*\* percent in 2015, then decreasing to \*\*\* percent in 2016. In 2016, \*\*\* percent of total shipments of wire rod from the United Arab Emirates were exported to the United States, and \*\*\* percent were exported to other markets. Exports of wire rod from the United Arab Emirates to the United States increased from \*\*\* short tons from 2014 to 2016, and are projected to decrease to \*\*\* in 2017 and 2018.

#### Table VII-29

Wire rod: Data for producer in the United Arab Emirates, 2014-16, and projections for calendar years 2017 and 2018

\* \* \* \* \* \* \* \*

#### **Alternative products**

As shown in table VII-30, Emirates Steel produced \*\*\* on the same equipment and machinery used to produce wire rod. While the production of wire rod increased in absolute terms from 2014 to 2016, wire rod accounted for a smaller share of overall production of product made on this equipment and machinery in 2016 than in 2014. Throughout the period, wire rod accounted for \*\*\* percent of overall production of product made on this equipment and machinery. Overall capacity utilization increased steadily during 2014-16, reaching \*\*\* percent in 2016. Emirates Steel reports that \*\*\*.

#### Table VII-30

Wire rod: Overall capacity and production on the same equipment as in-scope production by producers in the United Arab Emirates, 2014-16

\* \* \* \* \* \* \*

# **Exports**

Table VII-31 presents UK export data for wire rod as reported in the GTA database.

Table VII-31
Wire rod: Exports from the United Arab Emirates, 2014-16

Wife rod. Exports from the officed Arab Ellin	Calendar year			
Destination market	2014	2015	2016	
	Qu	antity (short tons)	1	
United Arab Emirates exports to the United States	80	217	163	
United Arab Emirates exports to other major destination markets				
Qatar	2,436	29,064	181,242	
Saudi Arabia	41,192	124,664	157,588	
Malaysia	17,513	3,951	65,406	
Oman	33,478	55,822	37,358	
Other Asia N.E.S.	2,757	1,372	21,660	
India	1,001	10,527	12,836	
Bahrain	1,421	5,119	6,582	
Sri Lanka	413	531	4,540	
All other destination markets	20,189	26,097	15,065	
Total United Arab Emirates exports	120,480	257,362	502,439	
	Va	lue (1,000 dollars)		
United Arab Emirates exports to the United States	61	109	69	
United Arab Emirates exports to other major destination markets				
Qatar	1,380	8,742	13,876	
Saudi Arabia	22,810	50,859	57,668	
Malaysia	9,034	1,686	25,218	
Oman	18,164	25,282	14,350	
Other Asia N.E.S.	1,446	569	8,801	
India	400	4,332	5,221	
Bahrain	788	2,478	3,058	
Sri Lanka	249	223	1,896	
All other destination markets	10,706	9,294	6,120	
Total United Arab Emirates exports	65,038	103,573	136,276	

**Table VII-31--Continued** 

Wire rod: Exports from United Arab Emirates, 2014-16

	,	Calendar year	
Destination market	2014	2015	2016
	Unit value (dollars per short ton)		
United Arab Emirates exports to the United States	764	502	423
United Arab Emirates exports to other major destination markets			
Qatar	567	301	77
Saudi Arabia	554	408	366
Malaysia	516	427	386
Oman	543	453	384
Other Asia N.E.S.	525	415	406
India	399	412	407
Bahrain	554	484	465
Sri Lanka	601	420	418
All other destination markets	530	356	406
Total United Arab Emirates exports	540	402	271
	Shar	e of quantity (perc	ent)
United Arab Emirates exports to the United States	0.1	0.1	0.0
United Arab Emirates exports to other major destination markets			
Qatar	2.0	11.3	36.1
Saudi Arabia	34.2	48.4	31.4
Malaysia	14.5	1.5	13.0
Oman	27.8	21.7	7.4
Other Asia N.E.S.	2.3	0.5	4.3
India	0.8	4.1	2.6
Bahrain	1.2	2.0	1.3
Sri Lanka	0.3	0.2	0.9
All other destination markets	16.8	10.1	3.0
Total United Arab Emirates exports	100.0	100.0	100.0

Source: Official exports statistics under HS subheading 7213.91, 7227.20, and 7227.90 as reported by United Arab Emirates Customs in the IHS/GTA database, accessed October 11, 2017.

#### THE INDUSTRY IN THE UNITED KINGDOM

The Commission issued foreign producers' or exporters' questionnaires to two firms believed to produce and/or export wire rod from the United Kingdom. <sup>26</sup> Usable responses to the Commission's questionnaire were received from both of these firms: British Steel and Celsa UK. These firms' estimated exports to the United States accounted for \*\*\* percent of U.S. imports of wire rod from the United Kingdom in 2016. According to estimates requested of the responding UK producers, their production of wire rod accounts for approximately \*\*\* percent of overall production of wire rod in the United Kingdom. Table VII-32 presents information on the wire rod operations of the responding producers and exporters in the United Kingdom.

British Steel was formed when Tata Steel sold its Long Products Europe to Greybull Capital in 2016. Among other steel products, the company produces wire rod for several markets including construction and engineering, consumer goods, and the automotive industry. Celsa Steel UK is a subsidiary of Spanish firm Celsa Group, which acquired the company in 2003. Celsa Steel UK principally supplies product to markets in the Republic of Ireland and the United Kingdom.

Table VII-32

Wire rod: Summary data for producers in the United Kingdom, 2016

\* \* \* \* \* \* \*

## **Changes in operations**

Producers in the United Kingdom reported several operational and organizational changes since January 1, 2014. British Steel indicated that \*\*\* British Steel reported that \*\*\*. British Steel also reported that \*\*\*. Celsa UK reported \*\*\*.

<sup>&</sup>lt;sup>26</sup> These firms were identified through a review of information submitted in the petition and contained in \*\*\* records.

<sup>&</sup>lt;sup>27</sup> British Steel, "Proud of Our Heritage," <a href="http://britishsteel.co.uk/who-we-are/">http://britishsteel.co.uk/who-we-are/</a>, accessed April 21, 2017; British Steel, "Our Markets," <a href="http://britishsteel.co.uk/who-we-are/our-markets/">http://britishsteel.co.uk/who-we-are/our-markets/</a>, accessed April 21, 2017.

<sup>&</sup>lt;sup>28</sup> Celsa Group, "Celsa Group: Who We Are,"

http://www.celsagroup.com/secciones/about/who.aspx, accessed April 21, 2017

<sup>&</sup>lt;sup>29</sup> Celsa Steel (UK) Ltd., "About Us: Celsa Steel UK,"

http://www.celsauk.com/Company.mvc/CelsaSteelUK, accessed April 21, 2017.

#### Operations on wire rod

Table VII-33 presents information on the wire rod operations of the responding producers and exporters in the United Kingdom. Capacity in the United Kingdom decreased by \*\*\* percent from 2014 to 2015, then increased by \*\*\* percent from 2015 to 2016. Capacity is projected to increase \*\*\* percent from 2016 to 2017 and \*\*\* from 2017 to 2018. Production in the United Kingdom increased \*\*\* percent from 2014 to 2015, and decreased \*\*\* percent from 2015 to 2016. Production is projected to increase \*\*\* percent from 2016 to 2018. The capacity utilization rate increased from \*\*\* percent in 2014 to \*\*\* percent in 2015, then decreased to \*\*\* percent in 2016. The capacity utilization rate is projected to increase by \*\*\* percentage points from 2016 to 2018.

Home market shipments increased from \*\*\* percent to \*\*\* percent from 2014 to 2016. Both internal consumption and transfers and commercial shipments increased in absolute terms and as shares on total shipments during the period. While home market shipments increased, export shipments as a share of total shipments decreased from \*\*\* percent in 2014 to \*\*\* percent in 2016. In absolute terms, export shipments fluctuated, increasing \*\*\* percent from 2014 to 2015, then decreasing \*\*\* percent from 2015 to 2016. In 2016, \*\*\* percent of total shipments of wire rod from the United Kingdom were exported to the United States, and \*\*\* percent were exported to other markets. Exports of wire rod from the United Kingdom to the United States decreased \*\*\* percent from 2014 to 2015, then increased \*\*\* percent from 2015 to 2016. UK exports of wire rod to the United States are projected to increase \*\*\* percent from 2016 to 2017, and \*\*\* in 2018.

#### Table VII-33

Wire rod: Data for producers in the United Kingdom, 2014-16, January to September 2016, January to September 2017, and projections for calendar years 2017 and 2018

\* \* \* \* \* \* \*

#### Alternative products

As shown in table VII-34, responding United Kingdom firms produced other products on the same equipment and machinery used to produce wire rod. These products include \*\*\*. Wire rod accounted for \*\*\*. Overall capacity utilization increased by \*\*\* percentage points from 2014 to 2016, and reached \*\*\* percent in 2016. Celsa Steel UK reports that \*\*\*. British Steel indicates that \*\*\*.

#### Table VII-34

Wire rod: UK producers' overall capacity and production on the same equipment as subject production, 2014-16, January to September 2016, and January to September 2017

\* \* \* \* \* \* \*

# **Exports**

Table VII-35 presents UK export data for wire rod as reported in the GTA database.

Table IV-35 Wire rod: Exports from the United Kingdom, 2014-16

Wife rod. Exports from the officer kingu	Calendar year			
Destination market	2014	2015	2016	
	Quantity (short tons)			
United Kingdom exports to the United States	72,626	49,645	49,642	
United Kingdom exports to other major destination markets				
Belgium	99,889	120,998	101,049	
Germany	61,157	73,294	92,691	
Italy	75,555	91,508	60,036	
Sweden	45,875	44,291	37,994	
Turkey	40,644	35,804	29,393	
Poland	20,477	29,745	27,391	
France	37,905	24,191	25,762	
Taiwan	19,672	10,686	23,387	
All other destination markets	130,922	127,628	110,204	
Total United Kingdom exports	604,721	607,789	557,550	
	Ì	/alue (1,000 dollars)		
United Kingdom exports to the United States	44,416	29,083	23,900	
United Kingdom exports to other major destination markets				
Belgium	61,777	53,559	41,980	
Germany	42,866	38,926	42,289	
Italy	51,324	48,926	27,424	
Sweden	28,631	22,075	16,963	
Turkey	27,469	18,109	13,526	
Poland	14,064	14,951	12,523	
France	24,759	12,267	11,142	
Taiwan	11,121	4,827	8,604	
All other destination markets	89,098	66,060	52,735	
Total United Kingdom exports	395,524	308,783	251,086	

**Table VII-35--Continued** 

Wire rod: Exports from the United Kingdom, 2014-16

TWING FOUR EXPORTS FROM THE OFFICE AND THE OFFICE A	,	Calendar year	
Destination market	2014	2015	2016
	Unit value (dollars per short ton)		
United Kingdom exports to the United			
States	612	586	481
United Kingdom exports to other major			
destination markets	C40	443	445
Belgium	618		415
Germany	701	531	456
Italy	679	535	457
Sweden	624	498	446
Turkey	676	506	460
Poland	687	503	457
France	653	507	433
Taiwan	565	452	368
All other destination markets	681	518	479
Total United Kingdom exports	654	508	450
	Sha	re of quantity (perce	ent)
United Kingdom exports to the United States	12.0	8.2	8.9
United Kingdom exports to other major destination markets			
Belgium	16.5	19.9	18.1
Germany	10.1	12.1	16.6
Italy	12.5	15.1	10.8
Sweden	7.6	7.3	6.8
Turkey	6.7	5.9	5.3
Poland	3.4	4.9	4.9
France	6.3	4.0	4.6
Taiwan	3.3	1.8	4.2
All other destination markets	21.6	21.0	19.8
Total United Kingdom exports	100.0	100.0	100.0

Source: Official exports statistics under HS subheading 7213.91, 7227.20, and 7227.90 as reported by United Kingdom Customs in the IHS/GTA database, accessed October 11, 2017.

#### SUBJECT COUNTRIES COMBINED

Table VII-36 presents combined data on the wire rod capacity and production of the responding producers and exporters in subject countries, and table VII-37 presents combined data on overall capacity and production on the same equipment as in-scope production by responding producers in subject countries.

#### Table VII-36

Wire rod: Data on industry in subject countries, 2014-16, January to September 2016, and January to September 2017 and projection calendar years 2017 and 2018

\* \* \* \* \* \* \*

#### Table VII-37

Wire rod: Overall capacity and production on the same equipment as in-scope production by producers in subject countries, 2014-16, January to September 2016, and January to September 2017

\* \* \* \* \* \* \*

### **U.S. INVENTORIES OF IMPORTED MERCHANDISE**

Table VII-38 presents data on U.S. importers' reported inventories of wire rod.

Table VII-38
Wire rod: U.S. importers' inventories, 2014-16, January-September 2016, and January-September 2017

	Calendar year		January to S	September	
Item	2014	2015	2016	2016	2017
		Inventories	(short tons); Ra	tios (percent)	
Imports from Belarus: Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from Italy: Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from Korea: Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from Russia: Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from South Africa: Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from Spain: Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from Turkey: Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***

Table VII-38--Continued Wire rod: U.S. importers' inventories, 2014-16, January-September 2016, and January-September 2017

	Calendar year			January to September		
Item	2014	2015	2016	2016	2017	
	Inventories (short tons); Rati			); Ratios (percent)		
Imports from Ukraine: Inventories	***	***	***	***	***	
Ratio to U.S. imports	***	***	***	***	***	
Ratio to U.S. shipments of imports	***	***	***	***	***	
Ratio to total shipments of imports	***	***	***	***	***	
Imports from United Arab Emirates: Inventories	***	***	***	***	***	
Ratio to U.S. imports	***	***	***	***	***	
Ratio to U.S. shipments of imports	***	***	***	***	***	
Ratio to total shipments of imports	***	***	***	***	***	
Imports from United Kingdom: Inventories	***	***	***	***	***	
Ratio to U.S. imports	***	***	***	***	***	
Ratio to U.S. shipments of imports	***	***	***	***	***	
Ratio to total shipments of imports	***	***	***	***	***	
Imports from Subject sources: Inventories	71,110	107,097	55,042	67,408	40,470	
Ratio to U.S. imports	16.2	16.9	8.1	8.9	6.9	
Ratio to U.S. shipments of imports	18.8	18.0	7.3	8.1	7.2	
Ratio to total shipments of imports	18.8	18.0	7.2	8.0	6.8	
Imports from Canada: Inventories	***	***	***	***	***	
Ratio to U.S. imports	***	***	***	***	***	
Ratio to U.S. shipments of imports	***	***	***	***	***	
Ratio to total shipments of imports	***	***	***	***	***	
Imports from Nonsubject sources: Inventories	46,072	43,847	67,612	51,249	100,037	
Ratio to U.S. imports	8.5	16.0	27.7	21.2	24.9	
Ratio to U.S. shipments of imports	7.7	15.9	30.6	22.2	28.0	
Ratio to total shipments of imports	7.7	15.9	30.6	22.2	28.0	
Imports from all import sources: Inventories	117,182	150,944	122,654	118,657	140,507	
Ratio to U.S. imports	12.0	16.7	13.2	11.9	14.2	
Ratio to U.S. shipments of imports	12.0	17.3	12.6	11.2	15.3	
Ratio to total shipments of imports	12.0	17.3	12.5	11.0	14.7	

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

#### **U.S. IMPORTERS' OUTSTANDING ORDERS**

Table VII-39 presents data on U.S. importers' reported arranged imports from subject sources, Canada, and all other sources for after September 30, 2017.

Table VII-39
Wire rod: U.S. importers' arranged imports, October 2017 through September 2018

	Period					
Item	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018	Jul-Sept 2018	Total	
Arranged U.S. imports from Belarus	***	***	***	***	***	
Italy	***	***	***	***	***	
Korea	***	***	***	***	***	
Russia	***	***	***	***	***	
South Africa	***	***	***	***	***	
Spain	***	***	***	***	***	
Turkey	***	***	***	***	***	
Ukraine	***	***	***	***	***	
United Arab Emirates	***	***	***	***	***	
United Kingdom	***	***	***	***	***	
Subject sources	***	***	***	***	***	
Canada	***	***	***	***	***	
Other sources	***	***	***	***	***	
Nonsubject sources	120,147	29,510	18,220	18,620	186,497	
All sources	127,279	29,510	18,220	18,620	193,629	

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

#### ANTIDUMPING OR COUNTERVAILING DUTY ORDERS IN THIRD-COUNTRY MARKETS

Table VII-40 presents a list of countries with current remedies in effect as well as the type of trade remedy action and year in which the orders were issued.

Table VII-40
Wire rod: Trade remedies on wire rod from subject countries in third countries, by type of action and year of imposition of duties

Country imposing remedy	Subject coutry(ies) subject to trade remedy action	Type of remedy	Covered products	Year of duty imposition
,	Belarus, Italy, Korea, Russia, South Africa, Spain, Turkey, Ukraine, United Arab Emirates,	Safeguard		·
Chile	United Kingdom	measure	Steel wire rod	April 2016
Eurasian Economic Commission (Russia, Kazakhstan, Belarus, Armenia, and				
Kyrgyzstan)	Ukraine	Antidumping	Bars and rods	March 2016
Indonesia	Belarus, Italy, Spain, United Kingdom	Safeguard measure	Bars and rods	August 2015
Malaysia	Korea	Antidumping	Steel wire rod	February 2013
Malaysia	Belarus, Italy, Korea, Russia, South Africa, Spain, Turkey, Ukraine, United Arab Emirates, United Kingdom	Provisional safeguard measure	Steel wire rod and deformed bar in coil	April 2017
Mexico	Ukraine	Antidumping/ ***	Bars and rods of iron or non-alloy steel/***	September 2000/***
Morocco	Belarus, Russia, Spain, Turkey, Ukraine, United Kingdom	Safeguard measure	Wire rods and reinforcing bars	March 2015
***	***	***	***	***
Viotnom	Italy, Korea, Russia, Spain, United Arab Emirates, United	Safeguard	Certain semi-finished and finished products of ally and non-alloy steel, including rods of iron or	August 2016
Vietnam	Kingdom	measure	non-alloy steel	August 2016

Note.—Petitioners noted that \*\*\*. Non-trade remedy barriers imposed by third countries in the form of increased import duties on imports from certain subject sources were identified for \*\*\*.

Source: Petitioner Nucor's postconference brief, exh. 9 and Notice of Affirmative Final Determination of an Investigation with Regard to Steel Wire Rods and Deformed Bar in Coils Products Imported Into Malaysia, Federal Government Gazette, April 11, 2017.

#### INFORMATION ON NONSUBJECT COUNTRIES

The industries in China, Germany, and Japan are among the largest global producers and exporters of wire rod. The largest wire rod producers in China include Benxi Beiying Iron & Steel Group, Hebei Iron and Steel Group Co., Jiangsu Shangang Group Co. Ltd., and Qiananshi Jiujiang Wire Co., Ltd, Wuhan Iron and Steel Group Corp., and Xingtai Iron and Steel Co., Ltd. China exported approximately 11.9 million short tons in 2016. Imports of wire rod from China are currently subject to antidumping and countervailing duty orders. The largest wire rod producers in Germany include ArcelorMittal, Badische Stahlwerke, Riva Stahl, and Saarstahl AG. Germany exported approximately 1.9 million short tons in 2016. The largest wire rod producers in Japan include JFE, Kobe Steel, Nakayama Steel Works, and Nippon Steel & Sumitomo Metals Corp. Japan exported approximately 1.7 million short tons in 2016.

Table VII-41 presents the largest global exporters of bar and rod (including wire rod) from 2014 to 2016.

<sup>&</sup>lt;sup>30</sup> Carbon and Certain Alloy Steel Wire Rod From China, Inv. Nos. 701-TA-512 and 731-TA-1248, USITC Publication 4509, January 2015, p. I-4.

<sup>&</sup>lt;sup>31</sup> Official export statistics under HS subheading 7213.91, 7227.20, and 7227.90 as reported by various national statistical authorities supplemented with UN comtrade data in the IHS/GTA database, accessed April 5, 2017.

<sup>&</sup>lt;sup>32</sup> Official export statistics under HS subheading 7213.91, 7227.20, and 7227.90 as reported by various national statistical authorities supplemented with UN comtrade data in the IHS/GTA database, accessed April 5, 2017.

<sup>&</sup>lt;sup>33</sup> Official export statistics under HS subheading 7213.91, 7227.20, and 7227.90 as reported by various national statistical authorities supplemented with UN comtrade data in the IHS/GTA database, accessed April 5, 2017.

Table VII-41
Bars and rod (including wire rod): Global exports by exporting country, 2014-16

	Calendar year				
Exporter	2014	2015	2016		
		Quantity (short tons)			
United States	95,301	75,461	72,657		
Belarus	8,648	200,181	255,596		
Italy	796,943	773,843	811,560		
Korea	892,517	938,588	925,397		
Russia	599,486	654,048	1,042,946		
South Africa	44,366	74,981	47,800		
Turkey	721,580	551,798	734,816		
Ukraine	1,232,435	1,157,827	1,292,428		
United Arab Emirates	120,480	257,362	502,439		
United Kingdom	604,721	607,789	557,550		
Subject sources	5,021,177	5,216,417	6,170,534		
All other major reporting exporters	12,433,992	13,378,324	11,886,041		
Canada	500,374	519,169	512,789		
Germany	2,108,013	2,109,334	1,869,315		
Japan	1,676,861	1,668,732	1,700,278		
Czech Republic	727,064	845,786	926,641		
Brazil	294,048	415,000	515,901		
Poland	450,450	458,016	421,594		
Austria	308,103	304,368	386,659		
All other exporters	3,702,541	3,221,515	3,234,772		
Total global exports	27,317,924	28,212,122	27,697,182		
3	,- ,-	Value (1,000 dollars)	, , -		
United States	99,541	75,629	66,841		
Belarus	4,459	61,689	68,523		
Italy	482,016	349,581	336,634		
Korea	542,513	452,596	421,658		
Russia	303,968	226,396	323,415		
South Africa	25,525	27,735	15,662		
Turkey	385,138	214,066	263,591		
Ukraine	604,540	418,146	415,631		
United Arab Emirates	65,038	103,573	136,276		
United Kingdom	395,524	308,783	251,086		
Subject sources	2,808,721	2,162,564	2,232,476		
All other major reporting exporters	5,639,556	4,492,961	3,645,266		
Canada	387,078	333,673	303,695		
Germany	1,376,648	1,067,375	880,965		
Japan	1,377,550	1,197,797	1,107,133		
Czech Republic	446,358	387,654	385,572		
Brazil	174,402	192,760	211,775		
Poland	280,456	217,485	183,233		
Austria	284,363	261,368	300,028		
All other exporters	2,272,496	1,560,014	1,411,942		
Total global exports	15,147,167	11,949,280	10,728,926		

Table VII-41--Continued
Bars and rod (including wire rod): Global exports by exporting country, 2014-16

	Calendar year				
Exporter	2014	2015	2016		
	Uni	it value (dollars per short	ton)		
United States	1,044	1,002	920		
Belarus	516	308	268		
Italy	605	452	415		
Korea	608	482	456		
Russia	507	346	310		
South Africa	575	370	328		
Turkey	534	388	359		
Ukraine	491	361	322		
United Arab Emirates	540	402	271		
United Kingdom	654	508	450		
Subject sources	559	415	362		
All other major reporting exporters China	454	336	307		
Canada	774	643	592		
Germany	653	506	471		
Japan	822	718	651		
Czech Republic	614	458	416		
Brazil	593	464	410		
Poland	623	475	435		
Austria	923	859	776		
All other exporters	614	484	436		
Total global exports	554	424	387		
		Share of quantity (percent	)		
United States	0.3	0.3	0.3		
Belarus	0.0	0.7	0.9		
Italy	2.9	2.7	2.9		
Korea	3.3	3.3	3.3		
Russia	2.2	2.3	3.8		
South Africa	0.2	0.3	0.2		
Turkey	2.6	2.0	2.7		
Ukraine	4.5	4.1	4.7		
United Arab Emirates	0.4	0.9	1.8		
United Kingdom	2.2	2.2	2.0		
Subject sources	18.4	18.5	22.3		
All other major reporting exporters China	45.5	47.4	42.9		
Canada	1.8	1.8	1.9		
Germany	7.7	7.5	6.7		
Japan	6.1	5.9	6.1		
Czech Republic	2.7	3.0	3.3		
Brazil	1.1	1.5	1.9		
Poland	1.6	1.6	1.5		
Austria	1.1	1.1	1.4		
All other exporters	13.6	11.4	11.7		
Total global exports	100.0	100.0	100.0		

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

Source: Official exports statistics under HS subheading 7213.91, 7227.20, and 7227.90 as reported by various national statistical authorities in the IHS/GTA database, accessed October 11, 2017.

#### Canada

The industry in Canada is not among the largest global producers and exporters of wire rod. Nonetheless, Canada is a leading source of U.S. wire rod imports. According to Table VII-42, virtually all Canadian exports of bars and rods (including wire rod) are exported to the United States. The largest wire rod producers in Canada are Ivaco Inc. (Heico) and ArcelorMittal. Combined these producers have an estimated wire rod and bar/rod/sections rolling capacity of 3.2 million short tons in 2016.<sup>34</sup>

Table VII-42
Bars and rod (including wire rod): Canadian exports by exporting country, 2014-16

	Calendar year				
Destination market	2014	2015	2016		
	(	Quantity (short tons)			
Canada exports to the United States	498,029	518,169	512,090		
Canada exports to other major destination markets Spain			282		
China	862	532	175		
Pakistan			157		
Vietnam			53		
India	473	159	24		
Singapore			5		
Brazil			2		
United Arab Emirates		307			
All other destination markets	1,009	2			
Total Canada exports	500,374	519,169	512,789		

<sup>&</sup>lt;sup>34</sup> World Steel Association, *Steel Statistical Yearbook 2016, table 12.* Capacity may be overstated due to shared production.

Table VII-42--Continued
Bars and rod (including wire rod): Canadian exports by exporting country, 2014-16

	Calendar year				
Destination market	2014	2015	2016		
	Va	alue (1,000 dollars)			
Canada exports to the United States	385,664	333,140	303,320		
Canada exports to other major destination					
markets			171		
Spain	440	240	171		
China	449	248	90		
Pakistan			58		
Vietnam		404	37		
India	235	121	16		
Singapore			3		
Brazil		400	1		
United Arab Emirates	700	163			
All other destination markets	730	1	0		
Total Canada exports	387,078	333,673	303,695		
Once de consente to the Haritani Otatan		ue (dollars per short			
Canada exports to the United States	774	643	592		
Canada exports to other major destination markets Spain			606		
China	520	466	514		
Pakistan			369		
Vietnam			685		
India	497	762	691		
Singapore			457		
Brazil			422		
United Arab Emirates		530			
All other destination markets	723	464			
Total Canada exports	774	643	592		
	Share	e of quantity (percen	t)		
Canada exports to the United States	99.5	99.8	99.9		
Canada exports to other major destination markets Spain			0.1		
China	0.2	0.1	0.0		
Pakistan			0.0		
Vietnam			0.0		
India	0.1	0.0	0.0		
Singapore			0.0		
Brazil			0.0		
United Arab Emirates		0.1			
All other destination markets	0.2	0.0			
Total Canada exports	100.0	100.0	100.0		
Note,Shares and ratios shown as "0.0" represent values					

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

Source: Official exports statistics under HS subheading 7213.91, 7227.20, and 7227.90 as reported by Canada's customs in the IHS/GTA database, accessed October 11, 2017.

# **APPENDIX A**

# **FEDERAL REGISTER NOTICES**

The Commission makes available notices relevant to its investigations and reviews on its website, <a href="www.usitc.gov">www.usitc.gov</a>. In addition, the following tabulation presents, in chronological order, <a href="Federal Register">Federal Register</a> notices issued by the Commission and Commerce during the current proceeding.

Citation	Title	Link
82 FR 16232, April 3, 2017	Carbon and Certain Alloy Steel Wire Rod From Belarus, Italy, Korea, Russia, South Africa, Spain, Turkey, Ukraine, United Arab Emirates, and United Kingdom; Institution of Antidumping and Countervailing Duty Investigations and Scheduling of Preliminary Phase Investigations	https://www.gpo.gov/fdsys/pkg/FR-2017- 04-03/pdf/2017-06457.pdf
82 FR 19207, April 26, 2017	Carbon and Alloy Steel Wire Rod From Belarus, Italy, the Republic of Korea, the Russian Federation, South Africa, Spain, the Republic of Turkey, Ukraine, United Arab Emirates, and United Kingdom: Initiation of Less- Than-Fair-Value Investigations	https://www.gpo.gov/fdsys/pkg/FR-2017- 04-26/pdf/2017-08397.pdf
82 FR 19213, April 26, 2017	Carbon and Alloy Steel Wire Rod From Italy and Turkey: Initiation of Countervailing Duty Investigations	https://www.gpo.gov/fdsys/pkg/FR-2017- 04-26/pdf/2017-08212.pdf
82 FR 22846, May 18, 2017	Carbon and Certain Alloy Steel Wire Rod From Belarus, Italy, Korea, Russia, South Africa, Spain, Turkey, Ukraine, United Arab Emirates, and the United Kingdom; Determinations	https://www.gpo.gov/fdsys/pkg/FR-2017- 05-18/pdf/2017-10010.pdf
82 FR 39564, August 21, 2017	Carbon and Alloy Steel Wire Rod From Italy, the Republic of Korea, the Republic of South Africa, Spain, the Republic of Turkey, Ukraine and the United Kingdom: Postponement of Preliminary Determinations in the Less-Than-Fair-Value Investigations	https://www.gpo.gov/fdsys/pkg/FR-2017- 08-21/pdf/2017-17620.pdf
82 FR 41929, September 5, 2017	Carbon and Alloy Steel Wire Rod From the Republic of Turkey: Preliminary Affirmative Countervailing Duty Determination and Preliminary Affirmative Critical Circumstances Determination, in Part	https://www.gpo.gov/fdsys/pkg/FR-2017- 09-05/pdf/2017-18640.pdf
82 FR 41931, September 5, 2017	Carbon and Alloy Steel Wire Rod From Italy: Preliminary Affirmative Countervailing Duty Determination	https://www.gpo.gov/fdsys/pkg/FR-2017- 09-05/pdf/2017-18641.pdf
82 FR 42794, September 12, 2017	Certain Carbon and Alloy Steel Wire Rod From the Russian Federation and the United Arab Emirates: Affirmative Preliminary Determinations of Sales at Less Than Fair Value, and Affirmative Preliminary Determination of Critical Circumstances for Imports of Certain Carbon and Alloy Steel Wire Rod From the Russian Federation	https://www.gpo.gov/fdsys/pkg/FR-2017- 09-12/pdf/2017-19289.pdf
82 FR 42796, September 12, 2017	Carbon and Alloy Steel Wire Rod From Belarus: Preliminary Affirmative Determination of Sales at Less Than Fair Value	https://www.gpo.gov/fdsys/pkg/FR-2017- 09-12/pdf/2017-19286.pdf
82 FR 43516, September 18, 2017	Carbon and Alloy Steel Wire Rod From Italy and Turkey: Alignment of Final Countervailing Duty Determinations With Final Antidumping Duty Determinations	https://www.gpo.gov/fdsys/pkg/FR-2017- 09-18/pdf/2017-19774.pdf
82 FR 50381, October 31, 2017	Carbon and Alloy Steel Wire Rod From Italy: Preliminary Affirmative Determination of Sales at Less than Fair Value	https://www.gpo.gov/fdsys/pkg/FR-2017- 10-31/pdf/2017-23645.pdf

82 FR 50389, October 31, 2017	Carbon and Alloy Steel Wire Rod From Spain: Preliminary Affirmative Determination of Sales at Less Than Fair Value and Preliminary Determination of Critical Circumstances, in Part	https://www.gpo.gov/fdsys/pkg/FR-2017- 10-31/pdf/2017-23650.pdf
82 FR 50386, October 31, 2017	Carbon and Alloy Steel Wire Rod From the Republic of Korea: Preliminary Affirmative Determination of Sales at Less Than Fair Value, and Preliminary Negative Determination of Critical Circumstances	https://www.gpo.gov/fdsys/pkg/FR-2017- 10-31/pdf/2017-23646.pdf
82 FR 50383, October 31, 2017	Carbon and Alloy Steel Wire Rod From the Republic of South Africa: Preliminary Affirmative Determination of Sales at Less Than Fair Value, Preliminary Affirmative Determination of Critical Circumstances, and Preliminary Determination of No Shipments	https://www.gpo.gov/fdsys/pkg/FR-2017- 10-31/pdf/2017-23649.pdf
82 FR 50394, October 31, 2017	Carbon and Alloy Steel Wire Rod From the United Kingdom: Preliminary Affirmative Determination of Sales at Less Than Fair Value, and Preliminary Affirmative Determination of Critical Circumstances	https://www.gpo.gov/fdsys/pkg/FR-2017- 10-31/pdf/2017-23651.pdf
82 FR 50377, October 31, 2017	Carbon and Alloy Steel Wire Rod From Turkey: Preliminary Affirmative Determination of Sales at Less Than Fair Value, and Preliminary Negative Determination of Critical Circumstances	https://www.gpo.gov/fdsys/pkg/FR-2017- 10-31/pdf/2017-23647.pdf
82 FR 50375, October 31, 2017	Carbon and Alloy Steel Wire Rod From Ukraine: Preliminary Affirmative Determination of Sales at Less Than Fair Value	https://www.gpo.gov/fdsys/pkg/FR-2017- 10-31/pdf/2017-23648.pdf
82 FR 56220, November 28, 2017	Carbon and Alloy Steel Wire Rod From the Republic of Korea: Amended Preliminary Determination of Sales at Less Than Fair Value	https://www.gpo.gov/fdsys/pkg/FR-2017- 11-28/pdf/2017-25658.pdf
82 FR 56214, November 28, 2017	Certain Carbon and Alloy Steel Wire Rod From Belarus, the Russian Federation, and the United Arab Emirates: Affirmative Final Determinations of Sales at Less Than Fair Value and Partial Affirmative Finding of Critical Circumstances	https://www.gpo.gov/fdsys/pkg/FR-2017- 11-28/pdf/2017-25659.pdf

# APPENDIX B LIST OF HEARING WITNESSES

#### **CALENDAR OF PUBLIC HEARING**

Those listed below appeared as witnesses at the United States International Trade Commission's hearing:

**Subject:** Carbon and Certain Alloy Steel Wire Rod from Belarus,

Italy, Korea, Russia, South Africa, Spain, Turkey, Ukraine, the United Arab Emirates, and the United Kingdom

**Inv. Nos.:** 701-TA-573-574 and 731-TA-1349-1358 (Final)

**Date and Time:** November 16, 2017 - 9:30 a.m.

Sessions were held in connection with these investigations in the Main Hearing Room (Room 101), 500 E Street, SW., Washington, DC.

#### **CONGRESSIONAL APPEARANCE:**

The Honorable Peter J. Visclosky, U.S. Representative, 1<sup>st</sup> District, Indiana

#### **EMBASSY APPEARANCE:**

The Embassy of Ukraine to the United States of America Washington, DC

Vitalii Tarasiuk, Head of Economic and Trade Office

#### **OPENING REMARKS:**

Petitioners (**Alan H. Price**, Wiley Rein LLP)
Respondents (**Richard O. Cunningham**, Steptoe & Johnson LLP)

# In Support of the Imposition of <u>Antidumping and Countervailing Duty Orders:</u>

Kelley Drye & Warren LLP Washington, DC on behalf of

Gerdau Ameristeel US Inc. Keystone Consolidated Industries, Inc. Charter Steel

**Chris Armstrong**, Chief Executive Officer, Keystone Consolidated Industries, Inc.

Marcelo Canosa, Director of Marketing, Gerdau Ameristeel US Inc.

**Stephen Ashby**, Vice President of Sales, Keystone Steel & Wire

**Holly Hart**, Assistant to the President and Legislative Director, United Steelworkers

**Brad Hudgens**, Economic Consultant, Georgetown Economic Services

Paul C. Rosenthal	)
Kathleen W. Cannon	)
	) – OF COUNSEL
Alan Luberda	)
Grace Kim	)

Wiley Rein LLP Washington, DC on behalf of

Nucor Corporation ("Nucor")

**Eric Nystrom** Director, SBQ and Wire Rod, Nucor

Alan H. Price )
Daniel B. Pickard ) – OF COUNSEL
Derick G. Holt )

# In Opposition to the Imposition of Antidumping and Countervailing Duty Orders:

Vorys, Sater, Seymour and Pease LLP Washington, DC on behalf of

The American Wire Producers Association ("AWPA")

Kimberly A. Korbel, Executive Director, AWPA

**John T. Johnson, Jr.**, President, Mid South Wire Company and President, AWPA

**Christian Stauffer**, Vice President for Sourcing and Logistics, Insteel Industries Inc.

Robert Moffitt, Vice President, Purchasing, Heico Wire Group

**Terry Hughes**, Director of Purchasing for North America, Bekaert Corporation

**Andrea Ramirez**, Regional Counsel – Americas, Group Legal U.S., Bekaert Corporation

Frederick P. Waite	)
	) – OF COUNSEL
Kimberly R. Young	)

Morris, Manning & Martin, LLP Washington, DC on behalf of

Kiswire Ltd.
Kiswire America Inc.
(collectively "Kiswire")

David Minnick, Chief Executive Officer, Kiswire America

Wan Kim, Advisor for Kiswire America

**Donald B. Cameron** ) – OF COUNSEL

# In Opposition to the Imposition of Antidumping and Countervailing Duty Orders (continued):

	•	
Trade Pacific PLLC Washington, DC on behalf of		
POSCO		
Dr. Kiho Rhee, Ph.D	., Quality Enhancement Rese	earcher, POSCO
<b>John Ryoo</b> , Sales M	anager, POSCO America Corp	oration
	Jarrod M. Goldfeder	)
	Warren E. Connelly	) – OF COUNSEL )
Arent Fox LLP Washington, DC on behalf of		
The Turkish Steel Exporters Associated Icdas Celik Enerji Tersane ve Ulasir (collectively	•	,
	e President for Long Products letals Division	, Tata Internationa
	Nancy A. Noonan	)
	Andrew Jaxa-Debicki	) – OF COUNSEL )
Steptoe & Johnson LLP Washington, DC on behalf of		
British Steel Limited		
<b>Bill Shields</b> , Sales M	lanager, British Steel	
	Richard O. Cunningham Joel D. Kaufman Thomas J. Trendl	) ) – OF COUNSEL )

#### **NON-PARTY IN OPPOSITION**

U.S. Tire Manufacturers Association Washington, DC

**Tracey J. Norberg**, Senior Vice President *and* General Counsel

### **REBUTTAL/CLOSING REMARKS:**

Petitioners (**Paul C. Rosenthal**, Kelley Drye & Warren LLP *and* Daniel B. Pickard, Wiley Rein LLP)

Respondents (Nancy A. Noonan, Arent Fox LLP; Warren E. Connelly, Trade Pacific PLLC and Donald B. Cameron, Morris, Manning & Martin, LLP)

# **APPENDIX C**

**SUMMARY DATA** 

Table C-1: Wire rod	<b>C</b> -3
Table C-2: Merchant market	C-5
Table C-3a: Grade 1080 and higher tire cord and tire bead wire rod	C-θ
Table C-3b: All other wire rod except tire cord and tire bead wire rod	C-6

### **Total Market**

able C-1						i Otai I	<b>Market</b>		
fire rod: Summary data concerning the U.S. market (Quantity=short tons; Value=1,000			sts, and unit expense			es=percentexcept			
_	0044	Calendar year	Reported data	January to Se		0044.40	Period ch Calendar year		Jan-Sep
.S. consumption quantity:	2014	2015	2016	2016	2017	2014-16	2014-15	2015-16	2016-17
Amount	5,447,162	5,430,928	5,321,081	4,104,862	4,322,014	(2.3)	(0.3)	(2.0)	5.
Producers' share (fn1)	66.9	67.1	66.7	66.7	65.9	(0.3)	0.1	(0.4)	(0.
Importers' share (fn1):									
Belarus		0.2	0.7	0.9	0.6	0.7	0.2	0.5	(0.
Italy	0.0	0.0	0.6	0.3	0.7	0.6	(0.0)	0.6	0.
Korea	2.0	2.4	1.9	2.1	0.8	(0.1)	0.4	(0.5)	(1.
Russia	0.2	0.1	1.9	2.2	1.3	1.7	(0.1)	1.8	(0.
South Africa		0.8	0.4	0.5	0.7	0.4	0.8	(0.4)	0.
Spain	0.6	1.5	1.4	1.2	1.1	0.8	0.9	(0.1)	(0.
Turkey	3.9	4.8	1.8	1.7	2.6	(2.0)	0.9	(2.9)	0.
Ukraine	0.3	1.5	3.0	3.2	2.4	2.8	1.2	1.6	(0.
United Arab Emirates	0.0	0.3	0.4	0.5		0.4	0.3	0.1	(0.
United Kingdom	1.3	0.8	1.0	1.1	0.8	(0.3)	(0.5)	0.1	(0
Subject sources	8.3	12.4	13.2	13.7	11.2	4.9	4.1	0.8	(2
Canada	9.6	10.3	10.4	10.3	10.1	0.8	0.7	0.0	(0.
China	6.9	0.0	0.0	0.0	0.0	(6.9)	(6.8)	(0.0)	(0.
All other sources	8.3	10.2	9.7	9.3	12.8	1.5	1.9	(0.5)	3.
Nonsubject sources	24.8	20.6	20.1	19.6	22.8	(4.7)	(4.2)	(0.4)	3
All import sources	33.1	32.9	33.3	33.3	34.1	0.3	(0.1)	0.4	0
7 th import occirco	00.1	02.0	00.0	00.0	0	0.0	(0.1)	0	ŭ
.S. consumption value:									
Amount	3,796,857	3,189,202	2,842,255	2.188.179	2.587.275	(25.1)	(16.0)	(10.9)	18
Producers' share (fn1)	67.2	65.0	64.8	65.1	65.5	(2.4)	(2.2)	(0.2)	0
Importers' share (fin1):	01.2	05.0	04.0	05.1	03.3	(2.4)	(2.2)	(0.2)	U
Belarus		0.1	0.4	0.5	0.4	0.4	0.1	0.3	(0.
Italy	0.0	0.0	0.4	0.5	0.4	0.4	(0.0)	0.3	0
		2.1							
Korea	1.8		1.8	1.9	0.9	(0.0)	0.3	(0.3)	(1
Russia	0.2	0.1	1.2	1.4	1.0	1.0	(0.1)	1.2	(0
South Africa		0.6	0.3	0.4	0.6	0.3	0.6	(0.3)	0
Spain	0.6	1.6	1.6	1.3	1.3	1.0	1.1	(0.1)	(0
Turkey	3.3	4.0	1.5	1.4	2.1	(1.8)	0.7	(2.5)	0
Ukraine	0.2	1.1	2.1	2.1	1.8	1.9	0.9	1.0	(0
United Arab Emirates	0.0	0.2	0.3	0.3		0.3	0.2	0.1	(0
United Kingdom	1.2	8.0	0.9	1.0	8.0	(0.4)	(0.4)	0.1	(0
Subject sources	7.4	10.6	10.5	10.6	9.2	3.1	3.2	(0.1)	(1
Canada	10.7	11.2	11.5	11.4	11.4	0.8	0.6	0.2	(0
China	5.2	0.0	0.0	0.0	0.0	(5.2)	(5.2)	(0.0)	(0
All other sources	9.6	13.2	13.3	12.9	13.9	3.7	3.6	0.1	1
Nonsubject sources	25.5	24.5	24.7	24.3	25.3	(0.7)	(1.0)	0.3	1.
All import sources	32.8	35.0	35.2	34.9	34.5	2.4	2.2	0.2	(0.
.S. imports from:									
Belarus:									
Quantity		9,059	35,381	35,359	27,757	fn2	fn2	290.6	(21
Value		3,131	11,583	11,571	11,228	fn2	fn2	269.9	(3
Unit value	\$	\$346	\$327	\$327	\$405	fn2	fn2	(5.3)	23
Ending inventory quantity	***	***	***	***	***	***	***	***	
Italy:									
Quantity	346	246	33,163	12,007	29,609	9,484.7	(28.9)	13,380.9	146
Value	543	291	12,697	4,533	11,948	2,236.6	(46.4)	4,259.7	163
Unit value	\$1,570	\$1,184	\$383	\$378	\$404	(75.6)	(24.6)	(67.7)	6
Ending inventory quantity	***	***	***	***	***	***	***	***	•
Korea:									
	109,026	128.862	101,968	86,481	35,662	(6.5)	18.2	(20.9)	(58
Quantity Value	69,377	67,290	51,872	42,291	22,203	(25.2)	(3.0)	(20.9)	(47
Unit value	\$636	\$522 ***	\$509	\$489	\$623 ***	(20.1)	(17.9)	(2.6)	27
Ending inventory quantity	***	***	***	***	***	***	***	***	
Russia:	40.000		400.000	00.151	== 000	=00.0			
Quantity	12,329	6,857	103,322	90,154	57,893	738.0	(44.4)	1,406.8	(35
Value	7,552	2,230	35,215	30,310	25,484	366.3	(70.5)	1,479.1	(15
Unit value	\$613	\$325	\$341	\$336	\$440	(44.4)	(46.9)	4.8	30
Ending inventory quantity	***	***	***	***	***	***	***	***	
South Africa:									
Quantity		45,451	22,049	22,049	31,156	fn2	fn2	(51.5)	41
Value		18,830	8,000	8,000	14,465	fn2	fn2	(57.5)	80
Unit value	\$	\$414	\$363	\$363	\$464	fn2	fn2	(12.4)	28
Ending inventory quantity	***	***	***	***	***	***	***	***	
Spain:									
Quantity	31,778	79,976	72,779	49,246	49,338	129.0	151.7	(9.0)	0
Value	22,392	52,358	44,566	29,373	32,341	99.0	133.8	(14.9)	10
Unit value	\$705	\$655	\$612	\$596	\$656	(13.1)	(7.1)	(6.5)	9
Ending inventory quantity	***	***	***	***	***	***	***	***	,
Turkey:	210,096	259,183	07 764	60.752	112 604	(E0.E)	22.4	(60.0)	63
Quantity			97,761	69,753	113,681	(53.5)	23.4	(62.3)	
Value	124,577	126,483	42,798	29,852	53,301	(65.6)	1.5	(66.2)	78
Unit value	\$593	\$488	\$438	\$428	\$469	(26.2)	(17.7)	(10.3)	9
Ending inventory quantity	***	***	***	***	***	***	***	***	
Jkraine:									
Quantity	14,625	79,053	161,451	130,925	103,482	1,003.9	440.5	104.2	(21
Value	8,684	35,022	59,507	46,571	45,305	585.3	303.3	69.9	(2
Unit value	\$594	\$443	\$369	\$356	\$438	(37.9)	(25.4)	(16.8)	23
Ending inventory quantity	***	***	***	***	***	***	***	***	20
Jnited Arab Emirates:									
						70.000.0	63,017.9	05.4	(400
	20		22 150						
Quantity	28	17,673	22,159	22,132 7,618		79,039.3		25.4	
	28 18 \$635	17,673 6,952 \$393	22,159 7,631 \$344	22,132 7,618 \$344	  \$	42,847.1 (45.7)	39,026.8 (38.0)	9.8 (12.5)	(100. (100. (100.

Table C-1--Continued
Wire rod: Summary data concerning the U.S. market, 2014-16, January to September 2016, and January to September 2017

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

Peri

			Reported data			Period changes			
<del>-</del>	Calendar year			January to September		Calendar year			Jan-Sep
<del>-</del>	2014	2015	2016	2016	2017	2014-16	2014-15	2015-16	2016-17
U.S. imports from:									
United Kingdom:	74.070	45.503	E4 000	45.404		(0==)	(00.0)		(00.0)
Quantity	71,379	45,507	51,622	45,494	36,254	(27.7)	(36.2)	13.4	(20.3)
Value	46,428 \$650	24,795	24,329	21,270	21,427	(47.6)	(46.6)	(1.9) (13.5)	0.7 26.4
Unit value Ending inventory quantity	ν***	\$545 ***	\$471 ***	\$468	\$591 ***	(27.5)	(16.2)	(13.5)	20.4
Subject sources:									
	449,609	671,866	701,654	563,600	484,832	56.1	49.4	4.4	(14.0)
Quantity	279,572	337,383	298,198	231,389	237,703	6.7	20.7	(11.6)	2.7
Value	\$622	\$502	296, 196 \$425	231,369 \$411	\$490	(31.7)	(19.2)	(11.6)	19.4
Unit value Ending inventory quantity	φ022 ***	φυυZ ***	φ420 ***	φ <del>4</del> 11	\$ <del>**</del>	(31.7)	(19.2)	(13.4)	13.4
Canada:									
	524.324	561.752	552.375	421.875	434.431	5.3	7.1	(1.7)	3.0
Quantity	405.564	358.637	326.208	249.909	295.378	(19.6)	(11.6)	(9.0)	18.2
Value Unit value	405,564 \$773	\$638	\$26,208 \$591	\$592	295,378 \$680	(23.7)	(17.5)	(9.0)	14.8
	\$113 ***	ф036 ***	***	\$59Z	\$00U	(23.7)	(17.5)	(7.5)	14.0
Ending inventory quantity China:									
	274 705	4.670	0.4	0.4	26	(400.0)	(00.6)	(OF 2)	(EE 2)
Quantity	374,785	1,672	81	81	36	(100.0)	(99.6)	(95.2)	(55.3)
Value	196,661	887	56	56	34	(100.0)	(99.5)	(93.7)	(39.5)
Unit value	\$525	\$530	\$686	\$686	\$928	30.8	1.1	29.4	35.3
All other sources:	454 500	553,790	518.471	383.059	EE0 000	440	00.0	(0.4)	44.0
Quantity	451,589				552,688	14.8	22.6	(6.4)	44.3
Value	364,582	420,248	376,912	281,490	360,378	3.4	15.3	(10.3)	28.0
Unit value	\$807	\$759	\$727	\$735	\$652	(10.0)	(6.0)	(4.2)	(11.3)
Ending inventory quantity (fn3)	***	***	***	***	***	***	***	***	***
Nonsubject sources:									
Quantity	1,350,698	1,117,214	1,070,927	805,016	987,155	(20.7)	(17.3)	(4.1)	22.6
Value	966,807	779,772	703,176	531,455	655,790	(27.3)	(19.3)	(9.8)	23.4
Unit value	\$716	\$698	\$657	\$660	\$664	(8.3)	(2.5)	(5.9)	0.6
Ending inventory quantity	***	***	***	***	***	***	***	***	***
All import sources:									
Quantity	1,800,307	1,789,080	1,772,581	1,368,616	1,471,988	(1.5)	(0.6)	(0.9)	7.6
Value	1,246,379	1,117,155	1,001,373	762,845	893,494	(19.7)	(10.4)	(10.4)	17.1
Unit value	\$692	\$624	\$565	\$557	\$607	(18.4)	(9.8)	(9.5)	8.9
Ending inventory quantity	117,182	150,944	122,654	118,657	140,507	4.7	28.8	(18.7)	18.4
U.S. producers':									
Average capacity quantity	4,900,953	4,889,826	4,661,502	3,497,913	3,488,453	(4.9)	(0.2)	(4.7)	(0.3)
Production quantity	3,707,416	3,677,468	3,570,360	2,754,756	2,895,305	(3.7)	(8.0)	(2.9)	5.1
Capacity utilization (fn1)	75.6	75.2	76.6	78.8	83.0	0.9	(0.4)	1.4	4.2
U.S. shipments:									
Quantity	3,646,855	3,641,848	3,548,500	2,736,246	2,850,026	(2.7)	(0.1)	(2.6)	4.2
Value	2,550,478	2,072,047	1,840,882	1,425,334	1,693,781	(27.8)	(18.8)	(11.2)	18.8
Unit value	\$699	\$569	\$519	\$521	\$594	(25.8)	(18.6)	(8.8)	14.1
Export shipments:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	270,611	271,472	268,396	270,799	291,976	(8.0)	0.3	(1.1)	7.8
Inventories/total shipments (fn1)	***	***	***	***	***	***	***	***	***
Production workers	2,299	2.410	2,222	2,242	2,238	(3.3)	4.8	(7.8)	(0.2)
Hours worked (1,000s)	4.835	4.938	4,754	3.565	3,596	(1.7)	2.1	(3.7)	0.9
Wages paid (\$1,000)	170,593	172,268	168,288	124,641	129,142	(1.4)	1.0	(2.3)	3.6
Hourly wages (dollars)	\$35.28	\$34.89	\$35.40	\$34.96	\$35.91	0.3	(1.1)	1.5	2.7
Productivity (short tons per 1,000 hour)	766.8	744.7	751.0	772.7	805.1	(2.1)	(2.9)	0.8	4.2
Unit labor costs	\$46.01	\$46.84	\$47.13	\$45.25	\$44.60	2.4	1.8	0.6	(1.4)
Net sales:	ψ+0.01	φ+0.0+	ψ-11.10	ψ+0.20	φ-100	2.7	1.0	0.0	(1.4)
Quantity	3,680,257	3,676,608	3,573,436	2,755,429	2,871,656	(2.9)	(0.1)	(2.8)	4.2
	2,578,070	2,096,056	1,856,769	1,437,464	1,709,007	(28.0)	(18.7)	(11.4)	18.9
Value									
Unit value  Cost of goods sold (COGS)	\$701	\$570 1,984,458	\$520 1,717,124	\$522 1,317,267	\$595	(25.8)	(18.6)	(8.9) (13.5)	14.1 19.1
	2,420,417				1,568,486	(29.1)	(18.0)		
Gross profit or (loss)	157,653	111,598	139,645	120,197	140,521	(11.4)	(29.2)	25.1	16.9
SG&A expenses	82,227	75,825	86,734	65,225	67,706	5.5	(7.8)	14.4	3.8
Operating income or (loss)	75,426	35,773	52,911	54,972	72,815	(29.9)	(52.6)	47.9	32.5
Net income or (loss)	62,191	22,140	44,319	48,343	68,483	(28.7)	(64.4)	100.2	41.7
Capital expenditures	90,906	68,673	52,873	33,847	41,560	(41.8)	(24.5)	(23.0)	22.8
Unit COGS	\$658	\$540	\$481	\$478	\$546	(26.9)	(17.9)	(11.0)	14.3
	\$22	\$21	\$24	\$24	\$24	8.6	(7.7)	17.7	(0.4)
Unit SG&A expenses			\$15	\$20	\$25	(27.8)	(52.5)	52.2	27.1
Unit SG&A expenses Unit operating income or (loss)	\$20	\$10							
Unit SG&A expenses	\$20 \$17	\$6	\$12	\$18	\$24	(26.6)	(64.4)	106.0	35.9
Unit SG&A expenses. Unit operating income or (loss) Unit net income or (loss) COGS/sales (fn1)	\$20 \$17 93.9		\$12 92.5	\$18 91.6	\$24 91.8	(26.6) (1.4)	(64.4) 0.8	106.0 (2.2)	0.1
Unit SG&A expenses	\$20 \$17	\$6	\$12	\$18					

#### Notes:

Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. fn1.--Reported data are in percent and period changes are in percentage points. fn2.--Undefined.

fn3.--Includes inventories of imports from China.

Source: Compiled from data submitted in response to Commission questionnaires and official U.S. import statistics using HTS statistical reporting numbers 7213.91.3011, 7213.91.3015, 7213.91.3020, 7213.91.3093, 7213.91.4500, 7213.91.6000, 7213.91.6000, 7213.99.0030, 7227.20.0030, 7227.20.0080, 7227.90.6010, 7227.90.6020 7227.90.6030, and 7227.90.6035, accessed October 10, 20

Table C-2
Wire rod: Summary data concerning the merchant U.S. market, 2014-16, January to September 2016, and January to September 2017
(Quantity=short tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short ton; Period changes=percent--exceptions noted)

-	Reported data			Period changes					
	2014	Calendar year 2015	2016	January to Se 2016	eptember 2017	2014-16	Calendar year 2014-15	2015-16	Jan-Sep 2016-17
U.S. consumption quantity:	2014	2013	2010	2010	2017	2014-10	2014-13	2013-10	2010-17
Amount	4,427,667	4,380,478	4,241,954	3,245,101	3,470,915	(4.2)	(1.1)	(3.2)	7.0
Producers' share (fn1)	59.3	59.2	58.2	57.8	57.6	(1.1)	(0.2)	(0.9)	(0.2)
Importers' share (fn1): Belarus		0.2	0.8	1.1	0.8	0.8	0.2	0.6	(0.3)
Italy	0.0	0.0	0.8	0.4	0.9	0.8	(0.0)	0.8	0.5
Korea	2.5	2.9	2.4	2.7	1.0	(0.1)	0.5	(0.5)	(1.6)
Russia	0.3	0.2	2.4	2.8	1.7	2.2	(0.1)	2.3	(1.1)
South Africa		1.0	0.5	0.7	0.9	0.5	1.0	(0.5)	0.2
Spain	0.7	1.8	1.7	1.5	1.4	1.0	1.1	(0.1)	(0.1)
Turkey	4.7	5.9	2.3	2.1	3.3	(2.4)	1.2	(3.6)	1.1
Ukraine	0.3	1.8	3.8	4.0	3.0	3.5	1.5	2.0	(1.1)
United Arab Emirates	0.0	0.4	0.5	0.7		0.5	0.4	0.1	(0.7)
United Kingdom	1.6	1.0	1.2	1.4	1.0	(0.4)	(0.6)	0.2	(0.4)
Subject sources	10.2	15.3	16.5	17.4	14.0	6.4	5.2	1.2	(3.4)
Canada	11.8	12.8	13.0	13.0	12.5	1.2	1.0	0.2	(0.5)
China	8.5	0.0	0.0	0.0	0.0	(8.5)	(8.4)	(0.0)	(0.0)
All other sources	40.7	40.8	41.8	42.2	42.4	1.1	0.2	0.9	0.2
Nonsubject sources	30.5	25.5	25.2	24.8	28.4	(5.3)	(5.0)	(0.3)	3.6
All import sources	40.7	40.8	41.8	42.2	42.4	1.1	0.2	0.9	0.2
	40.7	40.0	41.0	72.2	72.7	***	0.2	0.5	0.2
U.S. consumption value:									
Amount	3,125,393	2,628,898	2,307,097	1,759,721	2,105,122	(26.2)	(15.9)	(12.2)	19.6
Producers' share (fn1)	60.1	57.5	56.6	56.6	57.6	(3.5)	(2.6)	(0.9)	0.9
Importers' share (fn1):									
Belarus		0.1	0.5	0.7	0.5	0.5	0.1	0.4	(0.1)
Italy		0.0	0.6	0.3	0.6	0.5	(0.0)	0.5	0.3
Korea	1.8	2.1	1.8	1.9	0.9	(0.0)	0.3	(0.3)	(1.1)
Russia	0.2	0.1	1.5	1.7	1.2	1.3	(0.2)	1.4	(0.5)
South Africa		0.7	0.3	0.5	0.7	0.3	0.7	(0.4)	0.2
Spain	0.7	2.0	1.9	1.7	1.5	1.2	1.3	(0.1)	(0.1)
Turkey	4.0	4.8	1.9	1.7	2.5	(2.1)	0.8	(3.0)	0.8
Ukraine	0.3	1.3	2.6	2.6	2.2	2.3	1.1	1.2	(0.5)
United Arab Emirates	0.0	0.3	0.3	0.4		0.3	0.3	0.1	(0.4)
United Kingdom	1.5	0.9	1.1	1.2	1.0	(0.4)	(0.5)	0.1	(0.2)
Subject sources	8.9	12.8	12.9	13.1	11.3	4.0	3.9	0.1	(1.9)
Canada		13.6	14.1	14.2	14.0	1.2	0.7	0.5	(0.2)
China	6.3	0.0	0.0	0.0	0.0	(6.3)	(6.3)	(0.0)	(0.0)
All other sources	11.7	16.0	16.3	16.0	17.1	4.7	4.3	0.4	1.1
Nonsubject sources	30.9	29.7	30.5	30.2	31.2	(0.5)	(1.3)	0.8	1.0
All import sources	39.9	42.5	43.4	43.4	42.4	3.5	2.6	0.9	(0.9)
U.S. producers':									
Commerical U.S. shipments	0.007.05	0 504 00-	0.400.077	4 070 40-		45.71			
Quantity	2,627,360	2,591,398	2,469,373	1,876,485	1,998,927	(6.0)	(1.4)	(4.7)	6.5
Value	1,879,014	1,511,743	1,305,724	996,876	1,211,628	(30.5)	(19.5)	(13.6)	21.5
Unit value	\$715	\$583	\$529	\$531	\$606	(26.1)	(18.4)	(9.4)	14.1
Commerical sales									
Quantity	2,666,397	2,625,649	2,493,495	1,895,668	2,020,557	(6.5)	(1.5)	(5.0)	6.6
Value	1,910,147	1,535,316	1,320,989	1,009,006	1,226,854	(30.8)	(19.6)	(14.0)	21.6
Unit value	\$716	\$585	\$530	\$532	\$607	(26.0)	(18.4)	(9.4)	14.1
Cost of goods sold (COGS)	1,795,046	1,465,679	1,230,242	931,508	1,127,415	(31.5)	(18.3)	(16.1)	21.0
Gross profit or (loss)	115,101	69,637	90,747	77,498	99,439	(21.2)	(39.5)	30.3	28.3
SG&A expenses	62,466	56,377	65,610	49,074	51,463	5.0	(9.7)	16.4	4.9
Operating income or (loss)	52,635	13,260	25,137	28,424	47,976	(52.2)	(74.8)	89.6	68.8
Net income or (loss)	46,408	5,661	21,115	25,281	46,919	(54.5)	(87.8)	273.0	85.6
Unit COGS	\$673	\$558	\$493	\$491	\$558	(26.7)	(17.1)	(11.6)	13.6
Unit SG&A expenses	\$23	\$21	\$26	\$26	\$25	12.3	(8.3)	22.5	(1.6)
Unit operating income or (loss)	\$20	\$5	\$10	\$15	\$24	(48.9)	(74.4)	99.6	58.4
Unit net income or (loss)	\$17	\$2	\$8	\$13	\$23	(51.3)	(87.6)	292.8	74.1
COGS/sales (fn1)	94.0	95.5	93.1	92.3	91.9	(8.0)	1.5	(2.3)	(0.4)
Operating income or (loss)/sales (fn1)	2.8	0.9	1.9	2.8	3.9	(0.9)	(1.9)	1.0	1.1
Net income or (loss)/sales (fn1)	2.4	0.4	1.6	2.5	3.8	(0.8)	(2.1)	1.2	1.3

#### Notes:

fn1.--Reported data are in percent and period changes are in percentage points. fn2.--Undefined.

Source: Compiled from data submitted in response to Commission questionnaires and official U.S. import statistics using HTS statistical reporting numbers 7213.91.3011, 7213.91.3015, 7213.91.3020, 7213.91.3093, 7213.91.4500, 7213.91.6000, 7213.91.6000, 7213.99.0030, 7227.20.0030, 7227.90.6010, 7227.90.6020 7227.90.6030, and 7227.90.6035, accessed October 10, 20

# Table C-3a

1080+ tire cord and tire bead: Summary data concerning the U.S. market, 2014-16, January to September 2016, and January to September 2017

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#### Table C-3b

All types of wire rod except tire cord: Summary data concerning the tire cord U.S. market, 2014-16, January to September 2016, and January to September 2017

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# **APPENDIX D**

U.S. PRODUCERS' AND PURCHASERS'
NARRATIVE RESPONSES TO LIKE PRODUCT QUESTIONS

# Table D-1

Wire rod: Narrative responses from U.S. producers about comparability of grade 1080 or higher tire cord and tire bead wire rod

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# Table D-2

Wire rod: Narrative responses from purchasers about comparability of grade 1080 or higher tire cord and tire bead wire rod

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# APPENDIX E FOREIGN PRODUCERS' GRADE 1080 AND HIGHER TRADE AND RELATED DATA

#### Table E-1

Wire rod: Data on tire cord industry in Belarus, 2014-16, January to September 2016, and January to September 2017 and projection calendar years 2017 and 2018

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#### Table E-2

Wire rod: Data on tire cord industry in Italy, 2014-16, January to September 2016, and January to September 2017 and projection calendar years 2017 and 2018

\* \* \* \* \* \* \*

#### Table E-3

Wire rod: Data on tire cord industry in Korea, 2014-16, January to September 2016, and January to September 2017 and projection calendar years 2017 and 2018

\* \* \* \* \* \* \*

#### Table E-4

Wire rod: Data on tire cord industry in Spain, 2014-16, January to September 2016, and January to September 2017 and projection calendar years 2017 and 2018

\* \* \* \* \* \* \*

#### Table E-5

Wire rod: Data on tire cord industry in United Kingdom, 2014-16, January to September 2016, and January to September 2017 and projection calendar years 2017 and 2018

\* \* \* \* \* \* \*

#### Table E-6

Wire rod: Data on tire cord industry in subject countries, 2014-16, January to September 2016, and January to September 2017 and projection calendar years 2017 and 2018

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#### Table E-7

Wire rod: Share of tire cord in subject countries, 2014-16, January to September 2016, and January to September 2017 and projection calendar years 2017 and 2018

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# **APPENDIX F**

**FINANCIAL DATA OF U.S. PRODUCERS** 

# Table F-1

Wire rod: Select results of operations of U.S. producers for the total market, by firm, 2014-16, January to September 2016, and January to September 2017

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### Table F-2

Wire rod: Select results of operations of U.S. producers for the merchant market, by firm, 2014-16, January to September 2016, and January to September 2017

\* \* \* \* \* \* \*