

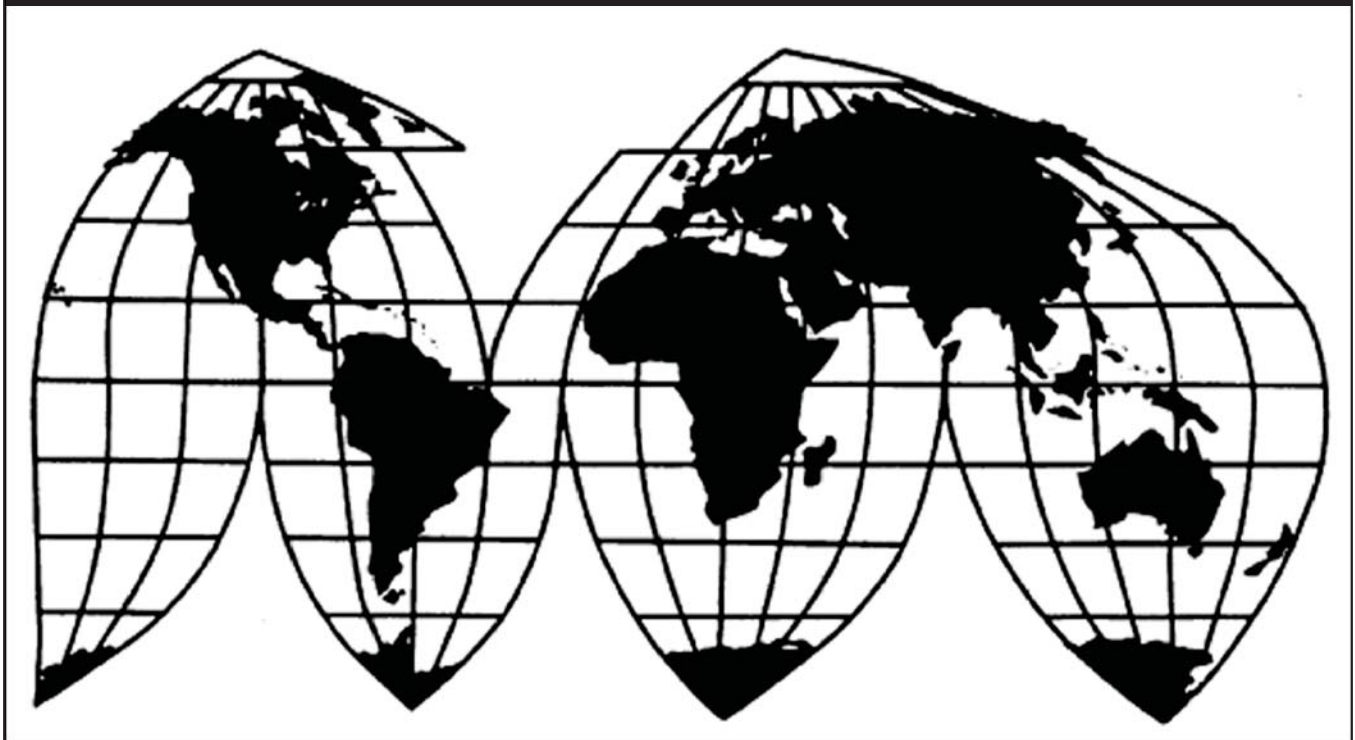
# **Ferrosilicon from Russia and Venezuela**

Investigation No. 731-TA-1224-1225 (Preliminary)

**Publication 4426**

**September 2013**

**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-1224-1225 (Preliminary)

FERROSILICON FROM RUSSIA AND VENEZUELA

### DETERMINATION

On the basis of the record<sup>1</sup> developed in the subject investigations, the United States International Trade Commission (Commission) determines, pursuant to section 733(a) of the Tariff Act of 1930 (19 U.S.C. § 1673b(a)) (the Act), that there is a reasonable indication that an industry in the United States is materially injured by reason of imports from Russia and Venezuela of ferrosilicon, provided for in subheadings 7202.21.10, 7202.21.50, 7202.21.75, 7202.21.90, and 7202.29.00 of the Harmonized Tariff Schedule of the United States, that are alleged to be sold in the United States at less than fair value (LTFV).

### COMMENCEMENT OF FINAL PHASE INVESTIGATION

Pursuant to section 207.18 of the Commission's rules, the Commission also gives notice of the commencement of the final phase of its investigations. The Commission will issue a final phase notice of scheduling, which will be published in the *Federal Register* as provided in section 207.21 of the Commission's rules, upon notice from the Department of Commerce (Commerce) of an affirmative preliminary determination in the investigation under section 733(b) of the Act, or, if the preliminary determination is negative, upon notice of an affirmative final determination in that investigation under section 735(a) of the Act. Parties that filed entries of appearance in the preliminary phase of the investigations need not enter a separate appearance for the final phase of the investigations. Industrial users, and, if the merchandise under investigation is sold at the retail level, representative consumer organizations have the right to appear as parties in Commission antidumping and countervailing duty investigations. The Secretary will prepare a public service list containing the names and addresses of all persons, or their representatives, who are parties to the investigations.

### BACKGROUND

On July 19, 2013, a petition was filed with the Commission and Commerce by Globe Specialty Metals, Inc. ("GSM"), New York, New York; CC Metals and Alloys, LLC ("CCMA"), Calvert City, Kentucky; the United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union ("USW"); and the International Union, United Automobile, Aerospace and Agricultural Implement Workers of America ("UAW")

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<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)).

alleging that an industry in the United States is materially injured and threatened with material injury by reason of LTFV imports of ferrosilicon from Russia and Venezuela. Accordingly, effective July 19, 2013, the Commission instituted antidumping duty investigation nos. 731-TA-1224-1225 (Preliminary).

Notice of the institution of the Commission's investigations and of a public conference 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 July 25, 2013 (78 FR 44969). The conference was held in Washington, DC, on August 9, 2013, and all persons who requested the opportunity were permitted to appear in person or by counsel.

## Views of the Commission

Based on the record in the preliminary phase of these investigations, we find that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of ferrosilicon from Russia and Venezuela that are allegedly sold in the United States at less than fair value (“LTFV”).

### I. The Legal Standard for Preliminary Determinations

The legal standard for preliminary antidumping and countervailing duty determinations requires the Commission to determine, based upon the information available at the time of the preliminary determinations, whether there is a reasonable indication that a domestic industry is materially injured or threatened with material injury, or that the establishment of an industry is materially retarded, by reason of the allegedly unfairly traded imports.<sup>1</sup> In applying this standard, the Commission weighs the evidence before it and determines whether “(1) the record as a whole contains clear and convincing evidence that there is no material injury or threat of such injury; and (2) no likelihood exists that contrary evidence will arise in a final investigation.”<sup>2</sup>

### II. Background

The petitions in these investigations were filed on July 19, 2013, by domestic producers Globe Specialty Metals, Inc. (“Globe”) and CC Metals and Alloys, LLC (“CCMA”), and trade unions United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union, and the International Union, United Automobile, Aerospace and Agricultural Implement Workers of America (“UAW”). Globe and CCMA appeared at the staff conference and submitted a postconference brief.

Several respondent entities participated in these investigations. Kuznetsk Ferroalloys OAO and Chelyabinsk Electro-Metallurgical Plant OAO, collectively known as CHEMK Industrial Group (“CHEMK”), a producer of the subject merchandise in Russia, appeared at the conference and filed a postconference brief. The Trade Representation of the Russian Federation in the United States of America, on behalf of the Ministry of Economic Development of the Russian Federation, entered an appearance and filed a postconference brief. Mechel OAO and its subsidiary Bratsk Ferroalloys Plant Ltd., a producer of the subject merchandise in Russia, entered an appearance. FerroAtlantica de Venezuela and FerroAtlantica S.A. (collectively “Ferroatlantica”), the sole Venezuelan producer and U.S. importer of Venezuelan ferrosilicon, appeared at the conference and filed a postconference brief.

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<sup>1</sup> 19 U.S.C. §§ 1671b(a), 1673b(a); *see also American Lamb Co. v. United States*, 785 F.2d 994, 1001-04 (Fed. Cir. 1986); *Aristech Chem. Corp. v. United States*, 20 CIT 353, 354-55 (1996). No party argues that the establishment of an industry in the United States is materially retarded by reason of the allegedly unfairly traded imports.

<sup>2</sup> *American Lamb Co.*, 785 F.2d at 1001; *see also Texas Crushed Stone Co. v. United States*, 35 F.3d 1535, 1543 (Fed. Cir. 1994).

**Data Coverage.** U.S. industry data are based on the questionnaire responses of two producers, Globe and CCMA, that accounted for all U.S. production of ferrosilicon in 2012. Data for subject imports from Russia and Venezuela are based on official import data and questionnaire responses from seven importers, two of which are believed to account for virtually all subject imports from Russia and Venezuela in 2012. The Commission received usable responses to its questionnaires from three subject producers in Russia that accounted for approximately \*\*\* percent of U.S. imports of ferrosilicon from Russia over the period of investigation (“POI”), which encompasses January 2010 through March 2013. The Commission received a response to its questionnaire from Ferroatlantica, which is believed to account for virtually all U.S. imports of ferrosilicon from Venezuela over the POI.

### III. Domestic Like Product

#### A. In General

In determining whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of imports of the subject merchandise, the Commission first defines the “domestic like product” and the “industry.”<sup>3</sup> 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.”<sup>4</sup> 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.”<sup>5</sup>

The decision regarding the appropriate domestic like product(s) 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>6</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>7</sup> The Commission looks for clear dividing lines among

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<sup>3</sup> 19 U.S.C. § 1677(4)(A).

<sup>4</sup> 19 U.S.C. § 1677(4)(A).

<sup>5</sup> 19 U.S.C. § 1677(10).

<sup>6</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>7</sup> See, e.g., S. Rep. No. 96-249 at 90-91 (1979).

possible like products and disregards minor variations.<sup>8</sup> Although the Commission must accept Commerce's determination as to the scope of the imported merchandise that is sold at less than fair value,<sup>9</sup> the Commission determines what domestic product is like the imported articles Commerce has identified.<sup>10</sup>

## **B. Product Description**

In its notice of initiation, Commerce defined the imported merchandise within the scope of these investigations as:

all forms and sizes of ferrosilicon, regardless of grade, including ferrosilicon briquettes. Ferrosilicon is a ferroalloy containing by weight 4 percent or more iron, more than 8 percent but not more than 96 percent silicon, 3 percent or less phosphorus, 30 percent magnesium, and 10 percent or less any other element. The merchandise covered also includes product described as slag, if the product meets these specifications.<sup>11</sup>

Ferrosilicon is used mainly in the production of steel and cast iron. In steel production, the silicon contained in ferrosilicon serves as a deoxidizer to combine with dissolved oxygen in molten steel, permitting casting of the steel without undesirable bubbles in the solidified steel. Ferrosilicon is also used as a reducing agent, particularly in the production of stainless steel, and as the source of silicon for alloying purposes in the production of certain steel alloys --

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<sup>8</sup> See, e.g., *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.").

<sup>9</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>10</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 where Commerce found five classes or kinds).

<sup>11</sup> *Ferrosilicon from the Russian Federation and Venezuela: Initiation of Antidumping Duty Investigations*, 78 Fed. Reg. 49471, 49472 (Dep't of Commerce, Aug. 14, 2013). Commerce indicated that "Ferrosilicon is currently classified under U.S. Harmonized Tariff Schedule ("HTSUS") subheadings 7202.21.1000, 7202.21.5000, 7202.29.0010, and 7202.29.005. Although the HTSUS subheadings are provided for convenience and customs purposes, the written description of the merchandise is dispositive." *Id.*

particularly silicon electrical steel, which contains three percent or more of silicon. Ferrosilicon is used by iron foundries as the source of silicon needed for alloying purposes in iron castings.<sup>12</sup>

Commercially, ferrosilicon is differentiated by grade and size. Ferrosilicon grades are defined by the percentages by weight of silicon and minor elements contained in the product. Almost all ferrosilicon consumed in the United States contains, by weight, approximately 75 percent or 50 percent of silicon. Ferrosilicon is available in “standard” grades and “specialty” grades. Standard grades of ferrosilicon are referred to by their silicon content, along with additional descriptive terms (for example, “regular,” “low aluminum,” “high-purity,” and “foundry grade” 75 percent and 50 percent ferrosilicon).<sup>13</sup> “Specialty” grades of ferrosilicon contain specific percentages of minor elements for the purpose of adding those elements to steel or foundry iron using ferrosilicon as the carrier. Ferrosilicon containing a non-standard percentage of silicon is also considered to be a specialty product.

#### **A. Analysis**

Petitioners argue that ferrosilicon should be treated as a single domestic like product and Respondents have made no contrary argument for purposes of the preliminary phase of these investigations.<sup>14</sup> For the reasons discussed below, we define ferrosilicon to be a single domestic like product for the purposes of our preliminary determinations.

*Physical Characteristics and Uses.* All ferrosilicon shares the same basic physical characteristics and end uses. Although ferrosilicon can differ in terms of its silicon content by weight or the presence or absence of minor elements, the principal use of all ferrosilicon is to introduce silicon into the production of steel and cast iron.<sup>15</sup>

*Manufacturing Facilities, Production Processes and Employees.* The basic production process for the various grades of ferrosilicon is the same. All ferrosilicon is produced by smelting iron-containing materials and silicon-containing materials in submerged-arc electric furnaces. This is generally accomplished with silica in the form of quartz gravel or sand and ferrous scrap combined with a carbonaceous reductant, such as coal or petroleum coke, and a bulking agent, usually wood chips. These are heated together to approximately 3,300 degrees Fahrenheit, causing the release of silicon from the silica and the alloying of the ferrous scrap with that silicon.<sup>16</sup> A higher purity product, if required, can be produced using raw materials with fewer impurities. Additionally, as the molten ferrosilicon is ladled from the furnace into large flat iron molds or onto beds of ferrosilicon fines, its composition can be altered by oxygen injection to remove impurities, such as aluminum and calcium, or by adding small amounts of alloying elements to create specialty grades of ferrosilicon.<sup>17</sup> After cooling and solidification, the ferrosilicon, regardless of grade, is crushed and screened to produce the lump sizes

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<sup>12</sup> Confidential Staff Report (“CR”) at I-10, Public Staff Report (“PR”) at I-8.

<sup>13</sup> CR at I-8-9, PR at I-6-7.

<sup>14</sup> Petitioners’ Postconference Brief at 5-6, Ferroatlantica’s Postconference Brief at 9. CHEMK does not state a position regarding the definition of the domestic like product.

<sup>15</sup> CR at I-8-11, PR at I-6-8.

<sup>16</sup> CR at I-11-12, PR at I-8-9.

<sup>17</sup> CR at I-12, PR at I-9.

required.<sup>18</sup> Thus, regardless of ferrosilicon grade, the same production facilities, production process, and employees can be used through the initial smelting steps, with the purity of raw material inputs and added elements potentially differing from one batch to another.<sup>19</sup>

*Channels of Distribution.* The \*\*\* of the domestic industry's U.S. shipments of ferrosilicon were made directly to end users, including steel producers and iron foundries.<sup>20</sup>

*Interchangeability.* Ferrosilicon may differ with respect to such characteristics as percentages of silicon and other minor elements contained within it.<sup>21</sup> There is information suggesting some degree of interchangeability among grades of ferrosilicon. For instance, ferrosilicon 50 percent and ferrosilicon 75 percent appear to be somewhat interchangeable.<sup>22</sup>

*Producer and Customer Perceptions.* Notwithstanding differences among the various grades of ferrosilicon, the record indicates ferrosilicon to be a product distinct from other products, such as silicon metal.<sup>23</sup>

*Price.* The limited record in these preliminary phase investigations suggests that prices can differ among grades. For instance, the quarterly pricing data show the domestic industry selling low aluminum grade 75 percent ferrosilicon in super sacks at prices higher than those for regular grade 75 percent ferrosilicon in super sacks.<sup>24</sup> Nonetheless, petitioners contend that prices of all grades of ferrosilicon are interrelated to some extent and follow similar trends.<sup>25</sup>

*Conclusion.* We find that all grades of ferrosilicon within the scope of these investigations share similarities with respect to the six factors we consider when defining the domestic like product. Therefore, based on the record in the preliminary phase of these investigations and the lack of argument to the contrary, we define a single domestic like product, consisting of ferrosilicon corresponding to Commerce's scope definition.

#### **IV. 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 a major proportion of the total domestic production of the product."<sup>26</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.

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<sup>18</sup> CR at I-12, PR at I-9.

<sup>19</sup> CR at I-8-13, PR at I-6-9.

<sup>20</sup> CR/PR at Table II-1.

<sup>21</sup> CR at I-8-9, PR at I-6-7.

<sup>22</sup> See, e.g., Ferrosilicon from Argentina, Kazakhstan, The People's Republic of China, Russia, Ukraine, and Venezuela, Inv. Nos. 303-TA-23, 731-TA-565-570 (Preliminary), USITC Pub. 2535 (July 1992) at 7.

<sup>23</sup> E.g., Petitioners' Postconference Brief at 11-12, CHEMK's Postconference Brief at 37-41.

<sup>24</sup> See CR/PR at Tables V-5 and V-7.

<sup>25</sup> Petitioners' Postconference Brief at 10-11.

<sup>26</sup> 19 U.S.C. § 1677(4)(A).

Based on the record, and in light of the definition of the domestic like product, we define the domestic industry to encompass all known U.S. producers of ferrosilicon.<sup>27</sup>

## V. Cumulation<sup>28</sup>

### A. In General

For purposes of evaluating the volume and price effects for a determination of reasonable indication 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;
- (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.<sup>29</sup>

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.<sup>30</sup> Only a “reasonable overlap” of competition is required.<sup>31</sup>

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<sup>27</sup> See CR/PR at III-1. There are no related party issues in these investigations pertaining to the producers that have submitted data.

<sup>28</sup> Negligibility is not an issue in these investigations. The data show that subject imports for each subject country exceed the requisite 3 percent statutory negligibility threshold established in 19 U.S.C. § 1677(24) for the 12-month period preceding the filing of the petition. From July 2012 to June 2013, the most recent 12-month period for which data are available, U.S. imports from Russia accounted for 46.6 percent of total U.S. imports of ferrosilicon by quantity, and U.S. imports from Venezuela accounted for 15.3 percent of total U.S. imports of ferrosilicon by quantity. CR at IV-5, PR at IV-2.

<sup>29</sup> See *Certain Cast-Iron Pipe Fittings from Brazil, the Republic of Korea, and Taiwan*, Inv. Nos. 731-TA-278-80 (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>30</sup> See, e.g., *Wieland Werke, AG v. United States*, 718 F. Supp. 50 (Ct. Int'l Trade 1989).



## B. Analysis<sup>32</sup>

In these investigations, the threshold criterion is satisfied because Petitioners filed the antidumping duty petitions with respect to ferrosilicon from Russia and Venezuela on the same day, July 19, 2013. None of the cumulation exceptions apply. Subject imports from Russia and Venezuela are therefore eligible for cumulation.<sup>33</sup> We consequently examine whether there is a reasonable overlap of competition between subject imports, as well as between subject imports and the domestic like product.

*Fungibility.* Ferrosilicon meeting a particular specification is generally fungible regardless of source and all ferrosilicon is used in the same general applications. \*\*\* responding U.S. producers reported that subject imports from both subject countries are always interchangeable with each other and with the domestic like product.<sup>34</sup> \*\*\* of responding importers reported that imports from subject countries are always interchangeable with the domestic like product and that subject imports are always interchangeable with each other.<sup>35</sup> When asked whether differences other than price are ever significant to purchasers choosing between the domestic like product and subject imports, \*\*\* domestic producers reported that non-price differences were never significant.<sup>36</sup> \*\*\* of importers reported that non-price factors were sometimes significant when comparing the domestic like product with subject imports and when comparing subject imports from the two subject countries.<sup>37</sup>

*Channels of Distribution.* The large majority of ferrosilicon shipments, whether domestically produced or imported from Russia or Venezuela, are sold directly to end users.<sup>38</sup>

*Geographic Overlap.* The domestic like product and subject imports from Russia and Venezuela were sold or offered for sale in the same geographic markets during the POI. U.S. producers reported selling ferrosilicon to all regions in the contiguous United States except the

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(...Continued)

<sup>31</sup> 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*, 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>32</sup> Petitioners argue that the prerequisites to cumulation are met because the petitions were filed on the same day, and there is a reasonable overlap of competition based on the factors the Commission generally considers. Petitioners’ Postconference Brief at 20-22. Respondents make no arguments regarding cumulation for purposes of the Commission’s analysis of reasonable indication of material injury by reason of subject imports.

<sup>33</sup> See 19 U.S.C. § 1677(7)(G)(ii).

<sup>34</sup> CR/PR at Table II-4.

<sup>35</sup> CR/PR at Table II-4.

<sup>36</sup> CR/PR at Table II-5.

<sup>37</sup> CR/PR at Table II-5.

<sup>38</sup> CR/PR at Table II-1.

Mountain region, and importers from each of the subject countries reported selling ferrosilicon to all regions in the contiguous United States.<sup>39</sup>

*Simultaneous Presence in Market.* Ferrosilicon from all sources was simultaneously present in the U.S. market. Ferrosilicon produced in the United States and subject imports from Russia and Venezuela were sold in the United States during each quarter between January 2010 and March 2013.<sup>40</sup>

*Conclusion.* For the reasons discussed above, we find a reasonable overlap of competition between and among the subject imports from Russia and Venezuela and the domestic like product. We therefore cumulate subject imports from Russia and Venezuela for purposes of our analysis of whether there is a reasonable indication of material injury to the domestic industry by reason of subject imports.

## **VI. Reasonable Indication of Material Injury by Reason of Subject Imports**

### **A. Legal Standard**

In the preliminary phase of antidumping and countervailing duty investigations, the Commission determines whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of the imports under investigation.<sup>41</sup> In making this 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.<sup>42</sup> The statute defines “material injury” as “harm which is not inconsequential, immaterial, or unimportant.”<sup>43</sup> In assessing whether there is a reasonable indication that 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.<sup>44</sup> 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>45</sup>

Although the statute requires the Commission to determine whether there is a reasonable indication that the domestic industry is “materially injured by reason of” unfairly traded imports,<sup>46</sup> it does not define the phrase “by reason of,” indicating that this aspect of the

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<sup>39</sup> CR/PR at II-2.

<sup>40</sup> CR/PR at Table IV-3.

<sup>41</sup> 19 U.S.C. §§ 1671b(a), 1673b(a).

<sup>42</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 ... {a}nd explain in full its relevance to the determination.” 19 U.S.C. § 1677(7)(B).

<sup>43</sup> 19 U.S.C. § 1677(7)(A).

<sup>44</sup> 19 U.S.C. § 1677(7)(C)(iii).

<sup>45</sup> 19 U.S.C. § 1677(7)(C)(iii).

<sup>46</sup> 19 U.S.C. §§ 1671b(a), 1673b(a).

injury analysis is left to the Commission's reasonable exercise of its discretion.<sup>47</sup> 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.<sup>48</sup>

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 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.<sup>49</sup> In performing its examination, however, the Commission need not isolate the injury caused by other factors from injury caused by unfairly traded imports.<sup>50</sup> Nor does the

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<sup>47</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>48</sup> The Federal Circuit, in addressing the causation standard of the statute, has 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 re-affirmed in *Mittal Steel Point Lisas Ltd. v. United States*, 542 F.3d 867, 873 (Fed. Cir. 2008), in which 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).

<sup>49</sup> SAA, H.R. Rep. 103-316, Vol. I at 851-52 (1994) (“{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>50</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* (Continued...)

“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.<sup>51</sup> It is clear that the existence of injury caused by other factors does not compel a negative determination.<sup>52</sup>

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 imports” and the Commission “ensure{s} that it is not attributing injury from other sources to

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(...Continued)

*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>51</sup> S. Rep. 96-249 at 74-75; H.R. Rep. 96-317 at 47.

<sup>52</sup> *See Nippon*, 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.”).

the subject imports.”<sup>53</sup> <sup>54</sup> Indeed, the Federal Circuit has examined and affirmed various Commission methodologies and has disavowed “rigid adherence to a specific formula.”<sup>55</sup>

The Federal Circuit’s decisions in *Gerald Metals*, *Bratsk*, and *Mittal Steel* all involved cases in which 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.<sup>56</sup> 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>57</sup> Accordingly, we do not consider ourselves required to apply the replacement/benefit test that was included in Commission opinions subsequent to *Bratsk*.

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<sup>53</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.

<sup>54</sup> Commissioner Pinkert does not join this paragraph or the following three paragraphs. He points out that the Federal Circuit, in *Bratsk*, 444 F.3d 1369, and *Mittal Steel*, held that the Commission is *required*, in certain circumstances when considering present material injury, to undertake a particular kind of analysis of nonsubject imports, albeit without reliance upon presumptions or rigid formulas. *Mittal Steel* explains as follows:

What *Bratsk* held is that “where commodity products are at issue and fairly traded, price-competitive, nonsubject imports are in the market,” the Commission would not fulfill its obligation to consider an important aspect of the problem if it failed to consider whether nonsubject or non-LTFV imports would have replaced LTFV subject imports during the period of investigation without a continuing benefit to the domestic industry. 444 F.3d at 1369. Under those circumstances, *Bratsk* requires the Commission to consider whether replacement of the LTFV subject imports might have occurred during the period of investigation, and it requires the Commission to provide an explanation of its conclusion with respect to that factor. 542 F.3d at 878.

<sup>55</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>56</sup> *Mittal Steel*, 542 F.3d at 875-79.

<sup>57</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).

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>58</sup>

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.<sup>59</sup> Congress has delegated this factual finding to the Commission because of the agency's institutional expertise in resolving injury issues.<sup>60</sup>

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

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

### **1. Demand Conditions**

Ferrosilicon is used primarily as an alloying agent in the production of iron and steel; thus, the steel industry is the principal user of ferrosilicon. Consequently, demand for ferrosilicon is driven by demand for steel products and general economic conditions.<sup>61</sup> Overall demand for ferrosilicon would likely experience only small changes in response to changes in price because there are few economically viable substitutes for ferrosilicon and it accounts for a small share of the total cost of most of its end-use products.<sup>62</sup> Questionnaire responses varied greatly regarding whether demand in the United States and elsewhere had increased, declined, or fluctuated during the POI.<sup>63</sup>

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<sup>58</sup> 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 final phase 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 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 final phase investigations in which there are substantial levels of nonsubject imports.

<sup>59</sup> We provide in our respective discussions of conditions of competition, volume, price effects, and impact a full analysis of other factors alleged to have caused any material injury experienced by the domestic industry.

<sup>60</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>61</sup> CR/PR at II-1.

<sup>62</sup> CR at II-10, PR at II-6.

<sup>63</sup> CR/PR at Table II-3.

Apparent U.S. consumption of ferrosilicon decreased overall from 2010 to 2012. Apparent U.S. consumption of ferrosilicon decreased from \*\*\* short tons in 2010 to \*\*\* short tons in 2011 and then increased to \*\*\* short tons in 2012.<sup>64</sup>

## 2. Supply Conditions

Sources of supply to the U.S. market during the POI included domestic shipments, subject imports, and imports from nonsubject sources.<sup>65</sup> The domestic industry's market share decreased from \*\*\* percent in 2010 to \*\*\* percent in 2011 and \*\*\* percent in 2012.<sup>66</sup> Globe and CCMA accounted for all domestic production of ferrosilicon during the POI.<sup>67</sup> Their combined capacity was not sufficient to satisfy apparent U.S. consumption.<sup>68</sup> The domestic industry's capacity fluctuated during the POI, declining from \*\*\* short tons in 2010 to \*\*\* short tons in 2011, before increasing to \*\*\* short tons in 2012.<sup>69</sup>

Cumulated subject imports supplied the largest share of the U.S. market throughout the POI. Subject imports' market share declined from \*\*\* percent in 2010 to \*\*\* percent in 2011 before increasing to \*\*\* percent in 2012.<sup>70</sup>

Nonsubject imports' market share increased from \*\*\* percent in 2010 to \*\*\* percent in 2011 before declining to \*\*\* percent in 2012.<sup>71</sup> The largest sources of nonsubject imports were China and Canada.<sup>72</sup>

## 3. Substitutability and Other Conditions

The record shows that ferrosilicon from all sources is highly substitutable. \*\*\* responding domestic producers and \*\*\* of responding importers indicated that the domestic product and subject imports were always interchangeable.<sup>73</sup> When asked whether differences

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<sup>64</sup> CR/PR at Table IV-4. During January-March 2013 ("interim 2013"), apparent U.S. consumption was \*\*\* short tons of ferrosilicon as compared to \*\*\* short tons in the same period in 2012. *Id.*

<sup>65</sup> CR/PR at Table IV-4.

<sup>66</sup> CR/PR at Table IV-5. The industry's market share was \*\*\* percent in interim 2012 and \*\*\* percent in interim 2013. *Id.*

<sup>67</sup> CR/PR at III-1.

<sup>68</sup> *E.g.*, CR/PR at Tables III-2, IV-4. Both U.S. producers reported producing products other than ferrosilicon on the same equipment and with the same workers employed to produce ferrosilicon. CR at III-4. We will explore in any final phase of these investigations how readily producers can switch from other products to ferrosilicon and how this affects their reported capacity for ferrosilicon.

<sup>69</sup> CR/PR at Table III-3. The industry's capacity was \*\*\* short tons in interim 2012 and \*\*\* short tons in interim 2013. *Id.*

<sup>70</sup> CR/PR at Table IV-5. Subject imports' market share was \*\*\* percent in interim 2012 and \*\*\* percent in interim 2013. *Id.*

<sup>71</sup> CR/PR at Table IV-5. Nonsubject imports' market share was \*\*\* percent in interim 2012 and \*\*\* percent in interim 2013. *Id.*

<sup>72</sup> CR/PR at Table IV-5.

<sup>73</sup> CR/PR at Table II-5.

other than price are ever significant to purchasers choosing between the domestic like product and subject imports, \*\*\* domestic producers reported that non-price differences were \*\*\* significant while importers were more likely to report that non-price factors were \*\*\* or \*\*\* significant.<sup>74</sup> Both petitioners and Ferroatlantica characterize ferrosilicon as a commodity product.<sup>75</sup> Based on the record of these preliminary phase investigations, we find that ferrosilicon from different sources is highly substitutable, and price is an important factor in purchasing decisions.<sup>76</sup>

The record indicates that ferrosilicon can fall within one of several standard grades or within specialty grades. As discussed above in section II.B., specialty grades contain specific percentages of minor elements. It is not clear from this record, however, which products market participants consider standard grade and which products they consider specialty grades. Consequently, we do not know what share of domestic and subject country production and shipments are standard or specialty grade products.<sup>77</sup> In any final phase of these investigations, we intend to seek more detailed information on production, capacity, shipment, and importation of different ferrosilicon grades. We also intend to provide specific definitions of standard and specialty grades of ferrosilicon in the questionnaire instructions.

Pricing of ferrosilicon in the U.S. market generally follows benchmark prices that are reported by *Ryan's Notes*, a publication that reports prices for ferrous and non-ferrous metals based on surveys of customers, traders, and producers.<sup>78</sup> *Ryan's Notes* reports prices twice a week and, at the end of the month, reports low, mid-point, high, and average prices. *Ryan's Notes* excludes prices set in long-term or formula contracts.<sup>79</sup>

The record indicates that domestic producers sell ferrosilicon primarily on the basis of \*\*\* whereas importers of subject ferrosilicon sell primarily on the basis of \*\*\*.<sup>80</sup> Contracts can include price adjustment mechanisms based on formulas or indexing, typically tied to published benchmark prices, such as those published by *Ryan's Notes*.<sup>81</sup> The current record does not indicate that domestic producers' short-term contracts are necessarily shorter in duration than importers' long-term contracts. U.S. producers reported selling the vast majority of their product under \*\*\*, the average duration of which was \*\*\*, with Globe also reporting sales under \*\*\* that averaged \*\*\* in duration.<sup>82</sup> Importers reported selling the majority of their product under long-term contracts, the average duration of which ranged from \*\*\* to \*\*\*.<sup>83</sup>

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<sup>74</sup> CR/PR at Table II-6.

<sup>75</sup> Conference Transcript at 7-8 (Kramer), Ferroatlantica's Postconference Brief at 25.

<sup>76</sup> See CR at II-12-13, PR at II-7.

<sup>77</sup> It appears, for instance, that low-aluminum ferrosilicon can fall within a standard or a specialty grade, depending on the percentage of aluminum involved. *E.g.*, Ferroatlantica Postconference Brief at 11, 17-18; CR at I-8, PR at I-6.

<sup>78</sup> CR at V-3-4, PR at V-3. A similar source reporting metal prices is *Platts Metals*. *E.g.*, Petition at Exhibit I-26 at 287.

<sup>79</sup> CR at V-3-4, PR at V-3.

<sup>80</sup> CR/PR at Table V-2.

<sup>81</sup> *E.g.*, Conference Transcript at 46 (Kramer), 99-100 (Pontoli).

<sup>82</sup> CR at V-4, PR at V-3.

<sup>83</sup> CR at V-4, PR at V-3.



We intend in any final phase of these investigations to examine further the basis for published benchmark prices, what information market participants convey to the publishers of those prices, and the extent to which prices under various contract durations affect published benchmark prices. We will also examine the distinctions between various types of contracts, the duration of specific contracts, the effect of contracts on price trends and price comparisons, the extent to which contracts that are called short-term and long-term overlap in duration, and the extent to which the domestic product and subject imports are competing for the same contracts.

### 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>84</sup>

The quantity of cumulated subject imports of ferrosilicon decreased from 110,193 short tons in 2010 to 89,104 short tons in 2011, before increasing to 117,209 short tons in 2012.<sup>85</sup> Because apparent U.S. consumption declined from 2010 to 2012, the market share of cumulated subject imports increased more rapidly during this period than the increase in import quantity. The share of apparent U.S. consumption held by cumulated subject imports declined from \*\*\* percent in 2010 to \*\*\* percent in 2011, before increasing to \*\*\* percent in 2012.<sup>86</sup> In 2012, cumulated subject imports took market share from both the domestic industry and nonsubject imports: \*\*\* percentage points from the domestic industry and \*\*\* points from nonsubject imports.<sup>87</sup> Cumulated subject imports were equivalent to \*\*\* percent of U.S. production in 2010, \*\*\* percent in 2011, and \*\*\* percent in 2012.<sup>88</sup>

Respondents argue that competition between subject imports and the domestic like product was attenuated because subject imports consisted largely of standard grades of ferrosilicon whereas the domestic like product was predominantly specialty grades.<sup>89</sup> The limited record in these investigations shows some head-to-head competition between subject imports and the domestic like product.<sup>90</sup> We will examine the extent of this competition further in any final phase of these investigations. In particular, we intend to seek specific data on the mix of ferrosilicon grades that make up capacity, production, and shipments of the domestic like product and subject imports.

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<sup>84</sup> 19 U.S.C. § 1677(7)(C)(i).

<sup>85</sup> CR/PR at Table IV-4. Subject imports were 47,061 short tons in interim 2012 and 27,508 short tons in interim 2013. *Id.*

<sup>86</sup> CR/PR at Table IV-5. Subject imports’ market share was \*\*\* percent in interim 2012 and \*\*\* percent in interim 2013. *Id.*

<sup>87</sup> CR/PR at Table IV-4.

<sup>88</sup> CR/PR at Table IV-6. Subject imports were equivalent to \*\*\* percent of U.S. production in interim 2012, and \*\*\* in interim 2013. *Id.*

<sup>89</sup> Ferroatlantica’s Postconference Brief at 11, CHEMK’s Postconference Brief at 4-5.

<sup>90</sup> *See, e.g.,* CR/PR at Tables V-3-5, V-9-10.

We find, for purposes of the preliminary phase of these investigations, that the cumulated volume of subject imports is significant both in absolute terms and relative to consumption and production 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 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>91</sup>

As discussed above, the record in the preliminary phase of these investigations indicates that subject imports and domestically produced ferrosilicon are highly substitutable and price is an important factor in purchasing decisions. The Commission collected pricing data for two products sold in bulk and in super sacks.<sup>92</sup> Two U.S. producers and five importers provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.<sup>93</sup> For 2012, pricing data reported by these firms accounted for \*\*\* percent, by quantity, of U.S. producers' commercial shipments, \*\*\* percent of U.S. commercial shipments of subject imports from Russia, and \*\*\* percent of U.S. commercial shipments of subject imports from Venezuela.<sup>94</sup>

The record indicates a mixed pattern of underselling and overselling by the subject imports. The pricing data show underselling by subject imports in \*\*\* quarterly price comparisons and overselling in \*\*\* comparisons.<sup>95</sup> The margins of underselling ranged from \*\*\* percent and the margins of overselling ranged from \*\*\* percent.<sup>96</sup> The underselling average margin was \*\*\* percent and the overselling average margin was \*\*\* percent.<sup>97</sup>

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<sup>91</sup> 19 U.S.C. § 1677(7)(C)(ii).

<sup>92</sup> CR at V-5-6, PR at V-4. Pricing product 1 is regular grade 75 percent ferrosilicon. Product 2 is low aluminum grade 75 percent ferrosilicon. *Id.*

<sup>93</sup> CR at V-6, PR at V-4.

<sup>94</sup> CR at V-6, PR at V-4. We note that domestic producers' shipments of product 1 in bulk were considerably smaller towards the conclusion of the POI than during its first five quarters. CR/PR at Table V-3. We intend to examine in any final phase of these investigations the extent to which this decline supports the domestic industry's argument that it has been pushed out of regular grades due to subject import competition. Conference Transcript at 41 (Perkins).

<sup>95</sup> CR/PR at Table V-8.

<sup>96</sup> CR/PR at Table V-8.

<sup>97</sup> CR/PR at Table V-8.

Purchasers confirmed domestic producers' lost sales allegations valued at \$\*\*\* and involving \*\*\* short tons of ferrosilicon.<sup>98</sup> Confirmed lost sales accounted for approximately \*\*\* percent of the total value of alleged lost sales.<sup>99</sup> Purchasers also confirmed lost revenue allegations valued at \$\*\*\*, involving \*\*\* short tons.<sup>100</sup>

We find some evidence of price depression during the latter portion of the POI.<sup>101</sup> Although prices for U.S.-produced ferrosilicon, which fluctuated over the period, were higher at the end of the period than at the beginning,<sup>102</sup> prices for U.S.-produced ferrosilicon were substantially lower in 2012 and the first quarter of 2013 than they were in 2011.<sup>103</sup> The declines in U.S. producers' prices from 2011 to 2012 were coincident with the 31.5 percent increase in the volume of cumulated subject imports and the 7.5 percentage point increase in subject imports' market share in 2012.<sup>104</sup>

#### **E. Impact of the Subject Imports<sup>105</sup>**

Section 771(7)(C)(iii) of the Tariff Act provides that the Commission, in examining the impact of the subject imports on the domestic industry, "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, profits, cash flow, return on investment, ability to raise capital, 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."

The record of the preliminary phase of these investigations indicates that the increase in cumulated subject imports in 2012 had adverse effects on the domestic industry. Although the domestic industry displayed some positive results in 2010 and 2011, particularly with respect to operating performance, several performance indicators declined in 2012 or failed to keep pace with increased apparent U.S. consumption.

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<sup>98</sup> CR/PR at Table V-9.

<sup>99</sup> CR/PR at Table V-9.

<sup>100</sup> CR/PR at Table V-10.

<sup>101</sup> Respondents argue that, because the subject imports are largely sold on the basis of long-term contracts, subject import prices do not substantially affect the benchmark prices published by *Ryan's Notes* (or other sources) that serve as the basis for domestic producers' prices. As discussed above, we will investigate this issue in any final phase of these investigations.

<sup>102</sup> CR/PR at Table V-7.

<sup>103</sup> CR/PR at Tables V-3-V-5.

<sup>104</sup> CR/PR at Table C-1.

<sup>105</sup> In its notice initiating the antidumping duty investigations of ferrosilicon from Russia and Venezuela, Commerce reported estimated dumping margins ranging from 21.85 percent to 60.78 percent for imports from Russia and from 20.07 percent to 60.11 percent for imports from Venezuela. 78 Fed. Reg. 49471, 49474 (Dep't of Commerce, Aug. 14, 2013).

The domestic industry's production declined from \*\*\* short tons in 2010 to \*\*\* short tons in 2011 and then increased to \*\*\* short tons in 2012.<sup>106</sup> Its production capacity declined from \*\*\* short tons in 2010 to \*\*\* short tons in 2011 then increased to \*\*\* short tons in 2012.<sup>107</sup> Capacity utilization declined from \*\*\* percent in 2010 to \*\*\* percent in 2011 and then increased to \*\*\* percent in 2012.<sup>108</sup>

Because producers \*\*\* basis, production and capacity utilization rates may be less meaningful indicators of the ferrosilicon industry's performance than other factors.<sup>109</sup> Accordingly, we have also closely examined factors such as domestic producers' shipments, inventories, and sales, to assess how the subject imports have affected the industry's output.

The domestic industry's U.S. shipments declined from \*\*\* short tons in 2010 to \*\*\* short tons in 2011, then increased to \*\*\* short tons in 2012.<sup>110</sup> The \*\*\* percent and \*\*\* short ton increase in U.S. producers' U.S. shipments from 2011 to 2012 occurred at the same time that apparent U.S. consumption increased by \*\*\* percent, from \*\*\* short tons in 2011 to \*\*\* short tons in 2012.<sup>111</sup> As a result, the domestic industry's share of apparent U.S. consumption fell \*\*\* percentage points, declining from \*\*\* percent in 2011 to \*\*\* percent in 2012, at the same time that the cumulated subject imports' quantity increased by \*\*\* percent and their share of apparent U.S. consumption increased \*\*\* percentage points, from \*\*\* percent in 2011 to \*\*\* percent in 2012.<sup>112</sup> Additionally, the domestic industry's increase in output from 2011 to 2012 did not lead to increased sales revenues. The value of the domestic industry's net sales declined from \$\*\*\* in 2010 to \$\*\*\* in 2011 and to \$\*\*\* in 2012.<sup>113</sup>

Moreover, from 2011 to 2012, the domestic industry's shipments did not increase at the same rate as production. Consequently, inventories soared. U.S. producers' ending inventories, after increasing \*\*\* percent from \*\*\* short tons in 2010 to \*\*\* short tons in 2011, grew an additional \*\*\* percent to \*\*\* short tons in 2012.<sup>114</sup> The ratio of U.S. producers' ending

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<sup>106</sup> CR/PR at Table III-2. The domestic industry's production was \*\*\* short tons in interim 2012 and \*\*\* short tons in interim 2013. *Id.*

<sup>107</sup> CR/PR at Table III-2. The domestic industry's capacity was \*\*\* short tons in interim 2012 and \*\*\* short tons in interim 2013. *Id.*

<sup>108</sup> CR/PR at Table III-2. The domestic industry's capacity utilization was \*\*\* percent in interim 2012 and \*\*\* percent in interim 2013. *Id.*

<sup>109</sup> CR/PR at Table III-2 n.1.

<sup>110</sup> CR/PR at Table III-3. The domestic industry's U.S. shipments were \*\*\* short tons in interim 2012 and \*\*\* short tons in interim 2013. *Id.*

<sup>111</sup> CR/PR at Table IV-4.

<sup>112</sup> CR/PR at Tables IV-5, C-1.

<sup>113</sup> CR/PR at Table VI-1. The value of net sales was \$\*\*\* in interim 2012 and \$\*\*\* in interim 2013. *Id.* Net sales, as measured by quantity, declined from \*\*\* short tons in 2010 to \*\*\* short tons in 2011, then increased to \*\*\* short tons in 2012; they were \*\*\* short tons in interim 2012 and \*\*\* in interim 2013. *Id.*

<sup>114</sup> CR/PR at Table III-4, C-1. U.S. producers' ending inventories were \*\*\* short tons in interim 2012 and \*\*\* short tons in interim 2013. CR/PR at Tables III-4.

inventories to U.S. shipments increased from \*\*\* percent in 2010 to \*\*\* percent in 2011 and to \*\*\* percent in 2012, an increase of \*\*\* percentage points between 2011 and 2012.<sup>115</sup>

The industry's number of production workers declined from \*\*\* in 2010 to \*\*\* in 2011 then increased to \*\*\* in 2012.<sup>116</sup> Total hours worked fell from \*\*\* in 2010 to \*\*\* in 2011 then increased to \*\*\* in 2012.<sup>117</sup> Wages paid declined from \$\*\*\* in 2010 to \$\*\*\* in 2011 and to \$\*\*\* in 2012.<sup>118</sup> Hourly wages declined from \$\*\*\* in 2010 to \$\*\*\* in 2011 and to \$\*\*\* in 2012.<sup>119</sup> Labor costs per short ton increased from \$\*\*\* in 2010 to \$\*\*\* in 2011, then declined to \$\*\*\* in 2012, while productivity declined from \*\*\* short tons per hour in 2010 to \*\*\* short tons in 2011 before returning to \*\*\* short tons per hour in 2012.<sup>120</sup>

From 2010 to 2011, as apparent U.S. consumption and the domestic industry's shipments declined, domestic producers' unit sales values increased at a greater rate than its unit cost of goods sold (COGS). Thus, even though shipments declined, the industry was earning greater unit profits, and its ratio of operating income to net sales remained fairly stable; this ratio was \*\*\* percent in 2010 and \*\*\* percent in 2011.<sup>121</sup> By contrast, from 2011 to 2012, although apparent U.S. consumption increased and domestic shipments increased at a lower rate, unit sales revenues declined at a greater rate than unit COGS. The relatively modest increase in shipments could not compensate for the decline in unit profits and the industry's operating ratio declined to \*\*\* percent in 2012.<sup>122</sup> Capital expenditures, after increasing from \$\*\*\* in 2010 to \$\*\*\* in 2011, declined to \$\*\*\* in 2012.<sup>123</sup>

Accordingly, the domestic industry maintained its financial performance in 2011 notwithstanding a decline in both apparent U.S. consumption and the industry's market share, and notwithstanding nonsubject imports increasing their market share. In 2012, however, when increased volumes of subject imports took market share from the domestic industry,

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<sup>115</sup> CR/PR at Table III-4. The ratio of U.S. producers' ending inventories to U.S. shipments was \*\*\* percent in interim 2012 and \*\*\* percent in interim 2012. *Id.*

<sup>116</sup> CR/PR at Table III-6. The number of production workers was \*\*\* in interim 2012 and \*\*\* in interim 2013. *Id.*

<sup>117</sup> CR/PR at Table III-6. Hours worked were \*\*\* in both interim 2012 and interim 2013. *Id.*

<sup>118</sup> CR/PR at Table III-6. Wages paid were \$\*\*\* in interim 2012 and \$\*\*\* in interim 2013. *Id.*

<sup>119</sup> CR/PR at Table III-6. Hourly wages were \$\*\*\* in interim 2012 and \$\*\*\* in interim 2013. *Id.*

<sup>120</sup> CR/PR at Table III-6. Labor costs per short ton were \$\*\*\* in interim 2012 and \$\*\*\* in interim 2013, and productivity was \*\*\* short tons per hour in interim 2012 and \*\*\* short tons per hour in interim 2013. *Id.*

<sup>121</sup> CR/PR at Table VI-1.

<sup>122</sup> CR/PR at Table VI-1. The domestic industry's operating margins were \*\*\* percent in interim 2012 and \*\*\* percent in interim 2013. *Id.* On a per unit basis, the domestic industry's selling, general, and administrative (SG&A) expenses increased \*\*\* from \$\*\*\* per short ton in 2011 to \$\*\*\* per short ton in 2012. CR/PR at Table VI-3. Domestic producer \*\*\* reported \*\*\* SG&A expenses in 2011 and 2012 than in 2010 \*\*\*. CR at VI-5, PR at VI-2. While CHEMK argues that \*\*\* served to depress the domestic industry's operating income (CHEMK's Postconference Brief at 34), the \*\*\* does not substantially affect our observations concerning the decline in operating performance from 2011 to 2012 because \*\*\*.

<sup>123</sup> CR/PR at Table VI-5. Capital expenditures were \$\*\*\* in interim 2012 and \$\*\*\* in interim 2013. *Id.* Domestic producers \*\*\* research and development expenses for the period. CR/PR at Table VI-5.

domestic producers' sales revenues declined, inventories increased, and financial performance deteriorated. In sum, the record as a whole in the preliminary phase of these investigations does not contain clear and convincing evidence that there is no material injury to the domestic industry by reason of imports of the subject merchandise.<sup>124</sup> We therefore conclude that an affirmative preliminary determination is warranted.

We have considered the role of other factors, such as demand and nonsubject imports, to ensure that we are not attributing injury from such other factors to the subject imports. We find that demand trends do not explain the domestic industry's current condition. As noted earlier, the increase in the domestic industry's shipments in 2012 did not keep pace with the increase in apparent U.S. consumption that year. Rather, when apparent U.S. consumption rose in 2012, subject imports increased their share of the market, while the domestic industry's share continued to decline.

We have also considered the role of nonsubject imports. The volume of nonsubject imports increased substantially from 2010 to 2011, but this is not when the industry's performance declined significantly. Rather, the industry's declines corresponded to the increase in subject import volume that occurred between 2011 and 2012. Moreover, the record data shows that subject imports from China, the largest source of nonsubject imports, were generally priced higher than subject imports.<sup>125 126</sup>

## VII. Conclusion

For the reasons stated above, we determine that there is a reasonable indication that an industry in the United States is materially injured by reason of subject imports of ferrosilicon from Russia and Venezuela.

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<sup>124</sup> See *American Lamb Co.*, 785 F.2d at 1001. Respondents argue that there is no causal link between subject imports and the domestic industry's condition because competition was attenuated. We will be examining this issue further in any final phase of these investigations.

<sup>125</sup> CR/PR at D-3.

<sup>126</sup> Based on the available evidence in these preliminary investigations, Commissioner Pinkert finds that ferrosilicon constitutes a commodity product for purposes of the *Bratsk/Mittal Steel* analysis, and that price-competitive nonsubject imports were a significant factor in the U.S. market for ferrosilicon during the period of investigation. He also finds, however, that nonsubject imports would not have replaced the subject imports without benefit to the domestic industry had the subject imports exited the market during the period. The average unit values of nonsubject imports were consistently higher than those of the subject imports. CR/PR at Table IV-2. Moreover, prices for imports from China, the largest source of nonsubject imports, were generally higher than prices for either the subject imports or the domestic product. CR/PR at D-3. Thus, any replacement of the subject imports by nonsubject imports would generally have been at higher prices, which would have benefited the domestic industry.

## PART I: INTRODUCTION

### BACKGROUND

These investigations result from a petition filed with the U.S. Department of Commerce (“Commerce”) and the U.S. International Trade Commission (“USITC” or “Commission”) by Globe Specialty Metals, Inc. (“Globe”), New York, NY; CC Metals and Alloys, LLC (“CCMA”), Calvert City, KY, the United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union (“USW”); and the International Union, United Automobile, Aerospace and Agricultural Implement Workers of America (“UAW”), on July 19, 2013, alleging that an industry in the United States is materially injured and threatened with material injury by reason of subsidized imports of ferrosilicon<sup>1</sup> from Russia and Venezuela. The following tabulation provides information relating to the background of these investigations.<sup>2 3</sup>

Effective date	Action
July 19, 2013	Petition filed with Commerce and the Commission; institution of Commission investigation (78 FR 44969, July 25, 2013)
August 9, 2013	Commission’s conference
August 14, 2013	Commerce’s notice of initiation (78 FR 49471)
August 30, 2013	Commission’s vote
September 3, 2013	Commission’s determinations
September 10, 2013	Commission’s views

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<sup>1</sup> See the section entitled “The Subject Merchandise” in *Part I* of this report for a complete description of the merchandise subject to these investigations.

<sup>2</sup> Pertinent *Federal Register* notices are referenced in app. A, and may be found at the Commission’s website ([www.usitc.gov](http://www.usitc.gov)).

<sup>3</sup> A list of witnesses appearing at the conference is presented in app. B of this report.

## 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--

*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 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, profits, productivity, return on investments, 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.*

### **Organization of report**

*Part I* of this report presents information on the subject merchandise, alleged 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.

### **MARKET SUMMARY**

Ferrosilicon is primarily used as an alloying agent in the production of steel and cast iron. The two U.S. producers of ferrosilicon are Globe and CCMA, while leading producers of ferrosilicon outside the United States include CHEMK Industrial Group ("CHEMK") of Russia and FerroAtlántica de Veneuela, S.A. ("FerroVen") of Venezuela. The only U.S. importer of ferrosilicon from Russia is RFA International, LP ("RFA"), while the only importer of ferrosilicon from Venezuela is FerroAtlántica North America Inc. U.S. purchasers of ferrosilicon are firms that manufacture steel or have iron foundries. Leading purchasers include AK Steel Corporation, US Steel Corporation, Nucor Corporation, Gerdau Long Steel North America, Mittal Group and North American Stainless.

Apparent U.S. consumption of ferrosilicon totaled approximately \*\*\* short tons of contained silicon (\$\*\*\*) in 2012. Currently, CCMA and Globe are the only two firms known to produce ferrosilicon in the United States. U.S. producers' U.S. shipments of ferrosilicon totaled \*\*\* short tons of contained silicon (\$\*\*\* percent of apparent U.S. consumption by quantity and \*\*\* percent by value. U.S. imports from subject sources totaled 117,209 short tons of contained silicon (\$198.5 million) in 2012 and accounted for \*\*\* percent of apparent U.S. consumption by quantity and \*\*\* percent by value. U.S. imports from nonsubject sources totaled 64,874 short tons of contained silicon (\$152.3 million) in 2012 and accounted for \*\*\* percent of apparent U.S. consumption by quantity and \*\*\* percent by value.

### **SUMMARY DATA AND DATA SOURCES**

A summary of data collected in these investigations is presented in appendix C, table C-1. U.S. industry data are based on questionnaire responses of CCMA and Globe that accounted for all U.S. production of ferrosilicon during 2012. U.S. imports are based on official import data

and from questionnaire responses from seven U.S. importers that are believed to have accounted for virtually all subject imports from Russia and Venezuela in 2012.

## PREVIOUS AND RELATED INVESTIGATIONS

The Commission has conducted several investigations concerning ferrosilicon. In 1983, the Commission instituted an investigation under section 406(a)(1) of the Trade Act following a request received from the United States Trade Representative. In 1984, the Commission found that market disruption did not exist.<sup>4</sup>

The Commission instituted investigations concerning ferrosilicon from Argentina, China, Kazakhstan, Russia, Ukraine, and Venezuela in June 1992. In March 1993, the Commission determined that a domestic industry was materially injured by reason of dumped ferrosilicon imports from China, Kazakhstan, and Ukraine, and in June 1993, the Commission determined that a domestic industry was materially injured by reason of dumped and subsidized ferrosilicon imports from Venezuela and dumped ferrosilicon imports from Russia.<sup>5</sup> Commerce reached a negative determination with respect to Argentina.<sup>6</sup>

The Commission instituted investigations concerning ferrosilicon from Brazil and Egypt in January 1993. In January 1994, the Commission determined that a domestic industry was materially injured by reason of dumped ferrosilicon imports from Brazil.<sup>7</sup> The Commission reached a negative determination with respect to Egypt.<sup>8</sup>

In April 1998, the Commission received a request for a changed circumstance review of its affirmative determination with respect to imports of ferrosilicon from Brazil, alleging that since the Commission's original investigation, a nationwide criminal ferrosilicon price-fixing conspiracy maintained by major U.S. ferrosilicon producers from as early as late 1989 to at least mid-1991 was uncovered and successfully prosecuted. The Commission determined that reconsideration was a more appropriate procedure for review of the original determinations, and in May 1999, the Commission suspended the changed circumstances review and instituted a reconsideration of the original determination. In August 1999, it determined on reconsideration that the domestic ferrosilicon industry was not materially injured or threatened with material injury by reason of subject imports from Brazil, China, Kazakhstan, Russia,

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<sup>4</sup> *Ferrosilicon from the Union of Soviet Socialist Republic, Inv. No. TA-406-10*, USITC Publication 1484 (February 1984).

<sup>5</sup> *Ferrosilicon from the People's Republic of China, Inv. No. 731-TA-566 (Final)*, USITC Pub. 2606 (March 1993); *Ferrosilicon from Kazakhstan and Ukraine, Inv. Nos. 731-TA-566 and 569 (Final)*, USITC Pub. 2616 (March 1993); *Ferrosilicon from Russia and Venezuela, Inv. Nos. 731-TA-568 and 570 (Final)*, USITC Pub. 2650 (June 1993).

<sup>6</sup> 58 FR 27534, May 10, 1993.

<sup>7</sup> *Ferrosilicon from Brazil, Inv. No. 731-TA-641 (Final)*, USITC Pub. 2722 (Jan 1994).

<sup>8</sup> 58 FR 58709, November 3, 1993.

Ukraine, and Venezuela.<sup>9</sup> The Commission's determination was then appealed to the U.S. Court of International Trade (CIT), which remanded the matter to the Commission four times. The Commission made negative determinations in all four remands.<sup>10</sup>

## NATURE AND EXTENT OF ALLEGED SALES AT LTFV

On August 14, 2013, Commerce published a notice in the *Federal Register* of the initiation of its antidumping duty investigations on product from Russia and Venezuela.<sup>11</sup> Commerce initiated antidumping duty investigations based on estimated dumping margins from 21.85 to 60.78 percent for product from Russia and from 20.07 to 60.11 percent for product from Venezuela.

## THE SUBJECT MERCHANDISE

### Commerce's scope

Commerce has defined the scope of this investigation as follows:<sup>12</sup>

*The merchandise covered by these investigations is all forms and sizes of ferrosilicon, regardless of grade, including ferrosilicon briquettes. Ferrosilicon is a ferroalloy containing by weight 4 percent or more iron, more than 8 percent but not more than 96 percent silicon, 3 percent or less phosphorus, 30 percent or less manganese, less than 3 percent magnesium, and 10 percent or less any other element. The merchandise covered also includes product described as slag, if the product meets these specifications.*

*Ferrosilicon is currently classified under U.S. Harmonized Tariff Schedule ("HTSUS") subheadings 7202.21.1000, 7202.21.5000, 7202.21.7500, 7202.21.9000, 7202.29.0010, and 7202.29.0050. Although the HTSUS subheadings are provided for convenience and customs purposes, the written description of the merchandise is dispositive.*

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<sup>9</sup> *Ferrosilicon from Brazil, China, Kazakhstan, Russia, Ukraine, and Venezuela, Invs. 303-TA-23, 731-TA-566-570 and 731-TA-641 (Final) (Reconsideration)*, USITC Publication 3218 (August 1999).

<sup>10</sup> *Ferrosilicon from Brazil, China, Kazakhstan, Russia, Ukraine, and Venezuela, Invs. 303-TA-23, 731-TA-566-570 and 731-TA-641 (Final) (Reconsideration) (Fourth Remand)*, USITC Publication 3890 (October 2006).

<sup>11</sup> *Ferrosilicon from the Russian Federation and Venezuela: Initiation of Antidumping Duty Investigations*, 78 FR 49471, August 14, 2013.

<sup>12</sup> *Ferrosilicon from the Russian Federation and Venezuela: Initiation of Antidumping Duty Investigations*, 78 FR 49471, August 14, 2013.

## 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 classifiable under the following provisions of the 2013 HTS: 7202.21.10, 7202.21.50, 7202.21.75, 7202.21.90, and 7202.29.00. The Column-1 General rate of duty respectively is 1.1 percent, 1.5 percent, 1.9 percent, 5.8 percent, and “Free.”<sup>13</sup>

## THE PRODUCT

### Description and applications

Ferrosilicon is a ferroalloy composed of iron and silicon, along with very small proportions of minor elements, such as aluminum, calcium, carbon, manganese, phosphorus, and sulfur. Ferrosilicon is silver in color.

Commercially, ferrosilicon is differentiated by grade and size. Ferrosilicon grades are defined by the percentages by weight of silicon and minor elements contained in the product. The principal characteristic is the percentage of silicon contained in the alloy, and grades are referred to primarily by reference to that percentage. Ferrosilicon grades are further defined by the percentages of minor elements present in the product. In the United States, almost all ferrosilicon produced and/or consumed is either 75 percent ferrosilicon or 50 percent ferrosilicon, containing, by weight, approximately 75 percent or 50 percent of silicon, respectively.<sup>14</sup>

Ferrosilicon is available in “standard” grades and “specialty” grades. Standard ferrosilicon grades include “regular,” “high-purity,” “low-aluminum,” and “foundry grade” material. References to “regular grade 75 percent ferrosilicon” or “regular grade 50 percent ferrosilicon” denote products containing the indicated percentages of silicon and recognized maximum percentages of minor elements. The other standard grades of ferrosilicon are also referred to by their silicon content, along with additional descriptive terms (for example, “low-aluminum,” “high-purity,” and “foundry grade” 75 percent and 50 percent ferrosilicon). These

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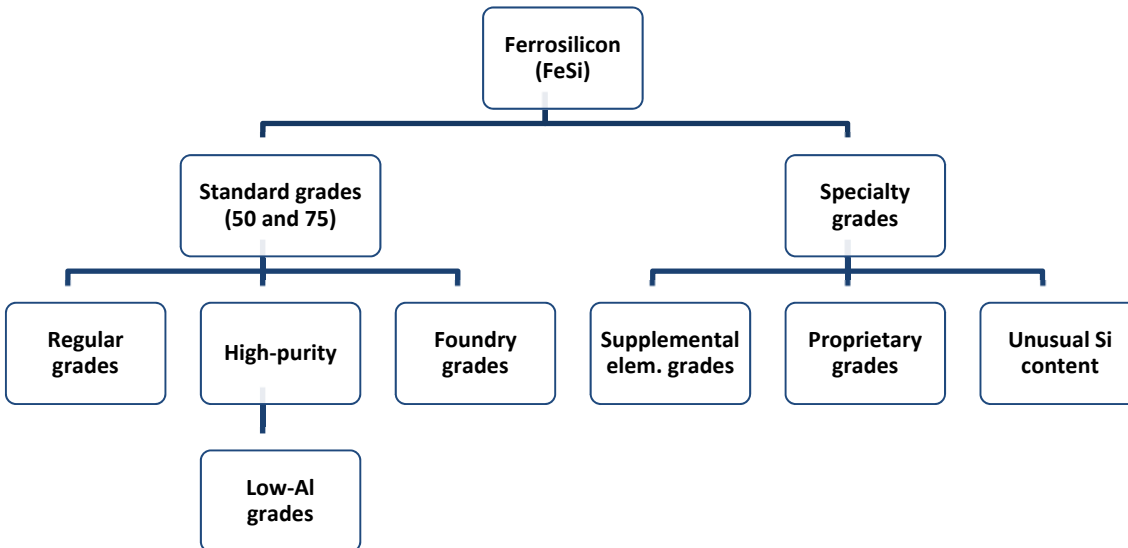
<sup>13</sup> Imports from both Russia and Venezuela of ferrosilicon under HTS 7201.21.10 and 7201.21.50 (covering ferrosilicon containing by weight more than 55 percent but not more than 80 percent of silicon) are eligible for duty-free treatment under the Generalized System of Preferences (GSP). The GSP program expired on July 31, 2013. The program has expired on several previous occasions, for periods of about one month to 15 months. After each of the previous expirations the program was renewed retroactively and duties paid by importers of eligible goods during the period of expiration were refunded.

<sup>14</sup> A standard specification for ferrosilicon is ASTM A 100 *Standard Specification for Ferrosilicon*. To be in compliance with this specification, 75 percent ferrosilicon must contain from 74.0 through 79.0 percent of silicon, and 50 percent ferrosilicon must contain from 47.0 through 51.0 percent silicon. Individual producers and consumers may have their own specifications that may be broader or narrower than the ASTM standard.

standard grades are distinguished from regular grades by differences in the allowable maximum or minimum percentage amounts of minor elements in the product. For example, low-aluminum 75 percent and 50 percent ferrosilicon contain no more than 0.50 percent aluminum. High-purity 75 percent and 50 percent ferrosilicon typically contain lower percentages of all minor elements than do the regular grades. “Foundry grades” contain minimum percentages of specific minor elements.<sup>15</sup>

Domestic and foreign producers also manufacture, and the steel and iron industries consume, “specialty” grades of ferrosilicon. In most cases, these products are considered specialty grades because they contain specific percentages of minor elements for the purpose of adding them to steel or foundry iron using ferrosilicon as the carrier. Ferrosilicon containing a non-standard percentage of silicon is also considered to be a specialty product.<sup>16</sup> Figure I-1 illustrates the variety of grades of ferrosilicon.

**Figure I-1**  
**Ferrosilicon: Breakdown by grades**



Source: *Ferrosilicon from Argentina, China, Kazakhstan, Russia, Ukraine, and Venezuela, Inv. Nos. 303-TA-23 and 731-TA-565-570 (Preliminary)*, USITC Pub. 2535 (July 1992), p. I-5.

<sup>15</sup> For example, under the ASTM Standard, foundry grade 75 percent ferrosilicon must contain a minimum of 0.50 percent calcium.

<sup>16</sup> For example, ferrosilicon containing approximately 65 percent silicon is produced in Russia, but is not commonly used in the United States. There is very little U.S. production of ferrosilicon containing non-standard percentages of silicon.

Ferrosilicon is used mainly in the production of steel and cast iron. In steel production, the silicon contained in ferrosilicon serves as deoxidizer to combine with dissolved oxygen in molten steel, necessary to permit casting of the steel without undesirable bubbles in the solidified steel. Ferrosilicon also is used as a reducing agent, particularly in the production of stainless steel. Silicon reacts with chromium oxides to form silicon oxides, returning chromium to the molten steel, and increasing the overall chromium recovery of the process. Finally, ferrosilicon is used as the source of silicon for alloying purposes in the production of certain steel alloys, particularly silicon electrical steel, which contains three percent or more of silicon.

Ferrosilicon is used by iron foundries as the source of silicon needed for alloying purposes in iron castings.

Ferrosilicon is sold primarily in sized lump form.<sup>17</sup> Size is important because it affects the performance of the ferrosilicon in its designated use. Large lumps are generally used in primary steelmaking furnaces because they penetrate the layer of slag on top of the molten metal more readily. Smaller lumps are more commonly used for alloying purposes to insure rapid dissolution in molten steel. Fines are less desirable than lumps because it is more difficult to recover the silicon content in them.

\*\*\*. It contains about 15 percent silicon. \*\*\*<sup>18</sup> Such 15 percent ferrosilicon powder is not used for metallurgical purposes by steel or iron castings firms; rather, it is combined with water to create a dense medium for gravity (sink/float) separation of minerals, aggregates, and metals.<sup>19</sup>

### **Manufacturing processes**

Ferrosilicon is produced by smelting iron-containing materials and silicon-containing materials in submerged-arc electric furnaces. Iron is in the form of iron or steel scrap and silicon is in the form of quartz gravel or sand. These are combined with carbonaceous material such as coal or petroleum coke and a bulking agent such as wood chips. The raw materials are weighed, combined in the required proportions and then fed into the furnace. High-current, low-voltage electricity is delivered through a transformer and into the furnace through carbon electrodes. The process is very energy-intensive, requiring about 8,000 to 9,000 kilowatt-hours of electricity to produce one short ton of 75 percent ferrosilicon. To operate efficiently and reduce unit fixed cost, the submerged-arc furnace must run continuously, 24 hours per day.

In the furnace, the charge is heated to approximately 3,300 degrees Fahrenheit. At that temperature, the quartzite is reduced by the carbon in the reductants forming carbon monoxide and releasing silicon, which forms an alloy with molten iron. Molten ferrosilicon

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<sup>17</sup> Ferrosilicon sizes are stated as the maximum and minimum dimensions of the lumps found in a given shipment. The dimensions refer to the openings in standardized sieves used to size the product. Sizes vary from eight inches by four inches to one-quarter inch by down.

<sup>18</sup> \*\*\*

<sup>19</sup> Westbrook Resources. <http://www.wbri.co.uk/atomised-ferro-silicon.html>, Accessed Aug. 21, 2013.

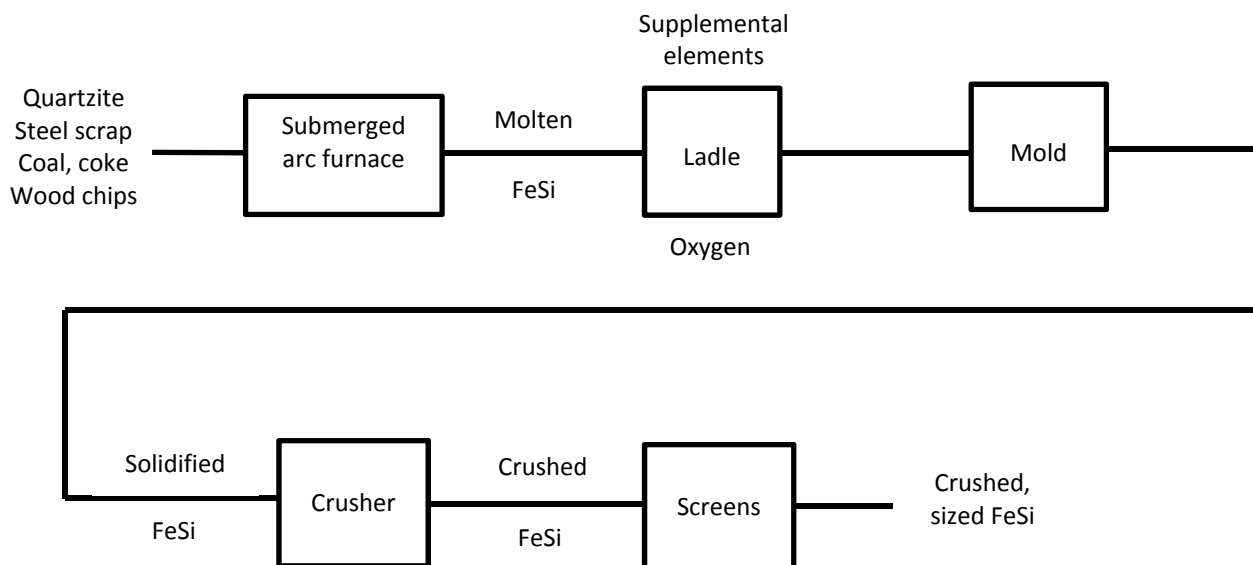
accumulates in the bottom of the furnace, from which it is drawn off into ladles on either a continuous or intermittent basis. Refinement of the ferrosilicon to remove unwanted impurities and the addition of special alloying elements occur in the ladles.

Molten ferrosilicon is poured from the ladles into large, flat cast-iron molds or onto a bed of ferrosilicon fines to cool. After cooling and solidification, the ferrosilicon is crushed and screened to produce the lump sizes required. In the process of crushing, some product may be too small for sale; such material may be further ground to a powder, combined with a binder and formed into briquettes. All sizes of ferrosilicon, including briquettes and fines are subject to these investigations.

All grades of ferrosilicon are produced using essentially the same process, but certain additional steps are required to produce higher-purity grades of ferrosilicon. Such grades are produced using raw materials containing lower amounts of impurities. In addition, higher-purity ferrosilicon undergoes further processing known as ladle metallurgy while in the molten state to further reduce its content of impurities.<sup>20</sup> Specialty grade 15 percent ferrosilicon for dense medium application is typically produced by remelting 75 percent ferrosilicon with steel scrap in an electric arc furnace and casting into a high-pressure water spray.<sup>21</sup> \*\*\*.<sup>22</sup>

Figure I-2 illustrates the manufacture of ferrosilicon.

**Figure I-2**  
**Ferrosilicon production process**



Source: *Ferrosilicon from China, Inv. No. 731-TA-567 (Final)*, USITC Pub. 2606, p. I-9.

<sup>20</sup> Ladle metallurgy involves injection of oxygen into the molten metal in the ladle to oxidize impurities. Proprietary processing involving specialized equipment is also performed in the ladle.

<sup>21</sup> Westbrook Resources. <http://www.wbrl.co.uk/atomised-ferro-silicon.html>, Accessed Aug. 21, 2013.

<sup>22</sup> \*\*\*.

## DOMESTIC LIKE PRODUCT ISSUES

No issues with respect to the definition of the domestic like product have been raised in these preliminary phase investigations.<sup>23</sup> The petitioners contend that there is a single domestic like product consisting of all forms and sizes of ferrosilicon, regardless of grade.<sup>24</sup> They state that the physical characteristics of all grades of ferrosilicon are determined by their chemical composition. Few physical differences exist among grades. Within a single grade, domestic and imported ferrosilicon have the same physical characteristics.<sup>25</sup> FerroVen states that although it believes competition is attenuated, it does not contest the domestic like product as defined in the petition.<sup>26</sup>

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<sup>23</sup> The Commission determined in previous ferrosilicon investigations that there was a single domestic like product consisting of all grades of ferrosilicon. *Ferrosilicon From the People's Republic of China*, Inv. No. 731-TA-567 (Final), USITC Pub. 2606 (March 1993), p. 5; *Ferrosilicon From Russia and Venezuela*, Inv. Nos. 303-TA-23, 731-TA-568 and 570 (Final), USITC Pub. 2650 (June 1993), p. 7; and *Ferrosilicon From Egypt*, Inv. No. 731-TA-641 (Final), USITC Pub. 2688 (October 1993), p. 1-8.

<sup>24</sup> Petitioners' postconference brief, p. 5.

<sup>25</sup> Petition, p. 14.

<sup>26</sup> FerroVen's postconference brief, p. 9. CHEMK did not comment on the definition of the domestic like product in its postconference brief or at the staff conference.



## PART II: SUPPLY AND DEMAND INFORMATION

### U.S. MARKET CHARACTERISTICS

Ferrosilicon is mainly used in the production of steel and iron to introduce silicon into molten steel or iron. Demand trends follow overall economic trends and the demand for steel.<sup>1</sup> Different grades of ferrosilicon can be manufactured, such as regular, high purity, low aluminum, and foundry grade. Each grade is defined by the percentage of silicon and minor elements contained in the product by weight. The lower the amount of other elements besides silicon and iron, the higher the purity level of the ferrosilicon.<sup>2</sup> According to Petitioners, consumers have the ability to switch amongst different grades of ferrosilicon depending on the price.<sup>3</sup>

### CHANNELS OF DISTRIBUTION

U.S.-produced and imported ferrosilicon is sold directly to end users, including steel producers and iron foundries.<sup>4</sup> As shown in table II-1, U.S. producers reported that approximately \*\*\* of their US shipments were to steel producers and \*\*\* were to iron foundries. U.S. importers of ferrosilicon from all sources reported that over \*\*\* of their shipments of ferrosilicon were to steel producers.

**Table II-1**

**Ferrosilicon: U.S. producers' and importers' U.S. shipments, by sources and channels of distribution, 2010-2012, January-March 2012 and January-March 2013**

\* \* \* \* \*

### GEOGRAPHIC DISTRIBUTION

U.S. producers reported selling ferrosilicon to \*\*\*, except the \*\*\* (table II-2). Venezuelan importers of ferrosilicon reported selling to \*\*\*, and Russian importers of ferrosilicon sold to \*\*\*. For U.S. producers, \*\*\* percent of sales were within 100 miles of their production facility, \*\*\* percent were between 101 and 1,000 miles, and \*\*\* percent were over 1,000 miles. Importers of Russian ferrosilicon sold \*\*\* percent within 100 miles of their U.S. point of shipment, \*\*\* percent between 101 and 1,000 miles, and \*\*\* of ferrosilicon over 1,000 miles. Importers of Venezuelan ferrosilicon sold \*\*\* percent within 100 miles of their U.S. point of shipment, \*\*\* percent between 101 and 1,000 miles, and \*\*\* percent over 1,000 miles.

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<sup>1</sup> Conference transcript, p. 56.

<sup>2</sup> Petition, p. 6.

<sup>3</sup> Petition, p. 21.

<sup>4</sup> Petition, pp.11 and 16.

**Table II-2**

**Ferrosilicon: Geographic market areas in the United States served by U.S. producers and importers, by number of responding firms**

\* \* \* \* \*

**SUPPLY AND DEMAND CONSIDERATIONS**

**U.S. supply**

**Domestic production**

Based on available information, U.S. producers of ferrosilicon have the ability to respond to changes in demand with moderate changes in the quantity of shipments of U.S.-produced ferrosilicon to the U.S. market. The main contributing factors to the moderate degree of responsiveness of supply is an ability to switch shipments between alternate markets and some ability to use inventories to increase shipments; supply responsiveness is somewhat constrained by limited unused capacity.

***Industry capacity***

Domestic capacity utilization \*\*\* from 2010 to 2012. Overall capacity to produce ferrosilicon \*\*\* while production \*\*\* from 2010 to 2012. During the period of investigation, domestic capacity utilization remained above \*\*\* percent.<sup>5</sup> Domestic producers' level of capacity utilization suggests that U.S. producers may have a somewhat limited capacity to increase production of ferrosilicon in response to an increase in prices.

***Alternative markets***

U.S. producers' exports, as a percentage of total shipments, \*\*\* from \*\*\* percent in 2010 to \*\*\* percent in 2012. CCMA reported shipping to \*\*\*, and Globe reported exporting to \*\*. U.S. producers may have some ability to shift shipments between the U.S. market and other markets in response to price changes.

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<sup>5</sup> During the interim period (January 2013-March 2013), U.S. producers' capacity utilization increased to \*\*\* percent from \*\*\* percent in the 2012 interim period (January 2012-March 2012). The 2013 interim period is the \*\*\* capacity utilization reported during the period of investigation.

### ***Inventory levels***

U.S. producers' inventories increased over the period of investigation from \*\*\* percent of total shipments in 2010 to \*\*\* percent in 2012. 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***

\*\*\* responding U.S. producers stated that they could switch production from ferrosilicon to other products. Other products that producers reportedly can produce on the same equipment as ferrosilicon are \*\*\*. In early 2011, Globe reported switching production lines between ferrosilicon and silicon metal production to improve product mix and capture higher returns.<sup>6</sup> In petitioners' briefs, Globe explained the conditions in which the company can shift production are based on \*\*\*. \*\*\*.<sup>7</sup>

### ***Supply constraints***

Both domestic producers reported \*\*\*.

### ***Subject imports from Russia***

Based on available information, producers of ferrosilicon from Russia have the ability to respond to changes in demand with moderate changes in the quantity of shipments of ferrosilicon to the U.S. market. Two Russian foreign producers, RFA and Bratsk Ferroalloys Plant Ltd., responded to foreign producer questionnaires.<sup>8</sup> Supply responsiveness is supported by a high ratio of exports to shipments, but mitigated by low inventories and high capacity utilization ratios.

### ***Industry capacity***

Russian capacity utilization remained relatively high during the period of investigation and increased from \*\*\* percent in 2010 to \*\*\* percent in 2012.<sup>9</sup> Overall capacity to produce ferrosilicon and production of ferrosilicon increased. Russian producers' high level of capacity utilization coupled with increasing production capacity suggests that Russian producers may

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<sup>6</sup> *Globe converts alloy furnace to silicon*, American Metal Market Today, February 9, 2011, <http://www.amm.com/Article/2769076/Globe-converts-alloy-furnace-to-silicon.html>, retrieved August 14, 2013.

<sup>7</sup> Petitioner's postconference brief, p. 1 of Responses of Globe Specialty Metals, Inc. and CC Metals and Alloys, LLC to Questions at the staff conference..

<sup>8</sup> Petition, p. 17.

<sup>9</sup> Interim 2013 data shows Russian capacity utilization at \*\*\* percent.

have somewhat limited ability to increase production of ferrosilicon in response to an increase in prices.

### ***Alternative markets***

Russian producers' total exports increased over the period of investigation. Russian producers' export shipments, as a percentage of total shipments, \*\*\* from \*\*\* percent in 2010 to \*\*\* percent in 2012. Export shipments to the United States \*\*\* around \*\*\* percent during 2010-2012. Russian producers' high exports-to-total shipment ratio may indicate that Russian producers have the ability to shift shipments between the U.S. market and other markets in response to price changes.

### ***Inventory levels***

Russian producers' inventories increased over the period of investigation, but inventories accounted for \*\*\* of total shipments for each year of the period of investigation. These inventory levels suggest that Russian producers may have a limited ability to respond to changes in demand with changes in the quantity shipped from inventories.

### ***Production alternatives***

One responding Russian producer, RFA, stated that it \*\*\*.

### ***Supply constraints***

Both Russian producers reported \*\*\*.

### ***Subject imports from Venezuela***

Based on available information, producers of ferrosilicon from Venezuela have the ability to respond to changes in demand with moderate-to-high changes in the quantity of shipments of ferrosilicon to the U.S. market. FerroVen is the only producer of ferrosilicon in Venezuela.<sup>10</sup> The main contributing factors to the moderate-to-high degree of responsiveness of supply are FerroVen's expanding capacity to produce and high levels of exports. Dampening FerroVen's responsiveness is the increasing proportion of home market shipments.

### ***Industry capacity***

Venezuelan capacity utilization decreased from \*\*\* percent in 2010 to \*\*\* in 2012. Overall capacity to produce ferrosilicon increased over \*\*\* during the period of investigation, while overall production increased \*\*\* percent. FerroVen's level of capacity utilization suggests

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<sup>10</sup> Conference transcript, p. 71 (Salinas).

that FerroVen may have some capacity to increase production of ferrosilicon in response to an increase in prices.

### ***Alternative markets***

FerroVen's total exports increased over the period of investigation. However, FerroVen's exports, as a percentage of total shipments, decreased from \*\*\* percent in 2010 to \*\*\* percent in 2012. FerroVen reported exporting to \*\*\*. Both FerroVen's shipments to the United States and its home market fluctuated over the period of investigation. FerroVen's export shipments to the United States as a percentage of total shipments decreased from \*\*\* percent in 2010 to \*\*\* in 2011 and increased to \*\*\* percent in 2012.<sup>11</sup> FerroVen's shipments to its home market increased from \*\*\* percent of total shipments in 2010 to \*\*\* percent in 2011 and then decreased to \*\*\* percent in 2012.<sup>12</sup> FerroVen's export shipments indicate that FerroVen may have a moderate ability to shift shipments between the U.S. market and other markets in response to price changes.

### ***Inventory levels***

FerroVen's total end-of-period inventories increased from \*\*\* percent of total shipments in 2010 to \*\*\* percent in 2012.<sup>13</sup> These inventory levels suggest that FerroVen may have some ability to respond to changes in demand with changes in the quantity shipped from inventories.

### ***Production alternatives***

\*\*\* reported that it \*\*\* switch production from ferrosilicon to other products.

### ***Supply constraints***

Ferroven reported \*\*\* supply constraint. \*\*\*.

### ***Nonsubject imports***

The largest source of nonsubject imports during 2010-12 was China. Imports from China fluctuated greatly but overall decreased from \*\*\* percent of total imports in 2010 to \*\*\* percent in 2012. Chinese imports \*\*\* in 2010 at \*\*\* percent of total imports. In 2012, imports

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<sup>11</sup> Interim 2013 shipments to the U.S. were \*\*\* percent of total shipments. The Venezuelan importer FerroAtlántica North America Inc. reported \*\*\*

<sup>12</sup> FerroVen's interim 2013 home market shipments were \*\*\* percent of total shipments.

<sup>13</sup> FerroVen's inventories accounted for \*\*\* percent of total shipments in 2010, and the highest share during the period of investigation.

from China accounted for approximately half of the nonsubject imports.<sup>14</sup> For 2010, Chinese officials capped levels of ferrosilicon production at 2009 levels.<sup>15</sup> In addition, Chinese products are subject to a 25 percent export tax.<sup>16</sup>

### **U.S. demand**

Based on available information, the overall demand for ferrosilicon would likely experience small changes in response to changes in price. The main contributing factors are the lack of economically viable substitutes and the small cost share of ferrosilicon in most of its end-use products. U.S. demand for ferrosilicon depends on the demand for U.S.-produced downstream products.

### **End uses**

Reported end uses for ferrosilicon include steel and iron castings, where it is used as an alloying agent. Ferrosilicon increases the silicon content in the steel, increases the tensile strength of carbon and other steels, improves the resistance to corrosion and high-temperature oxidation of stainless steels, and improves electrical characteristics of electrical steels.<sup>17</sup>

### **Business cycles**

\*\*\* U.S. producers and five of seven importers indicated that the ferrosilicon market was subject to business cycles or distinctive conditions of competition. Specifically, both U.S. producers and one importer cited \*\*\*, as being distinct to the ferrosilicon market. U.S. producer CCMA reported that \*\*\*. Importer FerroAtlántica North America Inc. described \*\*\*. It reported that in the \*\*\*.” It added that \*\*\*.<sup>18</sup>

### **Apparent consumption**

Apparent U.S. consumption of ferrosilicon decreased during 2010-12. Overall, apparent U.S. consumption in 2012 was approximately 2 percent lower than in 2010.

### **Demand trends**

Responses by U.S. producers and importers regarding ferrosilicon demand since 2010 varied greatly (table II-3). U.S. producer Globe reported \*\*\*. It reported \*\*\*. Importer

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<sup>14</sup> Compiled from official Commerce statistics. See Part IV for additional information on nonsubject imports.

<sup>15</sup> Conference transcript, p. 93.

<sup>16</sup> Conference transcript, p. 85.

<sup>17</sup> Petition, p. 8.

<sup>18</sup> \*\*\*'s importer questionnaire response, section III-17.

FerroAtlántica North America Inc. reported that global demand for ferrosilicon \*\*\*. Importer Allegheny Alloys reported that \*\*\*. Importer CCMA, LLC reported that \*\*\*.

**Table II-3**

**Ferrosilicon: Firms' perceptions regarding U.S. demand, by number of responding firms**

\* \* \* \* \*

**Substitute products**

Most U.S. producers and importers reported that there were no substitutes. The few identified substitutes for ferrosilicon consisted primarily of other silicon metals, including silicomanganese and silica carbide.<sup>19</sup>

**Cost share**

U.S. producers and importers reported that ferrosilicon accounts for a small share, between \*\*, of the cost of the steel production and iron castings, the main uses for ferrosilicon.

**SUBSTITUTABILITY ISSUES**

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

**Lead times**

Ferrosilicon is primarily sold from inventories. U.S. producer CCMA reported that \*\* of its sales were from its inventories with an average lead time of \*\* days. U.S. producer Globe reported that \*\*. Importers reported that \*\* of their sales were from inventories, with lead times averaging from \*\* days.<sup>20</sup>

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<sup>19</sup> \*\*, \*\*, and \*\*'s importer questionnaire responses, section III-14.

<sup>20</sup> FerroAtlántica North America Inc. reported needing approximately \*\* days of lead time if sourcing from foreign inventories.

## Factors affecting purchasing decisions

At the staff conference, U.S. producers indicated that price was the most important factor in the purchasing decisions made by their customers.<sup>21</sup> The subject importers reported that in addition to price, reliability and consistency of supply were important factors.<sup>22</sup>

### Comparison of U.S.-produced and imported ferrosilicon

In order to determine whether U.S.-produced ferrosilicon can generally be used in the same applications as imports from Russia and Venezuela, U.S. producers and importers were asked whether the products can “always,” “frequently,” “sometimes,” or “never” be used interchangeably. As shown in table II-4, \*\*\* U.S. producers and a \*\*\* of importers report U.S.-produced ferrosilicon and imported ferrosilicon were “always” interchangeable.

**Table II-4**

**Ferrosilicon: Perceived interchangeability between ferrosilicon produced in the United States and in other countries, by country pairs**

\* \* \* \* \*

In addition, producers and importers were asked to assess how often differences other than price were significant in the sale of ferrosilicon from the United States, subject, or nonsubject countries. As seen in table II-5, U.S. producers reported that there were \*\*\* between U.S produced ferrosilicon and imported ferrosilicon. A majority of importers, however, report that there were \*\*\*.

**Table II-5**

**Ferrosilicon: Significance of differences other than price between ferrosilicon produced in the United States and in other countries, by country pair**

\* \* \* \* \*

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<sup>21</sup> Conference transcript, p. 56 (Perkins).

<sup>22</sup> Conference transcript, p. 115 (Hopkins and Pontoli).



## 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 alleged margins of dumping 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 two firms that accounted for all U.S. production of ferrosilicon during 2012.

### U.S. PRODUCERS

The petitioners, CCMA and Globe, are the only known U.S. producers of ferrosilicon during the period of investigation.<sup>1</sup> The Commission issued U.S. producer questionnaires to CCMA and Globe based on information contained in the petition. Both firms provided useable data on their ferrosilicon operations. These responses accounted for 100 percent of U.S. production of ferrosilicon during the period of investigation.

Table III-1 lists U.S. producers of ferrosilicon, their production locations, positions on the petition, production locations, total production in 2012, and shares of total production in 2012.

**Table III-1  
Ferrosilicon: U.S. producers of ferrosilicon, their positions on the petition, production locations, production, and shares of reported production, 2012**

Firm	Position on petition	U.S. production location(s)	Related and/or affiliated firms	2012 U.S. production (short tons contained Si)	Share of 2012 production (percent)
CCMA	Petitioner	Calvert City, KY	Wholly-owned subsidiary of Georgian American Alloys, Inc., Miami, FL <sup>1</sup>	***	***
Globe	Petitioner	Bridgeport, AL Beverly, OH	***	***	***
Total				***	100.0

<sup>1</sup> CCMA also notes that \*\*\*. The Optima group acquired CCMA in March 2011. The Optima Group was previously affiliated with the importer CCMA, LLC, but there has been no affiliation since March 2011. Conference transcript, p. 45 (Nuss).

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

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<sup>1</sup> Petition, p. 3.

As indicated in table III-1, \*\*\* and \*\*\* U.S. producers are related to U.S. importers of the subject merchandise. In addition, as discussed in greater detail below, \*\*\* U.S. producers directly import the subject merchandise and \*\*\*.

Producers were asked to report any changes in operations since January 2010. CCMA was acquired by Optima Group, LLC in March 2011.<sup>2</sup> \*\*\*. CCMA idled its smaller furnace from June 2013 through August 2013.<sup>3</sup> In addition, CCMA reported \*\*\*. Globe reported that it \*\*\*. Globe also \*\*\*. Globe's Beverly, OH plant experienced production shutdowns in three ferrosilicon furnaces during May and June 2013,<sup>4</sup> \*\*\*.

### U.S. PRODUCTION, CAPACITY, AND CAPACITY UTILIZATION

Table III-2 and figure III-1 present U.S. producers' production, capacity, and capacity utilization. U.S. producers' reported capacity increased by \*\*\* percent between 2010 and 2012 and by \*\*\* percent between the interim periods. Reported production decreased by \*\*\* percent between 2010 and 2012 and increased by \*\*\* percent between the interim periods. In 2012, \*\*\* percent of total ferrosilicon production was 75% ferrosilicon.

**Table III-2**  
**Ferrosilicon: U.S. producers' production, capacity, and capacity utilization, 2010-12, January-March 2012, and January-March 2013**

\* \* \* \* \*

**Figure III-1**  
**Ferrosilicon: U.S. producers' production, capacity, and capacity utilization, 2010-12, January-March 2012, and January-March 2013**

\* \* \* \* \*

The Commission asked domestic producers to report constraints on their capacity to produce ferrosilicon. CCMA reported \*\*\*, and Globe reported \*\*\* as constraints.

Both U.S. producers reported producing other products on the same equipment, machinery, and using the same production and related workers employed to produce ferrosilicon. CCMA produces \*\*\*<sup>5</sup> and \*\*\*.<sup>6</sup> Globe produces \*\*\*.<sup>7</sup>

Domestic producers further explain that the equipment and processes used to manufacture ferrosilicon are virtually identical to those used to produce other bulk ferroalloys such as ferrochrome and silicomanganese. Because of the similarity in the equipment and

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<sup>2</sup> Conference transcript, p. 45 (Nuss).

<sup>3</sup> Conference transcript, pp. 31-32 (Joiner).

<sup>4</sup> Conference transcript, p. 22 (Perkins).

<sup>5</sup> \*\*\*.

<sup>6</sup> These \*\*\*.

<sup>7</sup> \*\*\*.

processes to produce these products, furnaces currently used to produce ferrochrome or silicomanganese could be switched to the production of ferrosilicon.<sup>8</sup> Globe states that it could produce ferrosilicon at its plants in in Niagara Falls, NY and Selma, AL, by converting furnaces currently being used to produce silicon metal to the production of ferrosilicon; in the past it has converted a furnace from ferrosilicon production to silicomanganese production and back again.<sup>9</sup> CCMA is not set up to produce silicon metal and does not have the capability to convert furnaces.<sup>10</sup>

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

Table III-3 presents U.S. producers' U.S. shipments, export shipments, and total shipments. The quantity of U.S. producers' U.S. shipments fluctuated from 2010 to 2012 but decreased overall by \*\*\* percent, and decreased by \*\*\* percent in the interim periods. The unit values of U.S. shipments increased by \*\*\* percent from 2010 to 2012. CCMA reported exporting to \*\*\* and Globe reported exporting to \*\*\*. Export shipments as a share of total shipments based on quantity were \*\*\* percent in 2012, up from \*\*\* percent in 2010.

**Table III-3**  
**Ferrosilicon: U.S. producers' U.S. shipments, exports shipments, and total shipments, 2010-12, January-March 2012, and January-March 2013**

\* \* \* \* \*

### U.S. PRODUCERS' INVENTORIES

Table III-4 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 over the period examined. The domestic industry's inventories of ferrosilicon increased by \*\*\* percent from 2010 to 2012 and also increased by \*\*\* percent during the interim periods. Inventories, relative to total shipments increased by \*\*\* percentage points from 2010 to 2012 and by \*\*\* percentage points during the interim period.

**Table III-4**  
**Ferrosilicon: U.S. producers' inventories, 2010-12, January-March 2012, and January-March 2013**  
**U.S. producers' imports and purchases**

\* \* \* \* \*

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<sup>8</sup> Petitioners' postconference brief, p. 37.

<sup>9</sup> Petition, p. 1 and 43. \*\*\*. Petitioners' postconference brief, Responses to Questions at the Staff Conference, p. 1.

<sup>10</sup> Conference transcript, p. 44 (Joiner).

U.S. producers' imports and purchases of ferrosilicon are presented in table III-5. \*\*\* reported direct imports of ferrosilicon. \*\*\*.

**Table III-5**  
**Ferrosilicon: U.S. producers' U.S. production, imports and purchases, 2010-12, January-March 2012, and January-March 2013**

\* \* \* \* \*

**U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY**

Table III-6 shows U.S. producers' employment-related data during the period examined. Production-related workers (PRWs) decreased by \*\*\* percent from 2010 to 2011 and by \*\*\* from 2010 to 2012. In addition, CCMA laid off 20 workers as of July 1, 2013,<sup>11</sup> and Globe laid off 45 workers in May and June 2013.<sup>12</sup> Hours worked per PRW increased by \*\*\* percent from 2010 to 2012, while productivity \*\*\* between 2010 and 2012.

**Table III-6**  
**Ferrosilicon: U.S. producers' employment-related data, 2010-12, January-March 2012, and January-March 2013**

\* \* \* \* \*

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<sup>11</sup> Conference transcript, p. 32 (Joiner).

<sup>12</sup> Conference transcript, p. 22 (Perkins).

## PART IV: U.S. IMPORTS, APPARENT U.S. CONSUMPTION, AND MARKET SHARES

### U.S. IMPORTERS

The Commission issued importer questionnaires to seven firms believed to be importers of subject ferrosilicon, as well as to all U.S. producers of ferrosilicon.<sup>1</sup> Usable questionnaire responses were received from seven<sup>2</sup> companies, representing virtually all imports from Russia and Venezuela between January 2010 and March 2013 under HTS statistical reporting numbers 7202.21.1000, 7202.21.5000, 7202.21.7500, 7202.21.9000, and 7202.29.0050.<sup>3</sup> Table IV-1 lists all responding U.S. importers of ferrosilicon from Russia, Venezuela, and from other sources, their locations, and their shares of U.S. imports, in 2012.

**Table IV-1  
Ferrosilicon: U.S. importers, headquarters, and shares of imports in 2012**

Firm	Headquarters	Source of imports (short tons)				Share of imports (percent)			
		Russia	Vene- zuela	Other <sup>1</sup>	Total	Russia	Vene- zuela	Other <sup>1</sup>	Total
Allegheny Alloys	Pittsburgh, PA	***	***	***	***	***	***	***	***
CCMA, LLC	Amherst, NY	***	***	***	***	***	***	***	***
FerroAtlantica	Madrid, Spain	***	***	***	***	***	***	***	***
Minerais	Hillsborough, NJ	***	***	***	***	***	***	***	***
Russian Ferro Alloys (RFA)	Mishawaka, IN	***	***	***	***	***	***	***	***
Washington Mills Electro Minerals	Niagara Falls, Canada	***	***	***	***	***	***	***	***
Washington Mills North Grafton <sup>2</sup>	N. Grafton, MA	***	***	***	***	***	***	***	***
Total		***	***	***	***	100.0	100.0	100.0	100.0

<sup>1</sup> \*\*\*.

<sup>2</sup> Washington Mills North Grafton \*\*\*.

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

<sup>1</sup> The Commission issued questionnaires to those firms identified as importers 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 subheadings 7202.21.1000, 7202.21.5000, 7202.21.7500, 7202.21.9000, 7202.29.0010 and 7202.29.0050 between January 2010 and March 2013.

<sup>2</sup> \*\*\*.

<sup>3</sup> The Commission received a questionnaire from Russian Ferro Alloys, the only known U.S. importer of ferrosilicon from Russia, and from FerroAtlantica, the only known U.S. importer of ferrosilicon from Venezuela.

## U.S. IMPORTS

Table IV-2 presents data for U.S. imports of ferrosilicon from Russia, Venezuela, and all other sources. U.S. import data based on imports for consumption,<sup>4</sup> HTS statistical reporting numbers 7202.21.1000, 7202.21.5000, 7202.21.7500, 7202.21.9000, and 7202.29.0050.<sup>5</sup>

Imports from Russia increased by 3.2 percent from 2010 to 2012, but were 53.6 percent lower in interim 2013 compared to interim 2012. Imports from Venezuela increased by 21.3 percent from 2010 to 2012 and were 69.4 percent higher in interim 2013 compared to interim 2012. The leading sources of nonsubject imports are China and Canada, which represented 18.0 and 7.2 percent of total imports in 2012, respectively.

## NEGLIGENCE

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.<sup>6</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 such merchandise imported into the United States during the applicable 12-month period, then imports from such countries are deemed not to be negligible. Imports from Russia accounted for 46.6 percent of total imports of ferrosilicon by quantity from July 2012 to June 2013. Imports from Venezuela accounted for 15.3 percent of total imports of ferrosilicon by quantity from July 2012 to June 2013.

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<sup>4</sup> RFA reports importing ferrosilicon from Russia through a bonded warehouse. Conference transcript, p. 110 (Mintzer). General imports from Russia were less than imports from consumption in all years except 2011, and the same in the first quarter of 2013. General imports of ferrosilicon from Russia were 74,414 short tons in 2010, 81,328 short tons in 2011, 84,118 short tons in 2012, 62,090 short tons in January – March 2012, and 45,805 short tons in January – March 2013.

<sup>5</sup> Subject ferrosilicon may be imported under HTS statistical reporting number 7202.29.0010 (ferrosilicon containing over 2 percent magnesium); however, ferrosilicon containing over 3 percent magnesium is outside the scope, and there is no commercial product containing more than 2 percent, but less than 3 percent magnesium. Thus, 7202.29.0010 is not included in official import data.

<sup>6</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)).

**Table IV-2**  
**Ferrosilicon: U.S. imports by source, 2010-12, January-March 2012, and January-March 2013**

Source	Calendar year			January - March	
	2010	2011	2012	2012	2013
	<b>Quantity (short tons contained Si)</b>				
Russia	91,025	71,302	93,964	42,457	19,707
Venezuela	19,169	17,802	23,245	4,604	7,801
Subtotal, subject	110,193	89,104	117,209	47,061	27,508
Canada	11,099	11,706	13,177	2,779	4,334
China	38,174	50,348	32,773	7,042	6,077
All other	6,264	12,196	18,923	8,142	3,579
Subtotal nonsubject	55,538	74,250	64,874	17,964	13,991
Total imports	165,731	163,354	182,083	65,025	41,499
	<b>Value (\$1,000)<sup>1</sup></b>				
Russia	170,883	146,016	158,713	72,918	32,541
Venezuela	38,639	33,239	39,801	8,083	13,559
Subtotal, subject	209,522	179,254	198,513	81,001	46,100
Canada	32,903	42,037	46,413	10,788	12,738
China	69,915	106,984	63,524	13,570	17,271
All other	22,115	42,763	42,314	18,242	8,036
Subtotal nonsubject	124,933	191,784	152,251	42,600	38,045
Total imports	334,455	371,038	350,765	123,601	84,145
	<b>Unit value (dollars per pound)</b>				
Russia	0.94	1.02	0.84	0.86	0.83
Venezuela	1.01	0.93	0.86	0.88	0.87
Subtotal, subject	0.95	1.01	0.85	0.86	0.84
Canada	1.48	1.80	1.76	1.94	1.47
China	0.92	1.06	0.97	0.96	1.42
All other	1.77	1.75	1.12	1.12	1.12
Subtotal nonsubject	1.12	1.29	1.17	1.19	1.36
Total imports	1.01	1.14	0.96	0.95	1.01
	<b>Share of quantity (percent)</b>				
Russia	54.9	43.6	51.6	65.3	47.5
Venezuela	11.6	10.9	12.8	7.1	18.8
Subtotal, subject	66.5	54.5	64.4	72.4	66.3
Canada	6.7	7.2	7.2	4.3	10.4
China	23.0	30.8	18.0	10.8	14.6
All other	3.8	7.5	10.4	12.5	8.6
Subtotal nonsubject	33.5	45.5	35.6	27.6	33.7
Total imports	100.0	100.0	100.0	100.0	100.0
	<b>Share of value (percent)</b>				
Russia	51.1	39.4	45.2	59.0	38.7
Venezuela	11.6	9.0	11.3	6.5	16.1
Subtotal, subject	62.6	48.3	56.6	65.5	54.8
Canada	9.8	11.3	13.2	8.7	15.1
China	20.9	28.8	18.1	11.0	20.5
All other	6.6	11.5	12.1	14.8	9.6
Subtotal nonsubject	37.4	51.7	43.4	34.5	45.2
Total imports	100.0	100.0	100.0	100.0	100.0

<sup>1</sup> Landed, duty-paid.

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

Source: Compiled from official Commerce statistics.

## **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 concerning fungibility and channels of distribution are discussed in Part II of this report. Additional information concerning geographical markets, and simultaneous presence in the market is presented below.

### **Geographical markets**

U.S. producers and U.S. importers reported shipping ferrosilicon throughout the United States.<sup>7</sup> Imports of ferrosilicon from Russia entered through Chicago, IL; Houston-Galveston, TX; Mobile, AL; New Orleans, LA; Philadelphia, PA; and Laredo, TX during the period for which data was collected. Imports of ferrosilicon from Venezuela entered through New Orleans, LA; Ogdensburg, NY; and Buffalo, NY.

### **Presence in the market**

Table IV-3 presents monthly import statistics for ferrosilicon from subject sources during January 2010 through March 2013.

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<sup>7</sup> See Part II, Table II-2.



**Table IV-3**  
**Ferrosilicon: Monthly U.S. imports, by source, January 2010 - March 2013**

Month	Russia	Venezuela	All others	Total
Quantity (short tons contained Si)				
January 2010	4,889	0	2,429	7,318
February 2010	5,683	3,720	2,675	12,079
March 2010	10,501	0	2,375	12,876
April 2010	4,439	0	1,333	5,772
May 2010	8,930	4,134	8,925	21,989
June 2010	4,307	2,811	6,821	13,938
July 2010	9,534	0	3,388	12,922
August 2010	10,874	3,461	6,030	20,366
September 2010	6,942	0	2,065	9,007
October 2010	12,259	0	6,772	19,030
November 2010	12,668	4,547	7,191	24,406
December 2010	0	496	5,534	6,030
Total 2010	91,026	19,169	55,538	165,733
January 2011	13,394	0	3,995	17,389
February 2011	0	0	2,097	2,097
March 2011	2,592	4,218	6,045	12,855
April 2011	1,068	0	2,873	3,941
May 2011	9,182	0	7,984	17,167
June 2011	1,675	3,741	7,460	12,876
July 2011	5,163	0	6,193	11,355
August 2011	9,431	3,070	12,856	25,357
September 2011	9,079	0	9,840	18,919
October 2011	9,823	0	4,028	13,851
November 2011	5,771	3,300	4,534	13,605
December 2011	4,125	3,472	6,345	13,943
Total 2011	71,303	17,802	74,251	163,356
January 2012	21,359	0	6,891	28,250
February 2012	838	0	4,855	5,693
March 2012	20,260	4,604	6,218	31,083
April 2012	2,189	0	10,520	12,709
May 2012	14,259	3,514	6,879	24,652
June 2012	13,110	4,134	4,843	22,087
July 2012	0	0	2,554	2,554
August 2012	0	3,728	4,503	8,232
September 2012	11,807	0	5,081	16,888
October 2012	0	3,196	3,353	6,549
November 2012	10,144	18	6,621	16,782
December 2012	0	4,051	2,556	6,607
Total 2012	93,965	23,245	64,874	182,084
January 2013	8,352	33	6,186	14,571
February 2013	11,355	3,059	4,089	18,503
March 2013	0	4,709	3,716	8,425
Total January-March 2013	19,707	7,801	13,991	41,499

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

Source: Compiled from official Commerce statistics.

## APPARENT U.S. CONSUMPTION

Table IV-4 presents data on apparent U.S. consumption for ferrosilicon over the period examined. Apparent consumption, based on quantity, decreased by \*\*\* percent from 2010 to 2012, and by \*\*\* percent during the interim period.

**Table IV-4**  
**Ferrosilicon: U.S. shipments of domestic product, U.S. imports, and apparent U.S. consumption, 2010-12, January-March 2012, and January-March 2013**

Item	Calendar year			January - March	
	2010	2011	2012	2012	2013
<b>Quantity (short tons contained Si)</b>					
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. imports from--					
Russia	91,025	71,302	93,964	42,457	19,707
Venezuela	19,169	17,802	23,245	4,604	7,801
Subtotal, subject	110,193	89,104	117,209	47,061	27,508
Canada	11,099	11,706	13,177	2,779	4,334
China	38,174	50,348	32,773	7,042	6,077
All other	6,264	12,196	18,923	8,142	3,579
Subtotal nonsubject	55,538	74,250	64,874	17,964	13,991
Total imports	165,731	163,354	182,083	65,025	41,499
Apparent consumption	***	***	***	***	***
<b>Value (\$1,000)</b>					
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. imports from--					
Russia	170,883	146,016	158,713	72,918	32,541
Venezuela	38,639	33,239	39,801	8,083	13,559
Subtotal, subject	209,522	179,254	198,513	81,001	46,100
Canada	32,903	42,037	46,413	10,788	12,738
China	69,915	106,984	63,524	13,570	17,271
All other	22,115	42,763	42,314	18,242	8,036
Subtotal nonsubject	124,933	191,784	152,251	42,600	38,045
Total imports	334,455	371,038	350,765	123,601	84,145
Apparent consumption	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires and from official Commerce import statistics.

## U.S. MARKET SHARES

U.S. market share data are presented in table IV-5. U.S. producers' market share of U.S. consumption, based on quantity, decreased steadily from 2010 to 2012, by \*\*\* percentage points, but were \*\*\* percentage points higher in interim period 2013 compared with interim 2012. The market share of imports of ferrosilicon from subject countries fluctuated from 2010 to 2012, increasing overall by \*\*\* percentage points; the market share of subject imports were \*\*\* percentage points lower in interim 2013 than in interim 2012.

**Table IV-5**  
**Ferrosilicon: U.S. consumption and market shares, 2010-12, January-March 2012, and January-March 2013**

\* \* \* \* \*

## RATIO OF IMPORTS TO U.S. PRODUCTION

Table IV-6 presents data on the ratio of U.S. imports to U.S. production of ferrosilicon. Imports from subject countries represented \*\*\* percent of U.S. production in 2012, an increase of \*\*\* percentage points since 2010. The ratio of subject imports to U.S. production was lower in interim 2013 by \*\*\* percentage points than in interim 2012.

**Table IV-6**  
**Ferrosilicon: Ratio of U.S. imports to U.S. production, 2010-12, January-March 2012, and January-March 2013**

Item	Calendar year			January - March	
	2010	2011	2012	2012	2013
	<b>Quantity (short tons contained Si)</b>				
U.S. production	***	***	***	***	***
U.S. imports from--					
Russia	91,025	71,302	93,964	42,457	19,707
Venezuela	19,169	17,802	23,245	4,604	7,801
Subtotal, subject	110,193	89,104	117,209	47,061	27,508
Canada	11,099	11,706	13,177	2,779	4,334
China	38,174	50,348	32,773	7,042	6,077
All other	6,264	12,196	18,923	8,142	3,579
Subtotal, nonsubject	55,538	74,250	64,874	17,964	13,991
Total imports	165,731	163,354	182,083	65,025	41,499
	<b>Ratio of imports to production</b>				
U.S. imports from--					
Russia	***	***	***	***	***
Venezuela	***	***	***	***	***
Subtotal, subject	***	***	***	***	***
Canada	***	***	***	***	***
China	***	***	***	***	***
All other	***	***	***	***	***
Subtotal, nonsubject	***	***	***	***	***
Total imports	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires and from official Commerce import statistics.

## PART V: PRICING DATA

### Raw material costs

Quartzite, iron or steel scrap, low-ash coal or petroleum coke, and wood chips are the principal raw materials used to produce ferrosilicon.<sup>1</sup> U.S. producers' raw materials costs as a share of cost of goods sold increased from \*\*\* percent in 2010 to \*\*\* percent in 2012. U.S. producers expect costs of raw materials to increase over the next two years.<sup>2</sup> During the period of investigation, iron scrap prices increased by nearly 20 percent, and reached the highest price in January 2012 (figure V-1).

**Figure V-1**

**Ferrosilicon: Average consumer ferrous scrap prices (No. 1 heavy melt, Chicago), monthly, January 2010-July 2013**



Source: American Metal Market.

Producing ferrosilicon is a very energy intensive process.<sup>3</sup> CCMA reported purchasing their energy from the Tennessee Valley Authority.<sup>4</sup> Globe purchase electricity through long-

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<sup>1</sup> Petition, pp. 9-10.

<sup>2</sup> Petitioner's postconference brief, p. 2 of Responses of Globe Specialty Metals, Inc. and CC Metals and Alloys, LLC to Questions at the staff conference.

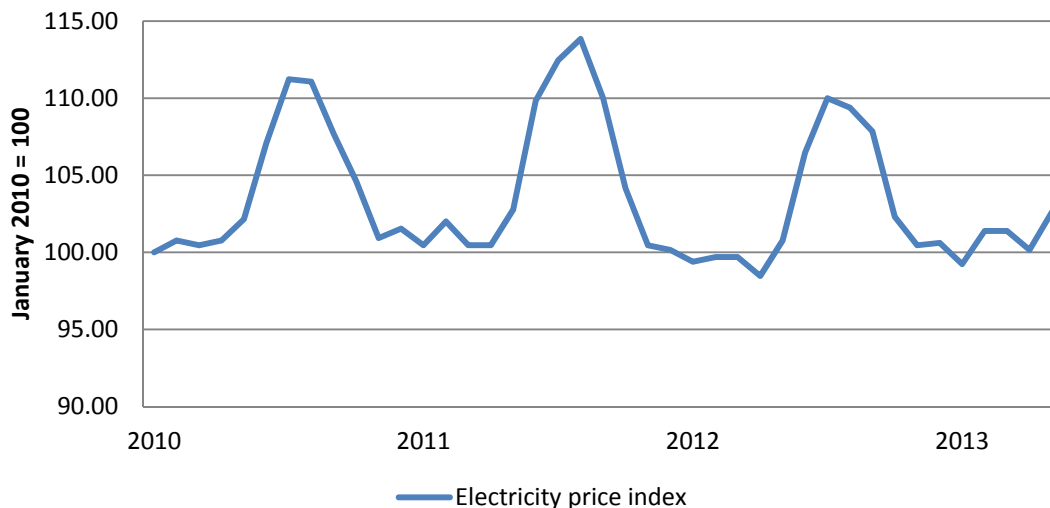
<sup>3</sup> Petition, p. 10 and conference transcript, p. 29 (Joiner).

<sup>4</sup> Conference transcript, p. 49 (Joiner).

term contracts with American Electric Power.<sup>5</sup> As seen in figure V-2, the cost of electricity has seasonal peaks, but overall has remained relatively constant during the period of investigation.

**Figure V-2**

**Industrial price of electricity: Monthly prices for January 2010-May 2013**



Source: U.S. Energy Information Administration, <http://www.eia.doe.gov>, accessed on August 7, 2013.

### U.S. inland transportation

\*\*\* responding U.S. producers and importers reported that they typically arrange transportation to their customers. U.S. producers reported that their U.S. inland transportation costs ranged from \*\*\* percent while importers reported costs of \*\*\* percent.

### Packaging costs

Ferrosilicon is sold in bulk form and also as a packaged product. Super sacks are the most commonly used packaging, but ferrosilicon is also shipped in pallet boxes, drums, and 25 and 50 pound bags.<sup>6</sup> U.S. producers charge their customers for packaging through a higher per-pound price and as a separate fee.<sup>7</sup> U.S. producer Globe estimated that it charges a separate fee for packaging which accounts for \*\*\* percent of its total sales. U.S. producer CCMA, LLC charges a separate fee for packaging for approximately \*\*\* percent of its sales.<sup>8</sup> Three importers reported charging a higher per-pound price to cover packaging costs. FerroVen

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<sup>5</sup> Petitioner's postconference brief, p. 2 of Responses of Globe Specialty Metals, Inc. and CC Metals and Alloys, LLC to Questions at the staff conference.

<sup>6</sup> Petition, p. 11.

<sup>7</sup> Ibid.

<sup>8</sup> Petitioner's postconference brief, p. 3.

exports ferrosilicon in bulk to the United States, and FerroAtlantica only reported charging \*\*\*.<sup>9</sup> RFA charges a separate fee for freight and packaging costs for over \*\*\* percent of its sales.<sup>10</sup>

## PRICING PRACTICES

### Pricing methods

The U.S. market for ferrosilicon generally follows the benchmark prices that are set by Ryan's Notes. Ryan's Notes establishes spot prices for ferrosilicon sold on the spot market after surveying consumers, traders, and producers. These prices are released twice a week, and at the end of each month, low, mid-point, and high prices and averages are reported. Ryan's Notes excludes prices set in long-term or formula contracts.<sup>11</sup>

U.S. producers and importers reported primarily using \*\*\* to set prices (table V-1). In addition, U.S. producers reported using \*\*\*.

**Table V-1**

**Ferrosilicon: U.S. producers and importers reported price setting methods, by number of responding firms<sup>1</sup>**

\* \* \* \* \*

U.S. producers reported selling the vast majority of their product under \*\*\* (table V-2). Both U.S. producers reported that their \*\*\* average duration was \*\*\* in length and \*\*\*. \*\*\* for U.S. producers can \*\*\*. Globe reported having \*\*\* that average \*\*\* years in length and do not have \*\*\*. Importers reported selling a majority of ferrosilicon under \*\*\* in 2012. Importers reported that their short term contracts' average duration ranged from \*\*\* to \*\*\* days, and long term contracts' average duration ranged from \*\*\* to \*\*\* days. A majority of importers reported that both their short- and long-term contracts do not have price renegotiations or meet-or-release clauses, and that both types of contracts have fixed prices and quantities.

**Table V-2**

**Ferrosilicon: U.S. producers' and importers' shares of U.S. commercial shipments by type of sale, 2012**

\* \* \* \* \*

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<sup>9</sup> Venezuelan respondent's postconference brief, Exhibit 1.

<sup>10</sup> Russian respondent's postconference brief, p. 49.

<sup>11</sup> Conference transcript, p. 103.

## Sales terms and discounts

U.S. producers and importers typically quote prices on \*\*\*. Both U.S. producers and a majority of importers reported offering \*\*\* and using sales terms of \*\*\*. \*\*\* importer reported using sales terms of \*\*\*.

## 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 ferrosilicon products shipped to unrelated U.S. steel producers, in both bulk and super sack shipments, during 2010-2013.

**Product 1**-- **Regular grade 75 percent ferrosilicon**. – Ferrosilicon containing by weight 74.0 to 79.0 percent silicon; 0.10 percent or less carbon; 0.025 percent or less sulfur; 0.035 percent or less phosphorus; more than 0.50 percent, but not more than 1.50 percent aluminum; and 0.40 percent or less manganese.

Regular grade 75 percent ferrosilicon does not include any form of high purity ferrosilicon (ferrosilicon containing substantially lower amounts of impurities than the maximum levels specified for regular grade ferrosilicon), magnesium ferrosilicon, or other ferrosilicon-based specialty/proprietary grades.

**Product 2**-- **Low aluminum grade 75 percent ferrosilicon**. – Ferrosilicon containing by weight 74.0 to 79.0 percent silicon; 0.10 percent or less carbon; 0.025 percent or less sulfur; 0.035 percent or less phosphorus; 0.50 percent or less aluminum; and 0.40 percent or less manganese.

Low aluminum 75 percent ferrosilicon does not include any other form of high purity<sup>12</sup> ferrosilicon, regular grade ferrosilicon, magnesium ferrosilicon, or other ferrosilicon-based specialty/proprietary grades.

Two U.S. producers and five importers provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters. For 2012, pricing data reported by these firms accounted for \*\*\* percent of U.S. producers' commercial shipments of ferrosilicon, \*\*\* percent of U.S. commercial shipments of subject imports from Russia and \*\*\* percent of U.S. commercial shipments of subject imports from Venezuela. For product 1 and 2 in bulk and super sacks, ferrosilicon prices from all sources generally peaked during the first half of 2011. Product 1 in bulk was the only pricing product

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<sup>12</sup> When reporting data, some U.S. producers and importers used different definitions in regards to high purity. \*\*\* defined high purity as ferrosilicon with extremely low values of minor elements, including aluminum, carbon, calcium, and titanium. \*\*\* defined high purity as low aluminum grade with less than 0.1 percent aluminum.



that had data allowing for comparisons for U.S., Russian, and Venezuelan product. U.S. prices were highest price in \*\*\* and the lowest reported price was in \*\*\*. Russian import prices peaked in \*\*\*. Venezuelan imports reported their highest price during \*\*\*. No price data were received for imports from Russia for product 2 in either bulk or super sack.<sup>13</sup> Venezuelan importers did not report price data for \*\*\*.<sup>14</sup> For product 2 in super sack, price data were only reported by \*\*\*.

Price data for products 1-2 are presented in tables V-3 to V-6 and figure V-3 to V-6. Nonsubject country prices are presented in Appendix D.

**Table V-3**

**Ferrosilicon: Weighted-average f.o.b. prices and quantities of domestic and imported product 1<sup>1</sup> in bulk and margins of underselling/(overselling), by quarters, January 2010-June 2013**

\* \* \* \* \*

**Table V-4**

**Ferrosilicon: Weighted-average f.o.b. prices and quantities of domestic and imported product 2<sup>1</sup> in bulk and margins of underselling/(overselling), by quarters, January 2010-June 2013<sup>2</sup>**

\* \* \* \* \*

**Table V-5**

**Ferrosilicon: Weighted-average f.o.b. prices and quantities of domestic and imported product 1<sup>1</sup> in super sacks and margins of underselling/(overselling), by quarters, January 2010-June 2013<sup>2</sup>**

\* \* \* \* \*

**Table V-6**

**Ferrosilicon: Weighted-average f.o.b. prices and quantities of domestic and imported product 2<sup>1</sup> in super sacks and margins of underselling/(overselling), by quarters, January 2010-June 2013<sup>2</sup>**

\* \* \* \* \*

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<sup>13</sup> Conference transcript, p. 113 (Mintzer).

<sup>14</sup> Venezuelan respondent's postconference brief, Exhibit 1.

**Figure V-3**

**Ferrosilicon: Weighted-average prices and quantities of domestic and imported product 1<sup>1</sup> in bulk, by quarters, January 2010-June 2013**

\* \* \* \* \*

**Figure V-4**

**Ferrosilicon: Weighted-average prices and quantities of domestic and imported product 2<sup>1</sup> in bulk, by quarters, January 2010-June 2013**

\* \* \* \* \*

**Figure V-5**

**Ferrosilicon: Weighted-average prices and quantities of domestic and imported product 1<sup>1</sup> in super sacks, by quarters, January 2010-June 2013**

\* \* \* \* \*

**Figure V-6**

**Ferrosilicon: Weighted-average prices and quantities of domestic and imported product 2<sup>1</sup> by super sacks, by quarters, January 2010-June 2013**

\* \* \* \* \*

**Price trends**

Overall, prices increased during January 2010 to March 2013. Table V-7 summarizes the price trends, by country and by product. As shown in the table, domestic prices for all products increased over the POI from \*\*\* percent during January 2010 to March 2013. U.S.-produced \*\*\* shows the highest increase over the period of investigation with a \*\*\* percent increase. Subject import price increases over the POI ranged from \*\*\* percent. Russian import prices increased the most for \*\*\* with a \*\*\*-percent increase whereas Venezuelan imports reported the highest increase in \*\*\* with a \*\*\*-percent increase. All three countries experienced the lowest increase in \*\*\*. For the products with U.S. and subject country comparisons, U.S.-produced ferrosilicon had overall lower price increases.

**Table V-7**

**Ferrosilicon: Summary of weighted-average f.o.b. prices for products 1 and 2 in bulk and super sacks from the United States, Russia, and Venezuela.**

\* \* \* \* \*

**Price comparisons**

As shown in table V-8, prices for ferrosilicon imported from Russia and Venezuela were below those for U.S.-produced product in \*\*\* instances; margins of underselling ranged from \*\*\* percent. In the remaining \*\*\* instances, prices for ferrosilicon from Russia and Venezuela were between \*\*\* percent above prices for the domestic product. Ferrosilicon imports from Russia reported the \*\*\* instances of \*\*\* with \*\*\* instances, and Venezuelan imports reported the \*\*\* instances of \*\*\* with \*\*\* instances.

**Table V-8**

**Ferrosilicon: Instances of underselling/overselling and the range and average of margins, by country, January 2010-March 2013**

\* \* \* \* \*

**LOST SALES AND LOST REVENUE**

The Commission requested U.S. producers of ferrosilicon to report any instances of lost sales or revenue they experienced due to competition from imports of ferrosilicon from Russia and Venezuela during January 2010 to March 2013. Both U.S. producers reported that they \*\*\* to avoid losing sales to importers of ferrosilicon from Russia and Venezuela.

U.S. producers \*\*\*.<sup>15</sup> \*\*\*. The \*\*\* lost sales allegations totaled between \$\*\*\* and involved \*\*\* short tons of contained ferrosilicon and the \*\*\* lost revenue allegations totaled \$\*\*\* and involved \*\*\* short tons of contained ferrosilicon. Staff contacted \*\*\* purchasers using the contract pricing information and a summary of the information obtained follows.

Purchasers responding to the lost sales and lost revenue allegations also were asked whether they shifted their purchases of ferrosilicon from U.S. producers to suppliers of ferrosilicon from Russia and Venezuela since 2010. In addition, they were asked whether U.S. producers reduced their prices in order to compete with suppliers of ferrosilicon from Russia and Venezuela. \*\*\* of the responding purchasers reported that they had shifted purchases of ferrosilicon from U.S. producers to subject imports since 2010. Purchaser \*\*\* reported switching sales from Russian suppliers to \*\*\*. \*\*\* purchasers reported that U.S. producers had reduced their prices in order to compete with the prices of subject imports since January 2010.

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<sup>15</sup> \*\*\*.

**Table V-9**  
**Ferrosilicon: U.S. producers' lost sales allegations**

\* \* \* \* \*

**Table V-10**  
**Ferrosilicon: U.S. producers' lost revenue allegations**

\* \* \* \* \*

## PART VI: FINANCIAL EXPERIENCE OF U.S. PRODUCERS

### BACKGROUND

Two U.S. producers, CCMA and Globe, which together accounted for all U.S. production of ferrosilicon during the period for investigation, supplied financial data on their ferrosilicon operations. Even though Globe's fiscal year ends June 30, its financial data are based on calendar year. \*\*\* reported internal consumption of ferrosilicon, and these sales accounted for less than \*\*\* percent of the industry's 2012 sales values. The unit sales values of \*\*\* product were somewhat higher than the unit sales values of its commercial sales for all periods, except 2010. However, since the quantities of internally consumed ferrosilicon were much smaller than sales quantities of commercial sales, the effect of higher per-unit sales values of internally consumed ferrosilicon did not have any impact on the combined per-unit values. No firms reported any transfers to related parties.

### OPERATIONS ON FERROSILICON

Aggregate income-and-loss data for the U.S. producers are presented in table VI-1. To summarize, the overall financial condition of the domestic ferrosilicon industry deteriorated between 2010 and 2012, while they continued to report operating income for the entire period of investigation, from \*\*\* in 2010 to \*\*\* in 2012. From 2010 to 2011, the increase in unit sales price (\*\*\* per short ton) was greater than the increase in unit total cost, i.e., cost of goods sold ("COGS") and selling, general, and administrative ("SG&A") expenses combined (\*\*\* per short ton), which resulted in a higher per-unit operating income in 2011. However, due to a lower sales quantity, operating income decreased slightly, from \*\*\* in 2010 to \*\*\* in 2011. From 2011 to 2012, even as sales quantities somewhat increased, net sales values decreased due to lower per-unit sales values. Therefore, the operating income further decreased to \*\*\* in 2012 because the decrease in unit total cost (by \*\*\* per short ton) was much smaller compared with the decrease in unit sales price (by \*\*\* per short ton).

Both net sales quantities and values were lower in January-March ("interim") 2013 than interim 2012, operating income in interim 2013 was lower (\*\*\* compared to the operating income of \*\*\* in interim 2012), due mainly to lower per-unit sales value and higher per-unit total cost combined. As a result, the operating income margin, which was \*\*\* percent in interim 2012, was \*\*\* percent in interim 2013. Both producers reported \*\*\*.

**Table VI-1**  
**Ferrosilicon: Results of operations of U.S. producers, fiscal years 2010-12, January-March 2012, and January-March 2013**

\* \* \* \* \*

Selected company-by-company data are presented in table VI-2. Total net sales (quantities and values), per-unit values (sales, COGS, SG&A, and operating income), operating income, and the ratio of operating income (loss) to net sales are presented in this table on a

firm-by-firm basis. Both producers incurred the same experience – \*\*\* between 2010 and 2012 (except Globe in 2012) and between the two interim periods. Both firms reported \*\*\* between 2010 and 2012 and between the two interim periods. Both producers reported \*\*\* between 2010 and 2012 and between the two interim periods (except \*\*\*). \*\*\*. Globe explained the \*\*\*.<sup>1</sup>\*\*\*. Both producers reported \*\*\*. However, \*\*\*.<sup>2</sup> \*\*\*.<sup>3</sup> \*\*\*. Both producers reported \*\*\*.

**Table VI-2**  
**Ferrosilicon: Results of operations of U.S. producers, by firm, fiscal years 2010-12, January-March 2012, and January-March 2013**

\* \* \* \* \*

Selected aggregate per-short ton cost data of the producers on their operations, i.e., COGS and SG&A expenses, are presented in table VI-3. Overall per-short ton COGS and total cost (which includes SG&A expenses) increased substantially from 2010 to 2011, driven mainly by changes in raw material costs and fabrication costs (labor and factory overhead)<sup>4</sup> and in SG&A expenses. However, per-short ton COGS and total cost decreased slightly from 2011 to 2012. Per-short ton COGS and per-unit total costs were somewhat higher in interim 2013 compared to interim 2012, due to the increases in the costs of raw materials and SG&A expenses. The ratio of total COGS to net sales increased slightly between 2010 and 2012, and increased again in interim 2013 from interim 2012.

**Table VI-3**  
**Ferrosilicon: Average unit costs of U.S. producers, fiscal years 2010-12, January-March 2012, and January-March 2013**

\* \* \* \* \*

A variance analysis for showing the effects of prices and volume on the producers’ sales of ferrosilicon, and of costs and volume on their total costs is presented in table VI-4.<sup>5</sup> The

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<sup>1</sup> E-mail from \*\*\*, August 12, 2013.  
<sup>2</sup> E-mail from \*\*\*, August 7, 2013.  
<sup>3</sup> E-mail from \*\*\*, August 8, 2013.  
<sup>4</sup> \*\*\*. E-mail from \*\*\*, August 12, 2013.

<sup>5</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 net volume variance is the sum of the price, COGS, SG&A volume variance. All things equal, a stable overall product mix generally enhances the utility of the Commission’s variance analysis.

information for this variance analysis is derived from table VI-1. The analysis indicates that the decrease in operating income between 2010 and 2012 (by \*\*\*) was the result of per-unit costs and expenses increasing more than per-unit prices. The summary at the bottom of the table illustrates that the positive effect of increased prices (\*\*\*) was less than the negative effects of increased costs and expenses (\*\*\*) and lower sales quantities (\*\*\*) between 2010 and 2012. Between the two interim periods, the variance analysis indicates that operating income decreased by (\*\*\*) which resulted from the combined negative effects of decreased price (\*\*\*), increased costs/expenses (\*\*\*), and decreased sales volume (\*\*\*)).

**Table VI-4**  
**Ferrosilicon: Variance analysis of operations of U.S. producers, fiscal years 2010-12, January-March 2012, and January-March 2013**

\*   \*   \*   \*   \*   \*   \*

### CAPITAL EXPENDITURES AND RESEARCH AND DEVELOPMENT EXPENSES

The responding firms' aggregate data on capital expenditures and research and development ("R&D") expenses are presented in table VI-5. Both producers reported capital expenditures during the period of investigation. Capital expenditures increased from 2010 to 2011, and then, decreased from 2011 to 2012. Capital expenditures were much lower in January-March 2013, compared to January-March 2012. Data for capital expenditures on a firm-by-firm basis are shown in table VI-6. No producer reported R&D expenses.

**Table VI-5**  
**Ferrosilicon: Capital expenditures and R&D expenses by U.S. producers, fiscal years 2010-12, January-March 2012, and January-March 2013**

\*   \*   \*   \*   \*   \*   \*

**Table VI-6**  
**Ferrosilicon: Capital expenditures by U.S. producers, by firms, fiscal years 2010-12, January-March 2012, and January-March 2013**

\*   \*   \*   \*   \*   \*   \*

### ASSETS AND RETURN ON ASSETS

Table VI-7 presents data on the U.S. producers' total net assets and their return on assets ("ROA"). Total \*\*\* (all assets were revalued to fair market value when CCMA was acquired by Optima Group, LLC in March 2011 as explained before).<sup>6</sup> At the same time, the

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<sup>6</sup> E-mail from \*\*\*, August 8, 2013.

return on assets decreased between 2010 and 2012. The trend of ROA over the period was the same as the trend of the operating income (loss) margin shown in table VI-1.

**Table VI-7**  
**Ferrosilicon: Value of assets and return on assets of U.S. producers, fiscal years 2010-12**

\* \* \* \* \*

**CAPITAL AND INVESTMENT**

The Commission requested U.S. producers to describe any actual negative effects on their return on investment, or their growth, investment, ability to raise capital, existing development and production efforts, or the scale of capital investments as a result of imports of Ferrosilicon from Russia and Venezuela. Their comments are as follows:

**Actual Negative Effects**

***CCMA.***—\*\*\*

***Globe.***—\*\*\*

**Anticipated Negative Effects**

***CCMA.***—\*\*\*

***Globe.***—\*\*\*



## 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,*

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<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 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.

## **THE INDUSTRY IN RUSSIA**

The Commission issued foreign producers' or exporters' questionnaires to four Russian firms believed to produce and/or export ferrosilicon.<sup>3</sup> Useable responses to the Commission's

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<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."

<sup>3</sup> These firms were identified through a review of information submitted in the petition and contained in proprietary Customs records.

questionnaire were received from two firms: Bratsk Ferroalloys Plant, Ltd. (“Bratsk”), and CHEMK Industrial Group (“CHEMK”).<sup>4</sup> These firms’ exports to the United States accounted for approximately \*\*\* percent of U.S. imports of ferrosilicon from Russia over the period being examined.<sup>5</sup> According to estimates requested of the responding Russian producers, the production of ferrosilicon in Russia reported in this Part of the report accounts for at least \*\*\* percent of overall production of ferrosilicon in Russia.<sup>6</sup> The \*\*\* Table VII- 1 presents 2012 capacity, production, and export shipment data for the responding Russian firms.

**Table VII-1  
Ferrosilicon: Responding Russian producers’ reported production capacity, production, and U.S. exports, by firm, 2012**

Producer	Capacity (short tons contained Si)	Production (short tons contained Si)	Share of reported 2012 production in Russia (percent)	Exports to the U.S. (short tons contained Si)	Share of reported exports to the U.S. (percent)
Bratsk	***	***	***	***	***
CHEMK	***	***	***	***	***
Total	***	***	100.0	***	100.0

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

Foreign producers were asked to report any changes in operations since January 2010. Bratsk reported \*\*\*. CHEMK reported that \*\*\*.

Bratsk reported that \*\*\*. The firm \*\*\*. CHEMK indicated that it \*\*\*. However, CHEMK stated that \*\*\*.

Table VII-2 presents information on the ferrosilicon operations of the responding producers and exporters in Russia.

**Table VII-2  
Ferrosilicon: Data for producers in Russia, 2010-12, January-March 2012, January-March 2013, and projected 2013-14**

\* \* \* \* \*

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<sup>4</sup> CHEMK’s response was on behalf of the following establishments: RFA International in Switzerland, CHEMK’s trading arm, Chelyabinski Electro-Metallurgical Plant OAO (“Chelyabinsk”), and Kuznetsk Ferroalloys OAO (“Kuznetsk”). Yurginski Ferroalloys Plant OAO (“Yurginsk”) is part of Kuznetsk and is not a separate legal entity. CHEMK’s posthearing brief, p. 42.

<sup>5</sup> Total reported imports from questionnaire data from January 2010 through March 2013 totaled \*\*\* short tons of contained silicon, and official import data totaled 275,999 short tons of contained silicon.

<sup>6</sup> Bratsk reported that its share of total production of ferrosilicon in Russia is \*\*\* percent while RFA International reported its share of total production is \*\*\*. \*\*\*.

## THE INDUSTRY IN VENEZUELA

The Commission issued foreign producers' or exporters' questionnaires to one Venezuelan firm believed to produce and/or export ferrosilicon.<sup>7</sup> FerroAtlántica de Venezuela, S.A. ("FerroVen")<sup>8</sup> provided the Commission with a questionnaire, and is believed to account for virtually all U.S. imports of ferrosilicon from Venezuela over the period being examined. FerroVen is the only producer of ferrosilicon in Venezuela and operates three ferrosilicon furnaces in Puerto Ordaz, Venezuela.<sup>9</sup>

FerroVen reported that it \*\*\*.<sup>10</sup> \*\*\*.

FerroVen \*\*\*.

Table VII- 3 presents information on FerroVen's ferrosilicon operations in Venezuela.

### Table VII-3

**Ferrosilicon: Data for FerroVen in Venezuela, 2010-12, January-March 2012, January-March 2013, and projected 2013-14**

\* \* \* \* \*

## U.S. INVENTORIES OF IMPORTED MERCHANDISE

Table VII-4 presents data on U.S. importers' reported inventories of ferrosilicon.

### Table VII-4

**Ferrosilicon: U.S. importers' inventories, 2010-12, January-March 2012, and January-March 2013**

\* \* \* \* \*

## U.S. IMPORTERS' OUTSTANDING ORDERS

The Commission requested importers to indicate whether they imported or arranged for the importation of ferrosilicon from Russia, Venezuela, or other sources after March 31, 2013. Six importers reported that they arranged such shipments. Table VII-5 presents data reported by U.S. importers concerning their arranged imports of ferrosilicon.

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<sup>7</sup> This firm was identified through a review of information submitted in the petition and contained in proprietary Customs records.

<sup>8</sup> FerroVen is a subsidiary of FerroAtlántica Group SA of Spain, which produces silicon metal, manganese, and ferrosilicon alloys. Conference transcript, p. 72 (Salinas).

<sup>9</sup> Conference transcript, p. 71 (Salinas) and FerroVen's foreign producer questionnaire, p. 10.

<sup>10</sup> FerroVen's \*\*\*.

**Table VII-5**  
**Ferrosilicon: Arranged imports, April 2013 – March 2014**

\* \* \* \* \*

### **ANTIDUMPING OR COUNTERVAILING DUTY ORDERS IN THIRD-COUNTRY MARKETS**

In February, 2008, the European Union imposed antidumping duty orders on imports of ferrosilicon from China, Egypt, Kazakhstan, the former Yugoslav Republic of Macedonia, and Russia. The duty rates for China are between 15.6 and 31.2 percent; Russia is 17.8 percent for Bratsk, 22.7 percent for CHEMK, and 22.7 percent for all others; Egypt are between 15.4 and 18.0 percent; Kazakhstan is 33.9 percent; and Macedonia is 5.4 percent.<sup>11</sup> The EU is currently reviewing the orders on China and Russia, and is scheduled to conclude its investigations in May 2014.<sup>12</sup>

### **INFORMATION ON NONSUBJECT COUNTRIES**

In assessing whether the domestic industry is materially injured or threatened with material injury “by reason of subject imports,” the legislative history states “that the Commission must examine all relevant evidence, including any known factors, other than the dumped or subsidized imports, that may be injuring the domestic industry, and that the Commission must examine those other factors (including non-subject imports) ‘to ensure that it is not attributing injury from other sources to the subject imports.’”<sup>13</sup>

Table VII-6 presents world production of ferrosilicon from 2007 to 2011, excluding U.S. production.

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<sup>11</sup> Official Journal of the European Union, Council Regulation (EC) No 172/2008, February 25, 2008.

<sup>12</sup> Official Journal of the European Union, Notice of initiation of an expiry review of the anti-dumping measures applicable to imports of ferro-silicon originating in the People’s Republic of China and Russia, 2013/C 58/07, February 28, 2013; and “EC to review antidumping duties on Chinese, Russian ferrosilicon”, Platts, February 28, 2013.

<sup>13</sup> *Mittal Steel Point Lisas Ltd. v. United States*, Slip Op. 2007-1552 at 17 (Fed. Cir., Sept. 18, 2008), quoting from *Statement of Administrative Action on Uruguay Round Agreements Act*, H.R. Rep. 103-316, Vol. I at 851-52; see also *Bratsk Aluminum Smelter v. United States*, 444 F.3d 1369 (Fed. Cir. 2006).

**Table VII-6**  
**Ferrosilicon: World production, by country (excluding United States), 2007-2011**

Country	2007	2008	2009	2010	2011
	Quantity (short tons of alloy)				
China	5,190,000	5,400,000	5,620,000	5,840,000	5,950,000
Russia	988,000	937,000	821,000	1,010,000	1,014,000
Norway	239,000	276,000	229,000	231,000	220,000
Ukraine	240,000	168,000	166,000	216,000	166,000
Brazil	161,000	160,000	160,000	160,000	160,000
Iceland	121,000	110,000	125,000	126,000	132,000
South Africa	154,000	149,000	121,000	130,000	123,000
India	88,000	101,000	112,000	111,000	116,000
Bhutan	44,000	34,000	100,000	108,000	104,000
Egypt	53,000	65,000	86,000	86,000	86,000
Venezuela	104,000	97,000	57,000	85,000	77,000
All other countries	428,000	417,000	239,000	354,000	411,000
Total	7,810,000	7,914,000	7,836,000	8,457,000	8,559,000

Note.—Data for year 2012 are not available.

Source: U.S. Geological Survey, Minerals Yearbook 2011,  
<http://minerals.usgs.gov/minerals/pubs/commodity/silicon/myb1-2011-simet.pdf> accessed 08/12/2013

Table VII-7 presents world exports of ferrosilicon from 2007 to 2012.

**Table VII-7**  
**Ferrosilicon: World exports, by country, 2007-2012**

Country	2007	2008	2009	2010	2011	2012
	Quantity (short tons of alloy)					
Russia	347,809	321,795	361,415	465,209	417,140	502,272
China	1,701,583	1,407,792	492,655	859,530	685,117	500,766
Norway	156,545	224,692	125,920	230,657	267,082	271,204
Brazil	128,175	111,257	156,889	181,352	158,294	159,948
Iceland	137,777	116,699	124,553	125,918	132,361	145,304
EU27 (External Trade)	34,207	39,718	110,862	143,665	170,230	127,304
United States	25,204	37,181	22,597	50,926	51,502	55,241
Canada	42,750	42,361	31,212	46,319	48,559	51,447
Ukraine	61,717	58,437	72,887	102,153	79,185	42,205
India	9,601	35,724	22,833	43,039	55,264	30,206
South Africa	52,003	42,911	38,235	58,916	68,198	26,746
Egypt	58,384	24,201	11,683	17,709	30,261	20,684
Venezuela	20,082	46,633	38,054	48,232	44,090	13,826
All other countries	69,366	63,554	59,923	71,106	62,421	46,935
World total	2,845,202	2,572,956	1,669,718	2,444,732	2,269,704	1,994,088

Note.—U.S. export data is for total exports, including re-export of imported goods. Data for exports from China are understated because ferrosilicon is smuggled from China through Vietnam to avoid payment of China's 25 percent export tax. Reported imports by all countries (mirror exports) of ferrosilicon from China were 1,012,315 short tons in 2011 and 991,781 short tons in 2012.

Source: Compiled from Global Trade Atlas, HS 7202.21 and 7202.29. Retrieved August 15, 2013.





**APPENDIX A**

***FEDERAL REGISTER NOTICES***



The Commission makes available notices relevant to its investigations and reviews on its website, [www.usitc.gov](http://www.usitc.gov). In addition, the following tabulation presents, in chronological order, *Federal Register* notices issued by the Commission and Commerce during the current proceeding.

Citation	Title	Link
78 FR 44969 July 25, 2013	<i>Ferrosilicon From Russia and Venezuela; Institution of Antidumping Duty Investigations and Scheduling of Preliminary Phase Investigations.</i>	<a href="https://www.federalregister.gov/articles/2013/07/25/2013-17871/ferrosilicon-from-russia-and-venezuela-institution-of-antidumping-duty-investigations-and-scheduling">https://www.federalregister.gov/articles/2013/07/25/2013-17871/ferrosilicon-from-russia-and-venezuela-institution-of-antidumping-duty-investigations-and-scheduling</a>
78 FR 49471 August 14, 2013	<i>Ferrosilicon From the Russian Federation and Venezuela: Initiation of Antidumping Duty Investigations</i>	<a href="https://www.federalregister.gov/articles/2013/08/14/2013-19736/ferrosilicon-from-the-russian-federation-and-venezuela-initiation-of-antidumping-duty-investigations">https://www.federalregister.gov/articles/2013/08/14/2013-19736/ferrosilicon-from-the-russian-federation-and-venezuela-initiation-of-antidumping-duty-investigations</a>



**APPENDIX B**

**CALENDAR OF THE PUBLIC STAFF CONFERENCE**



**CALENDAR OF PUBLIC PRELIMINARY CONFERENCE**

**Subject:** Ferrosilicon from Russia and Venezuela

**Inv. Nos.:** 731-TA-1224 and 1225 (Preliminary)

**Date and Time:** August 9, 2013 - 9:30 a.m.

Sessions were held in connection with these preliminary phase investigations in Courtroom A (room 100), 500 E Street, S.W., Washington, DC.

**OPENING REMARKS:**

Petitioners (**William D. Kramer**, DLA Piper LLP (US))  
Respondents (**Sydney H. Mintzer**, Mayer Brown LLP)

**In Support of the Imposition of  
Antidumping Duty Orders:**

DLA Piper LLP (US)  
Washington, DC  
on behalf of

Globe Specialty Metals, Inc. ("GSM")  
CC Metals and Alloys, LLC ("CCMA")

**J. Marlin Perkins**, Vice President, Sales, GSM

**Barry C. Nuss**, Vice President, Treasurer, *and* Chief  
Financial Officer, CCMA

**Gary Joiner**, Plant Manager, CCMA

**Jennifer Lutz**, Senior Economist, Economic Consulting  
Services, LLC

**Robert L. Powell, Jr.**, Vice President, Secretary, *and*  
General Counsel, CCMA

**William D. Kramer** )  
**Martin Schaefermeier** ) – OF COUNSEL





**CLOSING REMARKS:**

Petitioners (**William D. Kramer**, DLA Piper LLP (US))

Respondents (**Julie C. Mendoza**, Morris, Manning & Martin LLP)



**APPENDIX C**  
**SUMMARY DATA**



Table C-1

## Ferrosilicon: Summary data concerning the U.S. market, 2010-12, January to March 2012, and January to March 2013

(Quantity=short tons contained Si; Value=1,000 dollars; Unit values=dollars per pound of contained Si; Period changes=percent--exceptions noted)

	Report data					Period changes			
	2010	Calendar year 2011	2012	January to March 2012	January to March 2013	2010-12	Calendar year 2010-11	2011-12	Jan-Mar 2012-13
U.S. consumption quantity:									
Amount.....	***	***	***	***	***	***	***	***	***
Producers' share (fn1).....	***	***	***	***	***	***	***	***	***
Importers' share (fn1):									
Russia.....	***	***	***	***	***	***	***	***	***
Venezuela.....	***	***	***	***	***	***	***	***	***
Subtotal, subject.....	***	***	***	***	***	***	***	***	***
All others sources, nonsubject.....	***	***	***	***	***	***	***	***	***
Total imports.....	***	***	***	***	***	***	***	***	***
U.S. consumption value:									
Amount.....	***	***	***	***	***	***	***	***	***
Producers' share (fn1).....	***	***	***	***	***	***	***	***	***
Importers' share (fn1):									
Russia.....	***	***	***	***	***	***	***	***	***
Venezuela.....	***	***	***	***	***	***	***	***	***
Subtotal, subject.....	***	***	***	***	***	***	***	***	***
All others sources, nonsubject.....	***	***	***	***	***	***	***	***	***
Total imports.....	***	***	***	***	***	***	***	***	***
U.S. imports from:									
Russia:									
Quantity.....	91,025	71,302	93,964	42,457	19,707	3.2	(21.7)	31.8	(53.6)
Value.....	170,883	146,016	158,713	72,918	32,541	(7.1)	(14.6)	8.7	(55.4)
Unit value.....	\$0.94	\$1.02	\$0.84	\$0.86	\$0.83	(10.0)	9.1	(17.5)	(3.9)
Ending inventory quantity.....	24,364	24,779	28,898	39,389	28,512	18.6	1.7	16.6	(27.6)
Venezuela:									
Quantity.....	19,169	17,802	23,245	4,604	7,801	21.3	(7.1)	30.6	69.4
Value.....	38,639	33,239	39,801	8,083	13,559	3.0	(14.0)	19.7	67.7
Unit value.....	\$1.01	\$0.93	\$0.86	\$0.88	\$0.87	(15.1)	(7.4)	(8.3)	(1.0)
Ending inventory quantity.....	6,110	5,320	6,670	5,880	7,640	9.2	(12.9)	25.4	29.9
Subtotal, subject sources:									
Quantity.....	110,193	89,104	117,209	47,061	27,508	6.4	(19.1)	31.5	(41.5)
Value.....	209,522	179,254	198,513	81,001	46,100	(5.3)	(14.4)	10.7	(43.1)
Unit value.....	\$0.95	\$1.01	\$0.85	\$0.86	\$0.84	(10.9)	5.8	(15.8)	(2.6)
Ending inventory quantity.....	30,474	30,099	35,568	45,269	36,152	16.7	(1.2)	18.2	(20.1)
All other sources:									
Quantity.....	55,538	74,250	64,874	17,964	13,991	16.8	33.7	(12.6)	(22.1)
Value.....	124,933	191,784	152,251	42,600	38,045	21.9	53.5	(20.6)	(10.7)
Unit value.....	\$1.12	\$1.29	\$1.17	\$1.19	\$1.36	4.3	14.8	(9.1)	14.7
Ending inventory quantity.....	6,087	8,004	7,268	4,065	3,947	19.4	31.5	(9.2)	(2.9)
Total imports:									
Quantity.....	165,731	163,354	182,083	65,025	41,499	9.9	(1.4)	11.5	(36.2)
Value.....	334,455	371,038	350,765	123,601	84,145	4.9	10.9	(5.5)	(31.9)
Unit value.....	\$1.01	\$1.14	\$0.96	\$0.95	\$1.01	(4.5)	12.6	(15.2)	6.7
Ending inventory quantity.....	36,561	38,103	42,836	49,334	40,099	17.2	4.2	12.4	(18.7)
U.S. producers':									
Average capacity quantity.....	***	***	***	***	***	***	***	***	***
Production quantity.....	***	***	***	***	***	***	***	***	***
Capacity utilization (fn1).....	***	***	***	***	***	***	***	***	***
U.S. shipments:									
Quantity.....	***	***	***	***	***	***	***	***	***
Value.....	***	***	***	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***	***	***	***
Export shipments:									
Quantity.....	***	***	***	***	***	***	***	***	***
Value.....	***	***	***	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***	***	***	***
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***
Inventories/total shipments (fn1).....	***	***	***	***	***	***	***	***	***
Production workers.....	***	***	***	***	***	***	***	***	***
Hours worked (1,000s).....	***	***	***	***	***	***	***	***	***
Wages paid (\$1,000).....	***	***	***	***	***	***	***	***	***
Productivity (short tons per hour).....	***	***	***	***	***	***	***	***	***
Unit labor costs (per short ton).....	***	***	***	***	***	***	***	***	***
Net Sales:									
Quantity.....	***	***	***	***	***	***	***	***	***
Value.....	***	***	***	***	***	***	***	***	***
Unit value (per short ton).....	***	***	***	***	***	***	***	***	***
Cost of goods sold (COGS).....	***	***	***	***	***	***	***	***	***
Gross profit of (loss).....	***	***	***	***	***	***	***	***	***
SG&A expenses.....	***	***	***	***	***	***	***	***	***
Operating income or (loss).....	***	***	***	***	***	***	***	***	***
Capital expenditures.....	***	***	***	***	***	***	***	***	***
Unit COGS (per short ton).....	***	***	***	***	***	***	***	***	***
Unit SG&A expenses (per short ton).....	***	***	***	***	***	***	***	***	***
Unit operating income or (loss) (per short ton).....	***	***	***	***	***	***	***	***	***
COGS/sales (fn1).....	***	***	***	***	***	***	***	***	***
Operating income or (loss)/sales (fn1).....	***	***	***	***	***	***	***	***	***

## Notes:

fn1.--Report data are in percent and period changes are in percentage points.



**APPENDIX D**  
**NONSUBJECT COUNTRY PRICE DATA**





\*\*\* importers reported price data for nonsubject imports from China<sup>1</sup> for products 1 and 2 for bulk and super sack shipments. For 2012, Price data reported by these firms accounted for \*\*\* percent of U.S. imports from China.<sup>2</sup> These price items and accompanying data are comparable to those presented in tables V-3 to V-6. Price and quantity data for China are shown in tables D-1 to D-2 and in figures D-1 to D-4 (with domestic and subject sources).

In comparing nonsubject country pricing data with U.S. producer pricing data, prices for product imported from China were lower than prices for U.S.-produced product in 12 instances and higher in 21 instances. In comparing nonsubject country pricing data with subject country pricing data, prices for product imported from China were lower than prices for product imported from subject countries in 17 instances and higher in 29 instances. A comparison of prices is presented in table D-3.

**Table D-1**

**Ferrosilicon: Weighted-average f.o.b. prices and quantities of imported product 1<sup>1</sup> from China, by quarters, January 2010-March 2013**

\* \* \* \* \*

**Table D-2**

**Ferrosilicon: Weighted-average f.o.b. prices and quantities of imported product 2<sup>1</sup> from China, by quarters, January 2010-March 2013**

\* \* \* \* \*

**Figure D-1**

**Ferrosilicon: Weighted-average prices and quantities of domestic and imported product 1 in bulk,<sup>1</sup> by quarters, January 2010-June 2013**

\* \* \* \* \*

**Figure D-2**

**Ferrosilicon: Weighted-average prices and quantities of domestic and imported product 2 in bulk,<sup>1</sup> by quarters, January 2010-June 2013**

\* \* \* \* \*

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<sup>1</sup> Nonsubject price data was requested for ferrosilicon imported from Canada and China; however, no price data were reported for imports from Canada.

<sup>2</sup> U.S. import data compiled from official Commerce statistics. See Part IV for additional information on nonsubject imports.

**Figure D-3**

**Ferrosilicon: Weighted-average prices and quantities of domestic and imported product 1 in super sacks,<sup>1</sup> by quarters, January 2010-June 2013**

\* \* \* \* \*

**Figure D-4**

**Ferrosilicon: Weighted-average prices and quantities of domestic and imported product 2 in super sacks,<sup>1</sup> by quarters, January 2010-June 2013**

\* \* \* \* \*

**Table D-3**

**Ferrosilicon: Comparison of prices, by country, January 2010-March 2013**

\* \* \* \* \*