Urea Ammonium Nitrate Solutions from Russia and Trinidad and Tobago

Investigation Nos. 701-TA-668-669 and 731-TA-1565-1566 (Preliminary)

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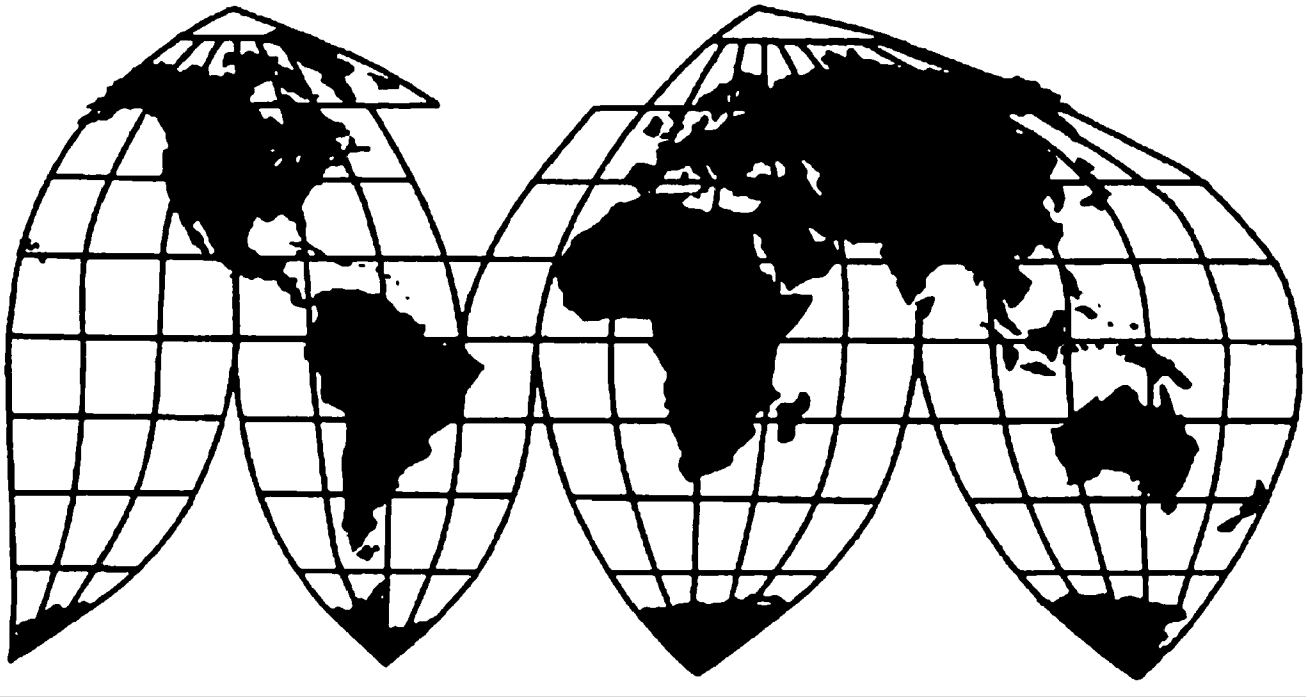
U.S. International Trade Commission



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Note.—Information that would reveal confidential operations of individual concerns may not be published. Such information is identified by brackets in confidential reports and is deleted and replaced with asterisks (***) in public reports.

UNITED STATES INTERNATIONAL TRADE COMMISSION

Inv. Nos. 701-TA-668-669 and 731-TA-1565-1566 (Preliminary)

Urea Ammonium Nitrate Solutions from Russia and Trinidad and Tobago

DETERMINATIONS

On the basis of the record[1] developed in the subject investigations, the United States International Trade Commission ("Commission") determines, pursuant to the Tariff Act of 1930 ("the Act"), that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of urea ammonium nitrate solutions from Russia and Trinidad and Tobago, provided for in subheading 3102.80.00 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") and to be subsidized by the governments of Russia and Trinidad and Tobago.[2]

COMMENCEMENT OF FINAL PHASE INVESTIGATIONS

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 § 207.21 of the Commission's rules, upon notice from the U.S. Department of Commerce ("Commerce") of affirmative preliminary determinations in the investigations under §§ 703(b) or 733(b) of the Act, or, if the preliminary determinations are negative, upon notice of affirmative final determinations in those investigations under §§ 705(a) or 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.

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

[2] 86 FR 40008 and 86 FR 40004, July 26, 2021.

BACKGROUND

On June 30, 2021, CF Industries Nitrogen, LLC and its subsidiaries, Terra Nitrogen, Limited Partnership and Terra International (Oklahoma) LLC, all of Deerfield, Illinois, filed petitions with the Commission and Commerce, alleging that an industry in the United States is materially injured or threatened with material injury by reason of subsidized imports of urea ammonium nitrate solutions from Russia and Trinidad and Tobago and LTFV imports of urea ammonium nitrate solutions from Russia and Trinidad and Tobago. Accordingly, effective June 30, 2021, the Commission instituted countervailing duty investigation Nos. 701-TA-668-669 and antidumping duty investigation Nos. 731-TA-1565-1566 (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* on July 8, 2021 (86 FR 36158). In light of the restrictions on access to the Commission building due to the COVID–19 pandemic, the Commission conducted its conference through written testimony and video conference on July 21, 2021. All persons who requested the opportunity were permitted to participate.

Views of the Commission

Based on the record in the preliminary phase of these investigations, we determine that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of urea ammonium nitrate solutions ("UAN" or "UAN solutions") from Russia and Trinidad & Tobago that are allegedly sold in the United States at less than fair value and that are allegedly subsidized by the governments of Russia and Trinidad & Tobago.

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.[1] 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."[2]

II. Background

CF Industries Nitrogen, LLC, a domestic producer of the subject merchandise, and its subsidiaries, Terra Nitrogen, Limited Partnership and Terra International (Oklahoma) LLC (collectively, "CF Industries" or "Petitioner") filed the petitions in these investigations on June 30, 2021.[3] Petitioner appeared at the conference accompanied by counsel and submitted a postconference brief.[4]

[1] 19 U.S.C. §§ 1671b(a), 1673b(a) (2000); *see also American Lamb Co. v. United States*, 785 F.2d 994, 1001-04 (Fed. Cir. 1986); *Aristech Chem. Corp. v. United States, 2*0 CIT 353, 354-55 (1996). No party argues that the establishment of an industry in the United States is materially retarded by the allegedly unfairly traded imports.

[2] *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).

[3] *See* Petition.

[4] In light of the restrictions on access to the Commission building due to the COVID-19 pandemic, the Commission conducted its conference by video conference held on July 21, 2021, as set forth in procedures provided to the parties.

Several respondent parties participated in these investigations. Public Joint Stock Company Acron and Acron USA Inc. ("Acron"), a subject producer/exporter in Russia and its affiliated U.S. importer, respectively; Methanol Holdings (Trinidad) Limited ("MHTL"), a subject producer/exporter in Trinidad & Tobago, and Helm Fertilizer Corporation ("HFC"), a U.S. importer of subject merchandise from Trinidad & Tobago (jointly "Helm"); and Gavilon Fertilizer, LLC ("Gavilon") and International Raw Materials Ltd. ("IRM"), U.S. importers of subject merchandise from Russia, appeared at the conference and submitted postconference briefs.[5] In addition, Nevinnomyssky Azot, JSC ("Nevinka"); Azot, JSC (Novomoskovsk) ("NAK Azot"); and EuroChem North America Corp. ("EuroChem NA") (collectively, "EuroChem"), subject producers/exporters in Russia jointly filed a postconference brief.

Data Coverage. The period of investigation ("POI") is January 2018 through March 2021. U.S. industry data are based on the questionnaire responses of eight producers, believed to account for virtually all U.S. production of UAN in 2020.[6] U.S. import data are based on official U.S. import statistics under HTS statistical reporting number 3102.80.0000.[7] The Commission received questionnaire responses from 13 importers of UAN, representing *** U.S. imports from Russia, *** percent of U.S. imports from Trinidad & Tobago, and *** percent of U.S. imports from nonsubject sources in 2020.[8] The Commission received useable responses to its questionnaires from three foreign producers of subject merchandise: two producers/exporters in Russia, accounting for approximately *** percent of U.S. imports of subject merchandise from Russia in 2020,[9] and one producer/exporter in Trinidad & Tobago, accounting for *** U.S. imports of subject merchandise from Trinidad & Tobago in 2020.[10]

[5] *See* Conference Transcript at 2-3.

[6] Confidential Report INV-TT-093 ("CR") at I-4 and *Urea Ammonium Nitrate Solutions from Russia and Trinidad and Tobago*, Inv. Nos. 701-TA-668-669 and 731-TA-1565-1566 (Preliminary), USITC Pub. 5226 (August 2021)("PR") at I-4. The eight U.S. producers are: CF Industries, CVR Partners, Dyno Noble, Iowa Fertilizer, Koch Industries, Inc. ("Koch"), LSB Industries, PCS, and TradeMark Nitrogen. *Id*. at Table III-1.

[7] CR/PR at I-2 and IV-1.

[8] CR/PR at IV-2 and Table IV-1.

[9] CR/PR at VII-3. These two producers/exporters in Russia accounted for approximately *** percent of overall production of UAN in Russia in 2020. *Id*.

[10] CR/PR at VII-11. This one producer/exporter in Trinidad & Tobago accounted for *** production of UAN in Trinidad & Tobago. *Id*.

III. Domestic Like Product

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."[11] 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."[12] 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."[13]

By statute, the Commission's "domestic like product" analysis begins with the "article subject to an investigation," *i.e.*, the subject merchandise as determined by Commerce.[14] Therefore, Commerce's determination as to the scope of the imported merchandise that is subsidized and/or sold at less than fair value is "necessarily the starting point of the Commission's like product analysis."[15] The Commission then defines the domestic like product in light of the imported articles Commerce has identified.[16] 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

[11] 19 U.S.C. § 1677(4)(A).

[12] 19 U.S.C. § 1677(4)(A).

[13] 19 U.S.C. § 1677(10).

[14] 19 U.S.C. § 1677(10). The Commission must accept Commerce's determination as to the scope of the imported merchandise that is subsidized and/or sold at less than fair value. *See*, *e.g.*, *USEC, Inc. v. United States*, 34 Fed. App'x 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).

[15] *Cleo Inc. v. United States*, 501 F.3d 1291, 1298 (Fed. Cir. 2007); *see also Hitachi Metals, Ltd. v. United States*, Case No. 19-1289, slip op. at 8-9 (Fed. Circ. Feb. 7, 2020) (the statute requires the Commission to start with Commerce's subject merchandise in reaching its own like product determination).

[16] *Cleo*, 501 F.3d at 1298 n.1 ("Commerce's {scope} finding does not control the Commission's {like product} determination."); *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); *Torrington Co. v. United States*, 747 F. Supp. 744, 748-52 (Ct. Int'l Trade 1990), *aff'd*, 938 F.2d 1278 (Fed. Cir. 1991) (affirming the Commission's determination defining six like products in investigations where Commerce found five classes or kinds).

uses" on a case-by-case basis.[17] No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.[18] The Commission looks for clear dividing lines among possible like products and disregards minor variations.[19]

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

> … all mixtures of urea and ammonium nitrate in aqueous or ammonia solution, regardless of nitrogen concentration by weight, and regardless of the presence of additives, such as corrosion inhibiters and soluble micro or macronutrients (UAN).
>
> Subject merchandise includes merchandise matching the above description that has been processed in a third country, including by commingling, diluting, adding or removing additives, or performing any other processing that would not otherwise remove the merchandise from the scope of the investigations if performed in the subject country.
>
> The scope also includes UAN that is commingled with UAN from sources not subject to these investigations. Only the subject component of such commingled products is covered by the scope of these investigations.
>
> The covered merchandise is currently classified in the Harmonized Tariff Schedule of the United States (HTSUS) at subheading 3102.80.0000.

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[17] *See*, *e.g.*, *Cleo Inc. v. United States*, 501 F.3d 1291, 1299 (Fed. Cir. 2007); *NEC Corp. v. Dep't 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.*, 747 F. Supp. at 749 n.3, ("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).

[18] *See*, *e.g.*, S. Rep. No. 96-249 at 90-91 (1979).

[19] *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.").

> Although the HTSUS subheading is provided for convenience and customs purposes, the written description of the scope is dispositive.[20]

UAN is a liquid nitrogen fertilizer composed of two independent fertilizers – urea and ammonium nitrate. The two fertilizers activate at different time scales, with ammonium nitrate rapidly making its nitrogen content available to crops while urea provides a slower release. UAN is most commonly, but not exclusively, applied to row crops like corn. Because UAN is in liquid form, it can more easily be mixed with other plant nutrients or other agricultural chemicals than solid nitrogen fertilizers. UAN is favored by some users because of its nitrogen content and its ease of handling and application. UAN can be easily sprayed onto fields, included in irrigation systems, or applied with other farm implements. Unlike ammonia, UAN can be stored at ambient pressures. Although UAN is manufactured year-round, it is applied only during specific parts of the planting season, particularly during a six-week window in the spring to coincide with emergent crop growth; in contrast, other fertilizers are applied throughout the growing season.[21]

A. Arguments of the Parties

Petitioner's Arguments. Petitioner contends that the Commission should define a single domestic like product, coextensive with the scope of Commerce's investigations.[22] It argues that UAN has different physical characteristics from and limited interchangeability with other fertilizers (such as dry nitrogen-based fertilizers). It further argues that UAN is applied with different equipment, is perceived by customers as a distinct product, and has significantly different pricing than other forms of nitrogen fertilizer. According to Petitioner, all UAN is manufactured in the same facilities, and producers have limited ability to shift facilities and workers from UAN to other fertilizer products.[23]

Respondents' Arguments. No respondent party has expressed opposition to the Petitioner's proposed definition of the domestic like product.[24]

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[20] *See Urea Ammonium Nitrate Solutions from the Russian Federation and the Republic of Trinidad and Tobago: Initiation of Countervailing Duty Investigations*, 86 Fed. Reg. 40004, 40008 (July 26, 2021) ("Commerce Initiation Notice (CVD)"), and *Urea Ammonium Nitrate Solutions from the Russian Federation and the Republic of Trinidad and Tobago: Initiation of Less-Than-Fair-Value Investigations*, 86 Fed. Reg. 40008, 40013 (July 26, 2021) ("Commerce Initiation Notice (AD)").

[21] CR/PR at I-11 to I-15.

[22] Petitioner Postconference Brief at 7.

[23] Petition at I-15 to I-19; Petitioner Postconference Brief at 7-8 and Response to Question 1 at 1-6.

[24] *See* CR/PR at I-15.

B. Analysis

Based on the record in the preliminary phase of these investigations, we define a single domestic like product consisting of UAN, coextensive with the scope of these investigations.

Physical Characteristics and Uses. UAN is a clear liquid mixture of urea and ammonium nitrate in water, typically sold with a nitrogen content by weight of 28, 30, or 32 percent; the latter content is the most widely used. UAN's physical characteristics distinguish it from the other principal forms of nitrogen fertilizers, including urea and ammonium nitrate. While individually urea and ammonium nitrate are generally consumed as solid fertilizers, UAN solutions are produced, sold, and consumed as liquids. Because it is a liquid, UAN can be applied in more ways and at more stages of crop growth than other types of nitrogen fertilizers. UAN also has more favorable storage and handling characteristics compared to the other types of nitrogen fertilizer typically consumed in liquid form (*e.g.*, anhydrous ammonia).[25]

Interchangeability. UAN has limited interchangeability with the other types of nitrogen fertilizers. Petitioner maintains that, unlike other nitrogen fertilizers, UAN is optimal for post-emergent applications or use with irrigation systems and minimal-till farming. Moreover, different equipment is used in application of UAN compared to other nitrogen fertilizers.[26]

Manufacturing Facilities, Production Processes and Employees. UAN is produced through a series of chemical reactions that involve combining water with hot concentrated urea liquor solution and hot concentrated ammonium nitrate solution.[27] Although UAN is produced using urea and ammonium nitrate, which themselves are nitrogen fertilizers, the record indicates that U.S. producers convert all these inputs to UAN, and therefore have limited ability to switch to production of other nitrogen fertilizers using the same production facilities.[28]

Channels of Distribution. Domestically produced UAN is sold through wholesalers and retailers.[29] The record does not indicate the channels of distribution through which other nitrogen fertilizers are sold.[30]

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[25] CR/PR at I-11 to I-15 and II-1; Petitioner Postconference Brief, Response to Questions at 2-4; and Conference Transcript at 22-23 (Bilby).

[26] CR/PR at I-15; Petitioner Postconference Brief, and Response to Questions at 4 and Conference Transcript at 23 (Bilby).

[27] CR/PR at I-12 to I-14; Petitioner Postconference Brief, Response to Questions at 5.

[28] Petitioner Postconference Brief, Response to Questions at 5 and n.224 (*citing* U.S. producer questionnaire responses denoting same); *see also* Helm Postconference Brief, Response to Question at 1-2 (processes identical).

[29] CR/PR at Table II-1; Conference Transcript at 29 (O'Connell).

[30] CR/PR at Table II-1; Conference Transcript at 29 (O'Connell).

Producer and Customer Perceptions. The available record evidence indicates that producers and customers perceive UAN to be a product category that is distinct from other nitrogen fertilizers.[31] Petitioner states that other nitrogen fertilizers are not viewed as having the multiple forms of nitrogen and the same favorable application and handling characteristics of UAN.[32]

Price. Different grades of UAN are priced on a nitrogen-content basis, like other nitrogen fertilizers. According to Petitioner, however, UAN is generally priced at a premium to other nitrogen fertilizers because of its superior agronomic characteristics and its higher cost of production.[33]

Conclusion. Based on the information on the record of the preliminary phase of these investigations, we find that a clear dividing line exists between UAN and other nitrogen fertilizers. UAN and other nitrogen fertilizers have different physical characteristics and limited interchangeability. Moreover, domestic producers do not produce other nitrogen fertilizers in their UAN facilities, and prices differ between UAN and other nitrogen fertilizers, with UAN commanding a price premium. In light of these considerations, and the lack of any contrary argument, we define a single domestic like product consisting of all UAN, coextensive with the scope. We do not expand the definition of the domestic like product beyond the scope to include other nitrogen-based fertilizers.

IV. Domestic Industry and Related Parties

The statute defines the relevant 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 product."[34] 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.

These investigations raise the issue of whether appropriate circumstances exist to exclude any domestic producers from the domestic industry pursuant to the related parties provision. Section 771(4)(B) of the Tariff Act allows the Commission, if appropriate

[31] Petitioner Postconference Brief, Response to Question 1 at 4-5 and Conference Transcript at 25 (Bilby).

[32] Petitioner Postconference Brief, Response to Question 1 at 4.

[33] Petitioner Postconference Brief, Response to Question 1 at 5-6 and Conference Transcript at 22-23 (Bilby) and 54-55 (Will).

[34] 19 U.S.C. § 1677(4)(A)

circumstances exist, to exclude from the domestic industry producers that are related to an exporter or importer of subject merchandise, or which are themselves importers.[35] In these investigations, one U.S. producer (***) is subject to possible exclusion pursuant to the related parties provision because its ***, imported subject UAN from *** during the January 2018-March 2021 period of investigation.[36] [37]

*** imported from Russia *** short tons[38] of UAN in 2019 and *** short tons in 2020; it did not import from Russia in either 2018 or January-March ("interim") 2021.[39] The ratio of the affiliated importer's subject imports to *** domestic production was *** percent in 2019, *** percent in 2020, and *** percent in interim 2020.[40] *** stated that it imported subject UAN ***.[41] ***.[42]

Imports of subject merchandise by ***, were small in relation to *** domestic production and indicate that its principal interest is in domestic production.[43] Therefore, we find that appropriate circumstances do not exist to exclude *** from the domestic industry as a related party.

For the foregoing reasons and based on our definition of the domestic like product, we define the domestic industry to include all U.S. producers of UAN.

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[35] 19 U.S.C. § 1677(4)(B). The primary factors the Commission has examined in deciding whether appropriate circumstances exist to exclude a related party include the following:

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

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

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

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

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

[36] CR/PR at III-18 and Table III-13; *** Importer Questionnaire Response at I-3, I-5, II-5.

[37] No party argued for *** exclusion from the definition of the domestic industry as a related party.

[38] In these Views, "short tons" is used in lieu of "short tons gross weight." *See, e.g.,* CR/PR at I-4.

[39] CR/PR at Table III-13.

[40] CR/PR at Table III-13.

[41] CR/PR at Table III-14; *** Importer Questionnaire Response at II-4.

[42] CR/PR at Table III-1; *** Domestic Producer Questionnaire Response at I-4.

[43] There is also no evidence on the record in the preliminary phase of these investigations to suggest that *** relationship with *** shields it from any effects of subject imports.

V. Negligible Imports

Pursuant to Section 771(24) of the Tariff Act, imports from a subject country of merchandise corresponding to a domestic like product that account for less than 3 percent of all such merchandise imported into the United States during the most recent 12 months for which data are available preceding the filing of the petition generally shall be deemed negligible.[44]

From June 2020 through May 2021, the 12-month period preceding the filing of the petition, imports from Russia accounted for 39.7 percent of the quantity of total imports of UAN and imports from Trinidad & Tobago accounted for 36.6 percent.[45] We therefore find that imports from each of the subject countries for the respective countervailing and antidumping duty investigations are not negligible.

VI. Cumulation

For purposes of evaluating the volume and 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

[44] 19 U.S.C. §§ 1671b(a), 1673b(a), 1677(24)(A)(i), 1677(24)(B); *see also* 15 C.F.R. § 2013.1 (developing countries for purposes of 19 U.S.C. § 1677(36)). The exceptions to this general rule are not applicable here.

[45] CR/PR at IV-7 and Table IV-3. The subject imports are the same quantity for the countervailing and antidumping duty investigations for each subject country.

(4) whether the subject imports are simultaneously present in the market.[46]

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.[47] Only a "reasonable overlap" of competition is required.[48]

One of the four statutory exceptions to the general cumulation rule applies to these investigations. It relates to Trinidad & Tobago, which is a beneficiary country under the Caribbean Basin Economic Recovery Act ("CBERA"). Under the CBERA exception in the statute, subject imports from Trinidad & Tobago may only be cumulated with imports from another CBERA country for purposes of determining material injury, or threat thereof, by reason of imports from the CBERA beneficiary country or countries.[49] Consequently, the Commission may not cumulate subject imports from Russia for purposes of its determinations regarding subject imports from Trinidad & Tobago. The CBERA exception, however, does not bar the Commission from cumulating subject imports from Trinidad & Tobago with subject imports from Russia for the purposes of determining whether there is a reasonable indication of material injury, or threat thereof, by reason of subject imports from Russia; in fact, if the prerequisites for cumulation are otherwise satisfied, the Commission is required to cumulate subject imports from Trinidad & Tobago with those of Russia for purposes of its material injury analysis for Russia.[50] [51] As explained below, we find there is a reasonable overlap of

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[46] *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 1988), *aff'd*, 859 F.2d 915 (Fed. Cir. 1988).

[47] *See*, *e.g.*, *Wieland Werke, AG v. United States*, 718 F. Supp. 50 (Ct. Int'l Trade 1989).

[48] 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.").

[49] 19 U.S.C. § 1677(7)(G)(ii)(III).

[50] *See Melamine from China and Trinidad and Tobago*, Inv. Nos. 701-TA-526-527 and 731-TA-1262-1263 (Final), USITC Pub. 4585 at 8-10 (Dec. 2015) (applying CBERA exception to cumulation for purposes of the determination involving melamine from Trinidad & Tobago, but cumulating imports from China and Trinidad & Tobago for purposes of the determination on subject imports from China); *see also Caribbean Ispat Ltd. v. United States*, 450 F. 3d 1336, 1339 (Fed. Cir. 2006).

[51] None of the parties argue against cumulation of subject imports from Russia and Trinidad & Tobago for purposes of the Commission's determinations with respect to subject imports from Russia.

competition between the subject imports from Russia and Trinidad & Tobago and between subject imports from each of the subject countries and the domestic like product.

Fungibility. UAN is a fungible commodity-type product, and the record indicates that there are no significant product differences between UAN imported from Russia and Trinidad & Tobago or when compared to the domestic like product. UAN produced in the United States is chemically identical to UAN imported from Russia and Trinidad & Tobago.[52] All domestic producers and all reporting importers reported that imports from both subject countries are "always" or "frequently" interchangeable with each other and the domestic like product.[53] A majority of U.S. producers reported that factors other than price are "never" significant in customers' purchasing decisions, while importers' responses were more mixed.[54] Consequently, the record indicates that the domestic like product and UAN from each subject source are fungible.

Channels of Distribution. Domestic producers and importers of subject merchandise from Trinidad & Tobago sold UAN principally to wholesalers/distributors; importers of subject merchandise from Russia sold UAN primarily to retailers, with a substantial share also sold to wholesalers/distributors.[55]

Geographic Overlap. Domestically produced UAN and imports from both of the subject countries are sold throughout the contiguous United States.[56]

Simultaneous Presence in Market. Import data show that subject imports from both subject countries were imported in nearly every month of the period of investigation,[57] while monthly pricing data show the domestic product and imports from each source were sold in the United States throughout the entire period of investigation.[58]

Nor do any of the parties argue that the CBERA exception precludes the Commission from cumulatively assessing subject imports from Trinidad & Tobago with subject imports from Russia for purposes of the Commission's determinations with respect to subject imports from Russia in these investigations.

[52] CR/PR at IV-8 and Table IV-4 (showing that the vast majority of U.S. producers' and U.S. importers' shipments were of UAN with a 32 percent nitrogen concentration); *see also* Conference Transcript at 24 (Bilby) and 66 (Will).

[53] CR/PR at Tables II-6 and II-7.

[54] CR/PR at Table II-8. Importers reported a variety of factors other than price that affected purchasing decisions including product availability and access to transportation networks. CR/PR at II-15 and Table II-9.

[55] CR/PR at Table II-1; *see also* Conference Transcript at 29 (O'Connell).

[56] CR/PR at Table II-2.

[57] CR/PR at IV-11 to IV-13, Table IV-6, and Figure IV-3. Subject imports from Russia were present in each month during January 2018 through May 2021, except for September 2018, and subject imports from Trinidad & Tobago were present in each month except for October 2019. *Id*.

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

Conclusion. UAN is a fungible, commodity-type product that is generally considered to be interchangeable regardless of source. Domestically produced UAN and subject imports from both countries were sold in overlapping channels of distribution and overlapping geographic regions and were simultaneously present in the market throughout the period of investigation. In sum, because the antidumping and countervailing duty petitions were filed on the same day and the record indicates that there is a reasonable overlap of competition between and among subject imports and the domestic like product, we cumulate subject imports from Russia and Trinidad & Tobago for our analysis of whether there is a reasonable indication of material injury by reason of subject imports from Russia. Because Trinidad & Tobago is a CBERA beneficiary country, however, we do not cumulate subject imports from Trinidad & Tobago with subject imports from Russia for purposes of our preliminary determinations concerning subject imports from Trinidad & Tobago.

VII. 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.[59] 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.[60] The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant."[61] 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.[62] 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."[63]

[59] 19 U.S.C. §§ 1671b(a), 1673b(a).

[60] 19 U.S.C. § 1677(7)(B). The Commission "may consider such other economic factors as are relevant to the determination" but shall "identify each {such} factor ... and explain in full its relevance to the determination." 19 U.S.C. § 1677(7)(B).

[61] 19 U.S.C. § 1677(7)(A).

[62] 19 U.S.C. § 1677(7)(C)(iii).

[63] 19 U.S.C. § 1677(7)(C)(iii).

Although the statute requires the Commission to determine whether there is a reasonable indication that the domestic industry is "materially injured or threatened with material injury by reason of" unfairly traded imports,[64] it does not define the phrase "by reason of," indicating that this aspect of the injury analysis is left to the Commission's reasonable exercise of its discretion.[65] 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.[66]

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.[67] In performing its examination, however, the Commission need not isolate

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[64] 19 U.S.C. §§ 1671b(a), 1673b(a).

[65] *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).

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

[67] SAA at 851-52 ("{T}he Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports."); S. Rep. 96-249 at 75 (1979) (the Commission "will consider information which indicates that harm is caused by factors other than less-than-fair-value imports."); H.R. Rep. 96-317 at 47 (1979) ("in examining the overall injury being experienced by a domestic industry, the ITC will take into account evidence presented to it which demonstrates that the harm attributed by the petitioner to the subsidized or dumped imports is

the injury caused by other factors from injury caused by unfairly traded imports.[68] Nor does the "by reason of" standard require that unfairly traded imports be the "principal" cause of injury or contemplate that injury from unfairly traded imports be weighed against other factors, such as nonsubject imports, which may be contributing to overall injury to an industry.[69] It is clear that the existence of injury caused by other factors does not compel a negative determination.[70]

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."[71] The Commission ensures that it has "evidence in the record" to "show that the harm occurred 'by reason of' the LTFV imports," and that it is "not attributing injury from other

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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.

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

[69] S. Rep. 96-249 at 74-75; H.R. Rep. 96-317 at 47.

[70] *See Nippon Steel Corp*., 345 F.3d at 1381 ("an affirmative material-injury determination under the statute requires no more than a substantial-factor showing. That is, the 'dumping' need not be the sole or principal cause of injury.").

[71] *Mittal Steel*, 542 F.3d at 876 &78; *see also id.* at 873 ("While the Commission may not enter an affirmative determination unless it finds that a domestic industry is materially injured 'by reason of' subject imports, the Commission is not required to follow a single methodology for making that determination ... {and has} broad discretion with respect to its choice of methodology."), *citing United States Steel Group v. United States*, 96 F.3d 1352, 1362 (Fed. Cir. 1996) and S. Rep. 96-249 at 75. In its decision in *Swiff-Train v. United States*, 793 F.3d 1355 (Fed. Cir. 2015), the Federal Circuit affirmed the Commission's causation analysis as comporting with the Court's guidance in *Mittal*.

sources to the subject imports."[72] The Federal Circuit has examined and affirmed various Commission methodologies and has disavowed "rigid adherence to a specific formula."[73]

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.[74] Congress has delegated this factual finding to the Commission because of the agency's institutional expertise in resolving injury issues.[75]

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

U.S. demand for UAN depends on the demand for domestically produced agricultural products.[76] UAN is used as a fertilizer by farmers in all regions of the United States with the 32-percent solution being the most widely used.[77] UAN is produced year-round, but farmers generally apply UAN to field crops in the spring months (typically a 6-week "application season" that occurs during April-June). U.S. producers' sales primarily occur during the "summer fill" months of July through September when wholesalers/distributors and retailers restock their supply.[78] Demand can be affected by adverse weather events, such as heavy rains and flooding, that interfere with the farmers' ability to plant crops or apply fertilizer, or impact transportation

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[72] *Mittal Steel*, 542 F.3d at 873 (quoting from *Gerald Metals*, 132 F.3d at 722), 877-79. We note that one relevant "other factor" may involve the presence of significant volumes of price-competitive nonsubject imports in the U.S. market, particularly when a commodity product is at issue. In appropriate cases, the Commission collects information regarding nonsubject imports and producers in nonsubject countries in order to conduct its analysis.

[73] *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.").

[74] We provide in our discussion below a full analysis of other factors alleged to have caused any material injury experienced by the domestic industry.

[75] *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.").

[76] CR/PR at II-7.

[77] CR/PR at II-1.

[78] CR/PR at II-1; *see also* Petition at I-10, I-20. The summer fill campaigns are when fertilizer retailers and wholesalers make a large portion of their UAN purchases and typically run from July through September. *Id.*; s*ee also* Petitioner Postconference Brief at 9-10.

of UAN.[79] Most U.S. producers and importers reported that U.S. demand has increased since January 1, 2018.[80]

Apparent U.S. consumption for UAN increased overall by 8.4 percent from 2018 to 2020 and was 5.2 percent lower in interim 2021 than in interim 2020. It increased from 13.9 million short tons in 2018 to 14.8 million short tons in 2019 and to 15.1 million short tons in 2020; it was 3.6 million short tons in interim 2020 and 3.4 million short tons in interim 2021.[81]

2. Supply Conditions

The U.S. UAN market was supplied by domestically produced UAN and imports from subject and nonsubject countries.[82]

During the POI, the domestic industry was the largest source of UAN supply in the U.S. market.[83] The domestic industry's share of the U.S. market declined from 81.1 percent of apparent U.S. consumption in 2018 to 78.6 percent in 2019, before increasing to 82.3 percent in 2020.[84] Of the eight reporting domestic producers, Petitioner CF Industries is ***, accounting for *** percent of domestic UAN production in 2020.[85] The domestic industry's capacity increased moderately over the POI.[86]

Cumulated subject imports' market share increased overall from 2018 to 2020. They accounted for 14.3 percent of apparent U.S. consumption in 2018, 17.9 percent in 2019, and

[79] *See* EuroChem Postconference Brief at 16-18 and Petitioner Postconference Brief at 38, 41; *see also* CR/PR at Table VI-11 and D-2.

[80] CR/PR at Table II-4. No market participants reported that demand has decreased. *See id.*

[81] CR/PR at IV-15, and Tables IV-7 and C-1.

[82] CR/PR at Tables IV-7 and C-1.

[83] CR/PR at Tables IV-7 and C-1.

[84] CR/PR at Table C-1. Domestic producers' share of apparent U.S. consumption was 78.5 percent in interim 2020 and 79.2 percent in interim 2021. *Id*.

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

[86] CR/PR at Table III-4. The domestic industry had sufficient production capacity to meet the entirety of apparent U.S. consumption in each year of the POI. CR/PR at Tables III-4 and IV-7. Notwithstanding this, three U.S. producers reported that they had experienced supply constraints since January 1, 2018. *** reported that it sells product on a forward basis and that infrequent and unplanned production outages have occasionally resulted in delayed deliveries of a few weeks. *** reported that it allocated truck shipments from one of its plants from March 5 – March 15, 2021. *** reported a freeze event, planned turnarounds, and unplanned outages. CR/PR at II-6.

14.4 percent in 2020.[87] Russia was the largest individual source of imports of UAN to the U.S. market during the POI.[88] [89]

The market share of subject imports from Trinidad & Tobago also increased during the POI. They increased from 5.5 percent apparent U.S. consumption in 2018 to 6.4 percent in 2019 and to 6.6 percent in 2020.[90] [91]

Nonsubject imports' share of the U.S. market decreased steadily from 4.6 percent in 2018 to 3.4 percent in 2019 and to 3.3 percent in 2020.[92] The source of the vast majority of nonsubject imports from 2018 to 2020 was Canada.[93]

3. Substitutability and Other Conditions

The record in the preliminary phase of these investigations indicates that there is a moderate-to-high degree of substitutability between domestically produced UAN and UAN from the subject sources.[94] UAN is considered a commodity-type product, chemically identical regardless of source.[95] All domestic producers and all reporting importers reported that

[87] CR/PR at Table C-1. Cumulated subject imports' market share was 17.9 percent in interim 2020 and 14.9 percent in interim 2021. *Id.*

[88] CR/PR at Table IV-2. The market share of subject imports from Russia was 8.8 percent in 2018, 11.5 percent in 2019, and 7.8 percent in 2020; it was 9.4 percent in interim 2020 and 9.2 percent in interim 2021. CR/PR at Table C-1.

[89] Seven importers reported that they had experienced supply constraints since January 1, 2018. *** reported that seasonality and weather-driven consumption can result in position where it is unable to always meet customer demand. *** reported vessel delays and lack of availability. *** and *** pointed to Petitioner *** as putting its customers on allocation, missing delivery timelines, and withdrawing from the East and West Coasts, forcing purchasers to seek alternative supply sources. CR/PR at II-6.

[90] CR/PR at Table C-1. The market share of subject imports from Trinidad & Tobago was 8.6 percent in interim 2020 and 5.7 percent in interim 2021. *Id.*

[91] Subject producer MHTL states that it experienced a significant natural gas curtailment and pipeline failure, in addition to other issues at its urea plant, which resulted in a reduction in its production of UAN in 2018, but these issues were largely resolved by 2019, at which point it was able to return to its normal production levels. MHTL Postconference Brief at 15.

[92] CR/PR at Table C-1. Nonsubject imports' market share was 3.5 percent in interim 2020 and 5.9 percent in interim 2021. *Id*.

[93] CR/PR at II-6. Other nonsubject sources of UAN during the period were Belarus, Estonia, Lithuania, the Netherlands, and Poland. *Id*.

[94] CR/PR at II-12.

[95] CR/PR at IV-8 and Table IV-4; *see also* Conference Transcript at 24 (Bilby) and 66 (Will).

imports from both subject countries are "always" or "frequently" interchangeable with each other and the domestic like product.[96] [97]

The record indicates that price is an important factor in purchasing decisions, along with availability. Purchasers responding to the lost sales/lost revenue survey reported price and availability most frequently among the top three purchasing factors; availability/supply was the most frequently cited first-most important factor, followed by price/cost, which also was most frequently reported as the second-most important purchasing factor.[98]

Natural gas is the major feedstock from which UAN is produced, as ammonia is manufactured from natural gas, which in turn is used to produce urea and ammonium nitrate.[99] Information available shows that natural gas prices fell between 2018 and mid-2020, but then increased in the second half of 2020 and spiked in the first quarter of 2021.[100] Raw materials as a share of the total cost of goods sold ("COGS") reported by U.S. producers declined from 32.7 percent in 2018 to 31.0 percent in 2019 and to 27.8 percent in 2020; they accounted for 28.7 percent in interim 2020 and 32.4 percent in interim 2021.[101]

Freight costs for transportation of UAN account for a substantial portion of purchasers' cost of acquisition.[102] UAN can be transported by rail, truck, ship, and barge to and from terminals, depending on the local distribution network's infrastructure, although transport requires special tanks and storage facilities.[103] Importers assert that the costs associated with transporting UAN particularly affects domestic producers, which are located primarily in the

[96] CR/PR at Tables II-6 and II-7.

[97] The degree of substitution between UAN from domestic and subject sources depends upon the extent of product differentiation between domestic and imported products and reflects how easily purchasers can switch from domestically produced UAN to the UAN imported from subject countries when prices change. While UAN from domestic and subject sources are similar in quality and generally interchangeable, factors reducing substitutability include some reported availability issues and different lead times from domestic and subject sources. CR/PR at II-12.

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

[99] CR/PR at V-1.

[100] CR/PR at V-1 and Figure V-1.

[101] CR/PR at V-1. We intend in any final phase of these investigations to further explore raw material prices and trends and their impact on the U.S. market. In this regard, we invite the parties to identify and provide any sources for information on raw material prices in their comments on draft questionnaires for any final phase of these investigations.

[102] CR/PR at I-14 and n.68. The water content of UAN ranges from 20-30 percent, depending on the grade of the solution.

[103] CR/PR at I-15 and n.80, Conference Transcript at 11 (Kessler) and 13 (Rosenthal). Importers are reportedly subject to the same constraints. Conference Transcript at 33 (O'Connell).

Midwest, when supplying customers on the East and West coasts of the United States and can make the price and availability of domestic UAN prohibitive for those customers.[104]

Parties report that inventories of UAN are seasonal and are likely to be at their highest of the year during the winter months of the first quarter and lowest after the spring growing season during the second quarter.[105] Petitioner asserts that significant inventories of UAN were held at the end of 2019 and in early 2020 predominantly by wholesalers/retailers for use in 2020 due to a surge in subject imports and adverse weather conditions.[106]

The domestic industry and importers predominantly sold UAN though short-term contracts, which accounted for 64.0 percent of the domestic industry's U.S. shipments in 2020 and for 58.6 percent of importers' U.S. shipments.[107] The domestic industry sold the remainder of its U.S. shipments in 2020 through spot sales (21.1 percent), long-term contracts (11.2 percent), and annual contracts (3.7 percent). Importers sold the remainder of their U.S. shipments in 2020 through annual contracts (25.1 percent), spot sales (11.5 percent), and long-term contracts (4.8 percent).[108]

In 2018, the European Union ("EU") initiated antidumping duty investigations on imports of UAN solutions from Russia, Trinidad & Tobago, and the United States.[109] In April 2019, the EU imposed provisional antidumping duties on imports of UAN from these countries and imposed final duties in October 2019.[110]

C. Determinations on Subject Imports from Russia

1. Cumulated 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."[111]

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[104] CR/PR at II-2 and n.5; Conference Transcript at 37 (Szamosszegi) and 119-120 (Frost).

[105] CR/PR at II-4 n.8; Conference Transcript at 202-203 (McMullin).

[106] Petitioner Postconference Brief at 21-23; Conference Transcript at 32-33 (O'Connell). We intend in any final phase of these investigations to explore ways to get purchaser input on inventory and storage issues during the POI and their impact on the U.S. UAN market. In this regard, we invite the parties to identify and provide any sources for information on inventories, particularly at the retail level of trade, in their comments on draft questionnaires for any final phase of the investigations.

[107] CR/PR at Table V-2. Domestic producers' short-term contracts ranged from 77 to 95 days while importers' short-term contracts ranged from 30 to 90 days. CR/PR at V-7.

[108] CR/PR at Table V-2.

[109] CR/PR at III-5 and Tables D-2 and D-3.

[110] CR/PR at III-5 and Table D-2, D-3, and D-5.

[111] 19 U.S.C. § 1677(7)(C)(i).

The volume of cumulated subject imports increased from 2.0 million short tons in 2018 to 2.6 million short tons in 2019, before declining to 2.2 million short tons in 2020, for an overall increase of 9.3 percent from 2018 to 2020.[112] We note that as subject imports from Russia and Trinidad & Tobago became subject to antidumping measures in the EU in 2019, the volume of subject imports increased by 32.7 percent and gained 3.6 percentage points in market share between 2018 to 2019.[113] In addition, notwithstanding that widespread flooding occurred in 2019 and industry publications were reporting "full inventories" that year,[114] subject imports in 2020 exceeded 2018 levels.[115] Cumulated subject imports' share of apparent U.S. consumption also increased overall from 2018 to 2020. Their share was 14.3 percent in 2018, 17.9 percent in 2019, and 14.4 percent in 2020.[116]

In light of the foregoing, we find that the volume of cumulated subject imports was significant, both in absolute terms and relative to consumption in the United States. We also find the increase in volume and market share of cumulated subject imports between 2018 and 2019 to be significant.

2. Price Effects of the Cumulated 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.[117]

[112] CR/PR at Tables IV-7 and C-1. Cumulated subject import volume was 636,414 short tons in interim 2020 and 502,640 short tons in interim 2021. *Id*.

[113] CR/PR at III-5 and Tables IV-7, C-1, D-2, and D-3. Subject imports' market share is calculated using import volumes rather than U.S. importers' U.S. shipments. *See* CR/PR at Table IV-7.

[114] Subject importers' inventories increased *** percent from 2018 to 2019. CR/PR at Table C-1.

[115] Petition, Vol. I, at I-37, I-40-41; Petitioner Postconference Brief at Exhibits 9-12.

[116] CR/PR at Table IV-8. Cumulated subject import's share of apparent U.S. consumption was 17.9 percent in interim 2020 and 14.9 percent in interim 2021. *Id*.

[117] 19 U.S.C. § 1677(7)(C)(ii).

As discussed above, we find there is a moderate-to-high degree of substitutability between cumulated subject imports and the domestic like product, and that price is an important factor in purchasing decisions, along with availability.

The Commission collected monthly f.o.b. pricing data on sales of one UAN product shipped to unrelated U.S. retailers during the POI.[118] Six U.S. producers and 10 importers provided usable pricing data for sales of the requested product, although not all firms reported pricing for the product for all months.[119] The pricing data reported by these firms accounted for approximately *** percent of U.S. producers' U.S. shipments of UAN in 2020, *** percent of U.S. shipments of subject imports from Russia, and *** percent of U.S. shipments of subject imports from Trinidad & Tobago in 2020.[120]

The pricing data show that cumulated subject imports undersold the domestic like product in 32 of 78 monthly comparisons at margins ranging between 1.0 and 14.0 percent, and an average underselling margin of 7.3 percent.[121] Cumulated subject imports oversold the domestic like product in the remaining 46 monthly comparisons at margins ranging between 1.4 and 36.9 percent, and an average overselling margin of 10.1 percent.[122] The pricing data reflect that *** short tons of cumulated subject imports were associated with months of underselling, as compared to *** short tons of cumulated subject imports associated with months of overselling.[123] Cumulated subject imports undersold the domestic like product in 17 of 24 monthly comparisons in 2019. The volume of subject imports associated with the months of underselling in 2019 was *** short tons compared to *** short tons of subject imports associated with the months of overselling.[124]

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[118] CR/PR at V-8. There is single pricing product: **Product 1.--** Standard-grade Urea Ammonium Nitrate (UAN) in an aqueous solution of 32-percent nitrogen concentration ("32% UAN"), sold on an f.o.b. basis to U.S. agricultural sector customers who are retailers. *Id*.

[119] CR/PR at V-8, and nn.16 and 17.

[120] CR/PR at V-9. Both Petitioner and Gavilon raised questions about the pricing product data, which by definition was limited to sales to retailers. Specifically, Petitioner claimed that certain firms ***, while Gavilon asserted that the pricing data failed to capture the true market dynamics because it did not also include sales to wholesalers/distributors. Petitioner Postconference Brief at 23-24; Gavilon Postconference Brief at 31-32 and Exhibit 1. In any final phase of these investigations, we intend to collect pricing data for sales to wholesalers/distributors, and we encourage parties in their comments on draft questionnaires to propose additional modifications to the pricing product definitions, including specific alternate pricing products, that will enable the Commission to make apples-to-apples comparisons of the domestic like product and subject imports.

[121] CR/PR at Table V-5.

[122] CR/PR at Table V-6.

[123] CR/PR at Tables V-5 and V-6.

[124] *Derived from* CR/PR at Table V-3.

We have also considered information purchasers provided in their responses to the lost sales and lost revenue ("LS/LR") survey. Commission staff contacted six purchasers and received responses from five purchasers.[125] Four purchasers reported that since 2018 they had purchased subject imports from Russia or Trinidad & Tobago instead of U.S.-produced product. None of these purchasers reported that subject imports were priced lower than the domestic like product.[126] The purchasers stated that transportation costs or domestic product availability were the primary reason they purchased subject imports rather than the domestic like product.[127]

The pricing data on the record indicate that in a price transparent market,[128] cumulated subject imports oversold and undersold the domestic like product, with underselling by cumulated subject imports most prevalent in 2019 as significant and increasing volumes of cumulated subject imports entered the United States.

We have also considered price trends for the domestic like product and subject imports during the POI. As an initial matter, prices generally tend to increase to their highest levels during the spring UAN application season as demand increases and inventories decrease, and then decline to their lowest levels of the year during the summer fill period as demand decreases and inventories increase.[129] Consistent with this, prices for domestically produced UAN fluctuated but generally increased in the first half of 2018 and 2019 and declined in the second half of each of these years. On a year-to-year basis, prices for domestically produced UAN declined substantially after the first half of 2019, and were substantially lower throughout

[125] CR/PR at V-15. These purchasers reported buying 3.8 million short tons of subject imports, or just over half of the total volume of subject imports that was imported during the period of investigation. *Derived from* CR/PR at Tables V-7 and IV-2.

[126] CR/PR at V-17.

[127] CR/PR at Table V-9. We acknowledge that some purchasers identified the domestic industry's inability to supply the products they desired as a reason for purchasing subject imports rather than the domestic like product. *Id*. Petitioner asserts that the domestic industry can supply purchasers with UAN in all regions of the United States. *See, e.g.,* Petitioner Postconference Brief at 43-44 and Response to Question 5 at 9-11. In any final phase of these investigations, we will examine further any differences in transportation costs and availability between the domestic industry and the subject imports and how any such differences may have affected purchasing decisions. However, for purposes of the preliminary phase of these investigations, we observe that the available record evidence shows that at least half of responding U.S. producers reported shipments in each region of the contiguous United States and that U.S. producers also maintain storage locations across all regions. CR/PR at Tables II-2, F-1.

[128] Several trade publications such as Green Markets publish price lists and general market intelligence frequently. CR/PR at V-5.

[129] CR/PR at V-12 n.19.

2020, reaching their lowest levels for the period in the second half of 2020.[130] Prices for cumulated subject imports followed similar trends.[131] These price declines occurred contemporaneously with increases in reported U.S. demand and apparent U.S. consumption.[132]

The declines in prices for domestically produced products coincided with the substantial increase in cumulated subject imports in 2019 that predominantly undersold the domestic like product that year. Petitioner also submitted some contemporaneous trade reports discussing ***.[133]

The record also shows that the domestic industry's ratio of cost of goods sold ("COGS") to net sales decreased from *** percent in 2018 to *** percent in 2019 but increased substantially to *** percent in 2020.[134] This increase in 2020 occurred as raw material costs declined, with raw material costs as a share of total COGS reaching their lowest level in 2020. While the industry's unit COGS declined by *** percent from 2019 to 2020, the domestic industry's unit net sales value declined by far more, *** percent over the same period, despite an increase in apparent U.S. consumption.[135] In interim 2021, the industry's ratio of COGS to net sales was up *** percentage points over the prior interim period, at *** percent in interim 2020 and *** percent in interim 2021, with unit COGS up *** percent across interim periods at $*** in interim 2020 and $*** in interim 2021, and the domestic industry's unit net sales value down *** percent at $*** in interim 2020 and $*** in interim 2021.[136]

Based on the record of the preliminary phase of these investigations, we cannot conclude that cumulated subject imports did not have significant price effects.[137]

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[130] CR/PR at Table V-3. Prices for domestically produced UAN increased in the first three months of 2021 as natural gas prices spiked, and were marginally higher at the end of the POI than at its beginning. *Id*.

[131] CR/PR at Table V-3 and Figure V-4.

[132] CR/PR at Tables II-4, IV-7, and C-1.

[133] CR/PR at Figure V-3, Table V-3, and Table C-1; Petition at Exhibits I-37, I-40, and I-41; Petitioners Postconference Brief at Exhibits 9-12.

[134] CR/PR at Tables VI-1 and C-1.

[135] CR/PR at Tables VI-2 and C-1. During the full years of the POI, the industry's total unit COGS declined by *** percent and unit net sales value declined by *** percent. CR/PR at Table VI-2.

[136] CR/PR at Tables VI-1 and C-1.

[137] Respondents contend that factors other than subject imports were responsible for the domestic industry's price declines during the POI, including Petitioner CF Industries' own pricing behavior and declines in global UAN prices and raw material costs. *See, e.g.,* Gavilon Postconference Brief at 29-33; EuroChem Postconference Brief at 9-13. In any final phase of these investigations, we intend to further investigate the extent to which these other factors may be affecting the domestic industry's prices.

3. Impact of the Cumulated Subject Imports[138]

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, gross profits, net profits, operating profits, cash flow, return on investment, return on capital, ability to raise capital, ability to service debt, 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."[139]

The domestic industry's output indicators generally increased throughout the POI. The domestic industry's capacity increased from 15.6 million short tons in 2018 to 15.9 million short tons in 2019 and 16.1million short tons in 2020.[140] Production increased overall by 1.7 percent from 2018 to 2020, decreasing from 12.8 million short tons in 2018 to 12.7 million short tons in 2019, before increasing to 13.0 million short tons in 2020.[141] Capacity utilization, however, decreased overall by 1.2 percentage points from 2018 to 2020, declining from 82.0 percent in 2018 to 80.0 percent in 2019, before increasing to 80.8 percent in 2020.[142]

The domestic industry's total U.S. shipments increased by 10 percent from 2018 to 2020, from 11.3 million short tons in 2018 to 11.6 million short tons in 2019 and 12.4 million short tons in 2020.[143] End-of-period inventories decreased 5.6 percent overall from 2018 to 2020, and were 948,976 short tons in 2018, 1.4 million short tons in 2019, and 895,716 short

[138] In its notice of initiation, Commerce reported estimated dumping margins ranging from 169.96 to 391.65 percent for imports from Russia and an estimated dumping margin of 158.81 percent for imports from Trinidad & Tobago. Commerce Initiation Notice (AD), 86 Fed. Reg. at 40011. In the petition, Petitioner also alleged that Russia is a non-market economy ("NME"). Under its NME methodology, Commerce estimated dumping margins for UAN from Russia ranging from 245.98 percent to 433.37 percent for purposes of initiation. *Id*.

[139] 19 U.S.C. § 1677(7)(C)(iii). This provision was amended by the Trade Preferences Extension Act of 2015, Pub. L. 114-27.

[140] CR/PR at Tables III-4 and C-1. The domestic industry's capacity was 4.0 million short tons in interim 2020 and interim 2021. *Id*.

[141] CR/PR at Tables III-4 and C-1. The domestic industry's production was 3.0 million short tons in interim 2020 and interim 2021. *Id*.

[142] CR/PR at Tables III-4 and C-1. The domestic industry's capacity utilization was 75.5 percent in interim 2020 and 75.1 percent in interim 2021. *Id*.

[143] CR/PR at Tables III-10 and C-1. The domestic industry's total U.S. shipments were 2.8 million short tons in interim 2020 and 2.7 million short tons in interim 2021. *Id*.

tons in 2020.[144] The domestic industry's share of apparent U.S. consumption, by quantity, increased by 1.2 percentage points overall from 2018 and 2020, decreasing from 81.1 percent in 2018 to 78.6 percent in 2019, before increasing to 82.3 percent in 2020.[145]

The domestic industry's employment indicators were mixed during the POI. Employment rose by 3.8 percent from 2018 to 2020, increasing from 1,381 production-related workers ("PRWs") in 2018 to 1,417 PRWs in 2019 and 1,434 PRWs in 2020.[146] Total hours worked increased from 3.0 million in 2018 to 3.1 million in 2019 and 2020.[147] Wages paid rose from $162.2 million in 2018 to $172.6 million in 2019 and $184.0 million in 2020.[148] Hourly wages increased from $54.77 in 2018 to $56.05 in 2019 and $60.17 in 2020.[149] Productivity, measured in short tons per hour, declined overall over the POI; it was 4,308 in 2018, 4,139 in 2019, and 4,244 in 2020. Unit labor costs, measured in dollars per short ton, increased throughout the POI; they were $12.71 in 2018, $13.54 in 2019, and $14.18 in 2020.[150]

Despite increases in other performance indicators, the domestic producers' financial indicia deteriorated overall during the POI. Their revenues and all measures of their profitability declined during each calendar year and generally were lower in interim 2021 than in interim 2020.[151] Total sales revenues were $*** in 2018, $*** in 2019, and $*** in 2020.[152] Total COGS were $*** in 2018 and 2019, and $*** in 2020.[153] Gross profits were $421.4 million

[144] CR/PR at Tables III-11 and C-1. End-of-period inventories were 1.4 million short tons in interim 2020 and 1.2 million short tons in interim 2021. *Id*.

[145] CR/PR at Tables IV-8 and C-1. The domestic industry's share of the apparent U.S. consumption was 78.5 percent in interim 2020 and 79.2 percent in interim 2021. *Id*.

[146] CR/PR at Tables III-15 and C-1. There were 1,317 PRWs in interim 2020 and 1,413 in interim 2020. *Id*.

[147] CR/PR at Tables III-15 and C-1. Total hours worked were 721,000 hours in interim 2020 and 759,000 in interim 2021. Hours worked per PRW declined overall over the POI, and were 2,145 hours in 2018, 2,174 hours in 2019, 2,133 hours in 2020, 547 hours in interim 2020, and 537 hours in interim 2021. *Id.*

[148] CR/PR at Tables III-15 and C-1. Wages paid were $44.5 million in interim 2020 and $48.1 million in interim 2021. *Id.*

[149] CR/PR at Tables III-15 and C-1. Hourly wages were $61.78 in interim 2020 and $63.40 in interim 2021. *Id.*

[150] CR/PR at Tables III-15 and C-1. Productivity, measured in short tons per hour, was 4,206 in interim 2020 and 3,969 in interim 2021. Unit labor costs, as measured in dollars per short ton, were $14.69 in interim 2020 and $15.97 in interim 2021. *Id*.

[151] CR/PR at Tables VI-1 and C-1.

[152] CR/PR at Tables VI-1 and C-1. Total sales revenues were $*** in interim 2020 and $*** in interim 2021. *Id*.

[153] CR/PR at Table VI-1. Total COGS were $*** in interim 2020 and $*** in interim 2021. *Id*.

in 2018, $526.5 million in 2019, and $213.9 million in 2020.[154] Operating income was $306.7 million in 2018, $404.1 million in 2019, and $109.3 million in 2020.[155] Operating income as a ratio to total net sales was *** percent in 2018, *** percent in 2019, and *** percent in 2020.[156] Net income was $144.2 million in 2018, $233.7 million in 2019, and $negative 27.4 million in 2020.[157]

The domestic industry's capital expenditures decreased overall from 2018 to 2020, increasing from $202.1 million in 2018 to $206.3 million in 2019, before decreasing to $152.2 million in 2020.[158] Research and development expenditures followed a similar pattern, decreasing overall from 2018 to 2020; they were $*** in 2018, $*** in 2019, and $*** in 2020.[159] The domestic industry's total net assets decreased from 2018 to 2020, decreasing from $8.3 billion in 2018 to $7.8 billion in 2019 and $7.4 billion in 2020.[160] The industry's operating return on assets was 3.7 percent in 2018, 5.2 percent in 2019, and 1.5 percent in 2020.[161] Five of six responding domestic producers reported that the cumulated subject imports had negative effects on their investment and on their growth and development.[162]

Based on the foregoing, we cannot determine that the significant volume of cumulated subject imports did not have a significant impact on the domestic industry. As discussed above, the volume and market share of cumulated subject imports were significant during the POI, as were the increases in subject imports' volume and market share particularly from 2018 to 2019.[163] As cumulated subject imports rose substantially in 2019, they predominantly undersold the domestic like product and gained market share. While subject imports lost nearly all of this market share in 2020, and their share was lower in interim 2021 than in interim 2020, Petitioner has provided evidence that subject imports in 2019 increased inventories.

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[154] CR/PR at Tables VI-1 and C-1. Gross profits were $76.9 million in interim 2020 and $negative 9.9 million in interim 2021. *Id*.

[155] CR/PR at Tables VI-1 and C-1. Operating income was $50.9 million in interim 2020 and $negative 37.4 million in interim 2021. *Id*.

[156] CR/PR at Tables VI-1 and C-1. Operating income as a ratio to total sales was *** percent in interim 2020 and *** percent in interim 2021. *Id*.

[157] CR/PR at Tables VI-1 and C-1. Net income was $16.6 million in interim 2020 and $negative 35.8 million in interim 2021. *Id*.

[158] CR/PR at Table VI-4. The domestic industry's capital expenditures were $34.0 million in interim 2020 and $36.2 million in interim 2021. *Id*.

[159] CR/PR at Table VI-6. Research and development expenditures were $*** in interim 2020 and interim 2021. *Id*.

[160] CR/PR at Tables VI-8 and C-1.

[161] CR/PR at Table VI-9.

[162] CR/PR at Table VI-10.

[163] CR/PR at Tables IV-8 and IV-9.

Further, as discussed above, we cannot conclude that the significant volume of cumulated subject imports did not have significant depressing or suppressing effects on domestic prices, thus contributing to the domestic industry's declining financial performance over the POI.[164] In addition, although the pricing data show the domestic industry's prices increased in the first three months of 2021, the domestic industry's overall unit net sales values declined between interim periods as its COGS to net sales ratio exceeded *** percent in interim 2021.[165]

We have also considered whether there are other factors that may have had an impact on the domestic industry to ensure that we are not attributing injury from such other factors to subject merchandise. The volume and market share of nonsubject imports steadily declined from 2018 to 2020 and maintained relatively low presence in the market during the POI.[166] Moreover, the average unit values ("AUVs") for nonsubject imports were higher than the AUVs for subject imports and the domestically produced product throughout the POI.[167] Therefore, nonsubject imports do not explain the declines in the domestic industry's performance during the period of investigation.

Respondents also argue that any material injury experienced by the domestic industry during the POI was not caused by cumulated subject imports. They claim that competition between the subject imports and the domestically produced products is attenuated because domestic producers cannot adequately supply customers on the East and West coasts of the United States. They assert that the domestic producers lack the transportation and logistical capabilities to reliably supply customers in these regions.[168] Moreover, they argue that the imposition of antidumping measures by the EU on exports of UAN from the United States in 2019 resulted in a significant reduction in the domestic industry's export shipments and that these additional volumes of domestically produced UAN, not subject imports, created the oversupply of UAN in the U.S. market in late 2019 and early 2020 that drove down U.S. prices.[169] We note that this argument fails to explain why subject imports increased their market share in 2019. In addition, as discussed above, we observe that the available record evidence shows that at least half of responding U.S. producers reported shipments in each region of the contiguous United States and that U.S. producers also maintain storage locations

[164] CR/PR at Tables VI-1 and VI-3.

[165] CR/PR at Table VI-1.

[166] CR/PR at Tables IV-2 and C-1.

[167] CR/PR at Tables IV-2 and C-1.

[168] *See, e.g.*, EuroChem Postconference Brief at 15-16, 18, and Gavilon Postconference Brief at 8-10.

[169] *See, e.g.*, EuroChem Postconference Brief at 14-15, and Gavilon Postconference Brief at 19-20.

across all regions.[170] We also observe that whereas U.S. producers' U.S. shipments increased by 2.9 percent from 11.3 million short tons in 2018 to 11.6 million short tons in 2019, the volume of cumulated subject imports increased by 32.7 percent from 2.0 million short tons in 2018 to 2.6 million short tons in 2019, indicating that the increase in cumulated subject imports at the time of the imposition of the EU order exceeded the increase in U.S. producers' U.S. shipments both on a percentage basis and in absolute terms.[171] In any event, we intend to explore further respondents' allegations in any final phase of these investigations.

For the foregoing reasons, we determine that there is a reasonable indication that an industry in the United States is materially injured by reason of allegedly dumped and subsidized imports from Russia.

D. Determinations on Subject Imports from Trinidad & Tobago

1. Volume of the 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."[172]

The volume of subject imports from Trinidad & Tobago increased from 769,643 short tons in 2018 to 942,579 short tons in 2019 and 996,137 short tons in 2020.[173] Subject imports from Trinidad & Tobago also increased their share of apparent U.S. consumption each year. Their market share increased from 5.5 percent of apparent U.S. consumption in 2018 to 6.4 percent in 2019 and 6.6 percent in 2020.[174]

We find that the volume of subject imports from Trinidad & Tobago, and the increase in that volume, are significant both in absolute terms and relative to consumption in the United States.

[170] CR/PR at Tables II-2 and F-1.

[171] CR/PR at Table C-1.

[172] 19 U.S.C. § 1677(7)(C)(i).

[173] CR/PR at Tables IV-2 and C-1. The volume of subject imports from Trinidad & Tobago was 304,134 short tons in interim 2020 and 192,696 short tons in interim 2021. *Id*.

[174] CR/PR at Tables IV-2 and C-1. The market share of subject imports from Trinidad & Tobago was 8.6 percent in interim 2020 and 5.7 percent in interim 2021. *Id*.

2. 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.[175]

As stated above, we find that there is a moderate-to-high degree of substitutability between domestically produced UAN and subject imports from Trinidad & Tobago and that price is an important factor in purchasing decisions, along with availability.

The record demonstrates mixed underselling and overselling by subject imports from Trinidad & Tobago. Subject imports from Trinidad & Tobago undersold the domestic like product in *** of *** comparisons by margins ranging from *** to *** percent.[176] In the remaining *** instances where subject imports from Trinidad & Tobago oversold the domestic like product,the margins of overselling were *** to *** percent.[177] The volume of subject imports that undersold the domestic like product amounted to *** percent of the volume of subject imports accounted for in the pricing data.[178] As explained above in section VII.C.2, no purchasers responding to the lost sales/lost revenue survey reported that subject imports from Trinidad & Tobago were priced lower than the domestic product or that they had purchased subject imports instead of the domestic product primarily because of price.[179] We

[175] 19 U.S.C. § 1677(7)(C)(ii).

[176] CR/PR at Table V-5.

[177] CR/PR at Table V-6.

[178] CR/PR at Table V5 and V-6.

[179] CR/PR at V-17. We acknowledge that some purchasers identified the domestic industry's inability to supply the products they desired as a reason for purchasing subject imports rather than the domestic like product. CR/PR at Table V-9. Petitioner asserts that the domestic industry can supply purchasers with UAN in all regions of the United States. *See, e.g.,* Petitioner Postconference Brief at 43-44 and Response to Question 5 at 9-11. In any final phase of these investigations, we will examine further any differences in transportation costs and availability between the domestic industry and the subject imports and how any such differences may have affected purchasing decisions. However, for purposes of the preliminary phase of these investigations, we observe that the available record evidence shows that at least half of responding U.S. producers reported shipments in each region of the

observe that, although there is a pattern of mixed underselling and overselling by subject imports throughout the entire POI, the record shows subject imports from Trinidad & Tobago predominantly undersold the domestic like product in 2019, when subject imports surged into the U.S. market, as well as in 2020, when the volume of subject imports further increased.[180]

We have also examined available data on price trends. As discussed above in section VII.E.2, prices for domestically produced UAN fluctuated but generally increased in the first half of 2018 and 2019, and declined in the second half of each of these years as a result of UAN application in the spring months and subsequent filling period .[181] On a year-to-year basis, however, prices for the domestically produced UAN declined substantially after the first half of 2019, were lower throughout 2020 and reached their lowest levels for the period in the second half of 2020.[182] Prices for subject imports from Trinidad & Tobago followed similar trends.[183] These price declines occurred at the same time as increases in reported U.S. demand and apparent U.S. consumption.[184]

The declines in prices for domestically produced products coincided with the significant increases in low-priced subject imports in 2019 and 2020 that predominantly undersold the domestic like product in those years.[185] Moreover, as previously mentioned, Petitioner also submitted some contemporaneous trade reports discussing the pricing pressure caused by heavy import volumes in late 2019 and the ensuing full inventory levels in 2020.[186]

The record also shows that the domestic producers' ratio of COGS to net sales decreased from *** percent in 2018 to *** percent in 2019, but increased substantially to *** percent in 2020.[187] This increase occurred as raw material costs declined, with raw material

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contiguous United States and that U.S. producers also maintain storage locations across all regions. CR/PR at Tables II-2, F-1.

[180] In both 2019 and 2020, subject imports from Trinidad & Tobago undersold the domestic product in 7 of 12 monthly comparisons. The volume of subject imports from Trinidad & Tobago that undersold the domestic like product amounted to *** percent of the volume of subject imports accounted for in the pricing data for 2019 and *** percent of the volume in 2020. Calculated from CR/PR at Table V-3.

[181] *See* CR/PR at Table V-3 and Figure V-3.

[182] CR/PR at Table V-3. Prices for domestically produced UAN increased in the first three months of 2021 as natural gas prices spiked and were marginally higher at the end of the POI than at its beginning. *Id*.

[183] CR/PR at Table V-3 and Figure V-4.

[184] CR/PR at Tables II-4, IV-7, and C-1.

[185] No responding purchasers reported reductions in prices for the domestically produced products due to subject import competition. CR/PR at V-17.

[186] Petition at Exhibits I-37, I-40, and I-41; Petitioner Postconference Brief at Exhibits 9-12.

[187] CR/PR at Tables VI-1 and C-1.

costs as a share of total COGS reaching their lowest level in 2020.[188] While the industry's unit COGS declined by *** percent from 2019 to 2020, the domestic industry's unit net sales values declined by far greater *** percent over the same period, despite an increase in apparent U.S. consumption.[189] Moreover, the industry's COGS to net sales ratio was up *** percentage points across interim periods at *** percent in interim 2020 and *** percent in interim 2021.[190] Unit COGS was up *** percent across interim periods at $*** in interim 2020 and $*** in interim 2021, while the domestic industry's unit values were down *** percent at $*** in interim 2020 and $*** in interim 2021.[191]

As noted above, respondents have raised several alternative explanations for the domestic industry's price declines, and we intend to further examine these factors in any final phase of these investigations. Based on the record in the preliminary phase of these investigations, however, we cannot conclude that subject imports from Trinidad & Tobago did not have significant price effects.

3. Impact of the Subject Imports[192]

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, gross profits, net profits, operating profits, cash flow, return on investment, return on capital, ability to raise capital, ability to service debt, 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."[193]

We incorporate by reference the discussion in section VII.E.3 above concerning the domestic industry's performance during the POI. As explained in that discussion, during the POI

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[188] CR/PR at Tables V-1 and VI-1.

[189] CR/PR at Tables VI-2 and C-1. During the full years of the POI, the industry's total unit COGS declined by *** percent and unit net sales value declined by *** percent. CR/PR at Table VI-2. In the interim period, unit COGS were *** percent higher in interim 2021 than in interim 2020, while the industry's unit net sales value was *** percent lower in interim 2021 than in interim 2020. *Id.*

[190] CR/PR at Tables V-1 and VI-1.

[191] CR/PR at Table VI-1. In interim 2021, natural gas costs spiked. As a result, the industry's unit raw material costs were up by *** percent, from $*** in interim 2020 to $*** in interim 2021. *See id.*

[192] In its notice of initiation, Commerce reported an estimated dumping margin of 158.81 percent for imports from Trinidad & Tobago. Commerce Initiation Notice (AD), 86 Fed. Reg. at 40011.

[193] 19 U.S.C. § 1677(7)(C)(iii). This provision was amended by the Trade Preferences Extension Act of 2015, Pub. L. 114-27.

the domestic industry's output indicators generally improved and its employment indicators were mixed, while its financial performance worsened significantly.

We have also found that the volume and market share of subject imports from Trinidad & Tobago, as well as the increase in their volume and market share, were significant over the POI and that these imports undersold the domestic like product in several comparisons, particularly in 2019 and 2020. Notwithstanding increases in reported demand and apparent U.S. consumption, the domestic industry experienced lower revenues as its prices declined significantly in the latter portion of the POI.[194] Further, as discussed, we cannot conclude that the significant volume of subject imports from Trinidad & Tobago did not have significant depressing or suppressing effects on domestic prices, thus contributing to the domestic industry's declining financial performance over the POI, with negative operating income and net income in 2020 and interim 2021.[195] We therefore cannot conclude that the significant volume of low-priced subject imports from Trinidad & Tobago did not have a significant impact on the domestic industry.

We have also considered whether there are other factors that may have had an adverse impact on the domestic industry during the period of investigation, to ensure that we are not attributing injury from such other factors to the subject imports. The volume of imports from sources other than Trinidad & Tobago fluctuated during the POI, increasing from 1.9 million short tons in 2018 to 2.2 million short tons in 2019, and then decreasing to 1.7 million short tons in 2020.[196] Imports from sources other than Trinidad & Tobago as a share of the U.S. market increased from 13.4 percent in 2018 to 15.0 percent in 2019, and then decreased to 11.1 percent in 2020.[197] Despite the increase in imports from sources other than Trinidad & Tobago in 2019, data on the record indicate that the AUVs of those imports were higher than the AUVs of subject imports from Trinidad & Tobago throughout the POI.[198] Subject imports from Trinidad & Tobago also continued to increase from 2019 to 2020 as imports from all other

[194] Although the pricing data show the domestic industry was able to raise prices somewhat in interim 2021, the increase did not keep pace with increasing costs and the industry's ratio of COGS to net sales reached *** percent in interim 2021, up from *** percent in interim 2020. *See* CR/PR at Tables V-3, VI-1, and VI-2.

[195] CR/PR at Tables VI-1, VI-3.

[196] Calculated from CR/PR at Table C-1. The volume of imports from sources other than Trinidad & Tobago was 457,704 short tons in interim 2020 and 508,557 short tons in interim 2021. *Id*.

[197] Calculated from CR/PR at Table C-1. The market share held by nonsubject imports from sources other than Trinidad & Tobago were 12.9 percent in interim 2020 and 15.1 percent in interim 2021. *Id*.

[198] *See* CR/PR at Table IV-2.

sources declined.[199] Therefore, the adverse effects of subject imports from Trinidad & Tobago are distinct from any effects attributable to the imports from other sources.[200]

Based on the record of these preliminary phase investigations, we therefore determine that there is a reasonable indication that the domestic industry is materially injured by reason of subject imports from Trinidad & Tobago.

VIII. 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 imports of UAN from Russia that are allegedly sold in the United States at less than fair value and subsidized by the government of Russia. We also determine that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of UAN from Trinidad & Tobago that are allegedly sold in the United States at less than fair value and subsidized by the government of Trinidad & Tobago.

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

[200] Moreover, as previously discussed, we intend to explore further in any final phase of these investigations respondents' allegations regarding attenuation of competition between domestically produced UAN and subject imports, particularly in the coastal regions, and the role of any redirection of product by the domestic industry from the EU to the U.S. market in declining prices.

Part I: Introduction

Background

These investigations result from petitions filed with the U.S. Department of Commerce ("Commerce") and the U.S. International Trade Commission ("USITC" or "Commission") by CF Industries Nitrogen, LLC and its subsidiaries, Terra Nitrogen, Limited Partnership and Terra International (Oklahoma) LLC, all of Deerfield, Illinois, on June 30, 2021, alleging that an industry in the United States is materially injured and threatened with material injury by reason of subsidized and less-than-fair-value ("LTFV") imports of urea ammonium nitrate solutions ("UAN")[1] from Russia and Trinidad and Tobago. The following tabulation provides information relating to the background of these investigations.[2] [3]

Effective date	Action
June 30, 2021	Petitions filed with Commerce and the Commission; institution of Commission investigations (86 FR 36158, July 8, 2021)
July 20, 2021	Commerce's notices of initiation (86 FR 40008 and 86 FR 40004, July 26, 2021)
July 21, 2021	Commission's conference
August 13, 2021	Commission's vote
August 16, 2021	Commission's determinations
August 23, 2021	Commission's views

[1] See the section entitled "The subject merchandise" in Part I of this report for a complete description of the merchandise subject in this proceeding.

[2] Pertinent Federal Register notices are referenced in appendix A and may be found at the Commission's website (www.usitc.gov).

[3] A list of witnesses appearing at the conference is presented in appendix B of this report.

Statutory criteria

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

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

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

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

[4] Amended by PL 114-27 (as signed, June 29, 2015), Trade Preferences Extension Act of 2015.

In addition, Section 771(7)(J) of the Act (19 U.S.C. § 1677(7)(J)) provides that—[5]

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

Organization of report

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

Market summary

UAN is used almost exclusively as an agricultural fertilizer. The leading U.S. producers of UAN are ***, while leading producers of UAN outside the United States are *** of Russia and *** of Trinidad and Tobago. The leading U.S. importers of UAN from Russia are ***, while the leading importer of UAN from Trinidad and Tobago is ***. The leading importers of UAN from nonsubject countries (primarily Canada) are ***. U.S. purchasers of UAN are mostly firms that purchase domestically produced and imported UAN for wholesale/distribution and retail sale (generally for use as an agricultural crop fertilizer); leading purchasers include *** and ***.

[5] Amended by PL 114-27 (as signed, June 29, 2015), Trade Preferences Extension Act of 2015.

Apparent U.S. consumption of UAN totaled approximately 15.1 million short tons gross weight ($2.1 billion) in 2020. Currently, eight firms are known to produce UAN in the United States. U.S. producers' U.S. shipments of UAN totaled 12.4 million short tons gross weight ($1.8 billion) in 2020 and accounted for 82.3 percent of apparent U.S. consumption by quantity and 81.9 percent by value. U.S. imports from subject sources totaled 2.2 million short tons gross weight ($297.3 million) in 2020 and accounted for 14.4 percent of apparent U.S. consumption by quantity and 13.8 percent by value. U.S. imports from nonsubject sources totaled 492.3 thousand short tons gross weight ($91.7 million) in 2020 and accounted for 3.3 percent of apparent U.S. consumption by quantity and 4.3 percent by value.

Summary data and data sources

A summary of data collected in these investigations is presented in appendix C, table C-1. Except as noted, U.S. industry data are based on questionnaire responses of eight firms that are believed to account for virtually all U.S. production of UAN during 2020. U.S. imports are based on official import statistics.

Previous and related investigations

Belarus, Lithuania, Russia, and Ukraine AD investigations

On April 19, 2002, the Nitrogen Solutions Fair Trade Committee[6] filed petitions with Commerce and the Commission alleging that an industry in the United States was materially injured and threatened with material injury by reason of LTFV imports of UAN from Belarus, Lithuania, Russia, and Ukraine. The Commission determined on the basis of its preliminary phase record that U.S. imports of UAN from Lithuania were negligible.[7] On February 20, 2003, Commerce signed a suspension agreement concerning UAN from Russia.[8] On that same day, the petitioners requested a continuation of the investigations, and both Commerce and the Commission resumed their investigations with respect to Russia. Commerce determined that UAN from Belarus, Russia, and Ukraine were being sold, or were likely to be sold, in the United States at LTFV.[9] The Commission subsequently determined that an industry in the United States

[6] Nitrogen Solutions Fair Trade Committee was an ad hoc coalition of U.S. UAN producers, consisting of CF Industries, Inc., Long Grove, Illinois; Mississippi Chemical Corp., Yazoo City, Mississippi; and Terra Industries, Inc., Sioux City, Iowa.

[7] 67 FR 39439, June 7, 2002.

[8] 68 FR 18673, April 16, 2003.

[9] 68 FR 9055, February 27, 2003; 68 FR 9977, March 3, 2003; and 68 FR 9057, February 27, 2003.

was not materially injured or threatened with material injury, and the establishment of an industry in the United States was not materially retarded, by reason of imports of UAN from Belarus, Russia, and Ukraine.[10] [11]

Investigations related to upstream and alternative fertilizer products

In addition to the investigations concerning UAN from Belarus, Lithuania, Russia, and Ukraine, the Commission has conducted several investigations related to urea and ammonium nitrate, products that are both upstream in the production of UAN and are themselves fertilizer products. The Commission has also completed investigations related to other fertilizer products (ammonium sulfate and phosphate fertilizers). Details about those investigations are discussed below.

Urea from the German Democratic Republic, Romania, and the USSR

On July 16, 1986, an ad hoc committee of domestic nitrogen producers[12] filed a petition with Commerce and the Commission alleging that an industry in the United States was materially injured by reason of dumped imports of solid urea from the German Democratic Republic ("East Germany"), Romania, and the Union of Soviet Socialist Republics ("USSR").[13] The Commission made its final affirmative injury determinations in July 1987,[14] and Commerce issued antidumping duty orders on July 14, 1987.[15]

In December 1991, the USSR divided into 15 independent countries. To conform to these changes, Commerce changed the original USSR antidumping duty order into 15 orders applicable to each independent country. Commerce revoked the order concerning the former East Germany in 1998,[16] and, during the first five-year reviews in 1999, revoked the orders concerning Armenia;[17] Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, and Moldova;[18] and

[10] 68 FR 18673, April 16, 2003.

[11] Following the Commission's negative determinations, Commerce published a notice of the termination of the suspension agreement and investigation with respect to Russia (68 FR 22681, April 29, 2003).

[12] The ad hoc committee was comprised of the following firms: Agrico Chemical Co., Tulsa, Oklahoma; American Cyanamid Co., Wayne, New Jersey; CF Industries, Long Grove, Illinois; First Mississippi Corp., Jackson, Mississippi; Mississippi Chemical Corp., Yazoo City, Mississippi; Terra International, Inc., Sioux City, Iowa; and W.R. Grace & Co., New York City, New York.

[13] 52 FR 19549, May 26, 1987.

[14] 52 FR 25640, July 8, 1987.

[15] 52 FR 26366, 26367, July 14, 1987.

[16] 63 FR 16471, April 3, 1998.

[17] 64 FR 62654, November 17, 1999.

[18] 64 FR 24137, May 5, 1999.

Latvia.[19] During the second five-year reviews, Commerce revoked the orders concerning Belarus, Estonia, Lithuania, Romania, Tajikistan, Turkmenistan, and Uzbekistan due to lack of domestic industry participation.[20] On January 5, 2006, Commerce published a notice of the continuation of the antidumping duty orders concerning Russia and Ukraine following full five-year reviews by the Commission.[21] Following affirmative determinations in the third five-year reviews, Commerce again published a continuation of the orders concerning Russia and Ukraine in December 2011.[22] During the fourth five-year reviews in 2016, Commerce revoked the remaining orders concerning Russia and Ukraine due to lack of domestic industry participation.[23] U.S. natural gas feedstock costs, the major feedstock component for urea, had become competitive with Russian and Ukrainian gas due to U.S. shale gas technology.

Ammonium nitrate from Russia

On July 23, 1999, the Committee for Fair Ammonium Nitrate Trade ("COFANT")[24] filed a petition with Commerce and the Commission alleging that an industry in the United States was materially injured by reason of LTFV imports of ammonium nitrate from Russia. In May 2000, Commerce entered into a suspension agreement with Russia and suspended the investigation,[25] but in June 2000, the petitioners requested a continuation of the investigations. Commerce made a final affirmative dumping determination in July 2000,[26] and the Commission made its final affirmative injury determination in August 2000.[27] Commerce did not issue an antidumping duty order due to the suspension agreement in effect. In April 2006, Commerce

[19] 64 FR 28974, May 28, 1999.

[20] 69 FR 77993, December 29, 2004.

[21] 71 FR 581, January 5, 2006.

[22] 76 FR 78885, December 20, 2011.

[23] 81 FR 96434, December 30, 2016.

[24]COFANT was an ad hoc committee comprised of the following member companies: Air Products & Chemicals, Inc., Allentown, Pennsylvania; Mississippi Chemical Corp., Yazoo City, Mississippi; El Dorado Chemical Co., Oklahoma City, Oklahoma; Nitram, Inc., Tampa, Florida; LaRoche Industries, Inc., Atlanta, Georgia; and Wil-Gro Fertilizer, Inc., Celina, Texas.

[25] 65 FR 37759, June 16, 2000. The basis for that action was an agreement between Commerce and Russia's Ministry of Trade accounting for substantially all imports of ammonium nitrate from Russia, wherein the Ministry agreed to restrict exports of ammonium nitrate from all Russian producers/exporters to the United States and to ensure that such exports are sold at or above the agreed reference price.

[26] 65 FR 42669, July 11, 2000.

[27] 65 FR 50719, August 21, 2000.

issued a continuation of the suspended antidumping duty investigation[28] following affirmative determinations from Commerce and the Commission in the first five-year reviews.[29]

In February 2011, Commerce received a letter from the Russian Federation notifying Commerce of its withdrawal from the suspension agreement. Effective May 2, 2011, Commerce terminated the suspension agreement and imposed an antidumping duty order on solid fertilizer grade ammonium nitrate from Russia.[30] Following affirmative determinations from Commerce and the Commission in the second five-year reviews,[31] Commerce issued a continuation of the antidumping duty order in August 2011.[32] As a result of the third five-year review, Commerce revoked the order due to a lack of domestic industry participation in August 2016.[33] U.S. natural gas feedstock costs, also the major feedstock component for ammonium nitrate, had become competitive with Russian gas due to U.S. shale gas technology.

Ammonium nitrate from Ukraine

On October 13, 2000, COFANT[34] also filed a petition with Commerce and the Commission alleging that an industry in the United States was materially injured and threatened with material injury by reason of dumped imports of ammonium nitrate from Ukraine. Commerce made its final affirmative dumping determination in July 2001,[35] and the Commission made its final affirmative injury determination in August 2001.[36] Commerce issued an antidumping duty order concerning ammonium nitrate from Ukraine on September 12, 2001.[37] Effective July 9, 2007, Commerce issued a continuation of order[38] following a first full five-year review by the Commission.[39] During the second five-year review, Commerce revoked the order due to lack of domestic industry participation.[40] U.S. natural gas feedstock costs, the

[28] 71 FR 17080, April 5, 2006
[29] 70 FR 41426, July 19, 2005 and 71 FR 11177, March 6, 2006.
[30] 76 FR 23569, April 27, 2011.
[31] 76 FR 39847, July 7, 2011 and 76 FR 46323, August 4, 2011.
[32] 76 FR 49449, August 10, 2011.
[33] 81 FR 53433, August 12, 2016.
[34] COFANT was an ad hoc committee comprised of the same member companies that filed the ammonium nitrate from Russia petition (except for Wil-Gro Fertilizer, Inc., which had ceased production of ammonium nitrate in December 1999).
[35] 66 FR 38632, July 25, 2001.
[36] 66 FR 46466, September 5, 2001.
[37] 66 FR 47451, September 12, 2001.
[38] 72 FR 37195, July 9, 2007.
[39] 72 FR 35260, June 27, 2007.
[40] 83 FR 28202 June 18, 2018.

major feedstock item for ammonium nitrate had become competitive with Ukrainian gas due to U.S. shale gas technology.

Ammonium sulfate from China

On May 25, 2016, Pasadena Commodities International (PCI) Nitrogen LLC, Pasadena, Texas, filed petitions with Commerce and the Commission alleging that an industry in the United States was materially injured and threatened with material injury by reason of LTFV and subsidized imports of ammonium sulfate from China. Ammonium sulfate is similar to other types of nitrogen fertilizer, such as urea, ammonium nitrate, and UAN. Commerce made its final affirmative determinations in January 2017,[41] and the Commission made its final affirmative determinations in March 2017.[42] Commerce issued the antidumping and countervailing duty orders on ammonium sulfate from China in March 2017.[43]

Phosphate fertilizers from Morocco and Russia

On June 26, 2020, Mosaic Company, Plymouth, Minnesota, filed petitions with the Commission and Commerce alleging that an industry in the United States was materially injured and threatened with material injury by reason of subsidized imports of phosphate fertilizers from Morocco and Russia. Commerce made its final affirmative determinations in February 2021,[44] and the Commission made its final affirmative determinations in March 2021.[45] Commerce issued the countervailing duty orders on phosphate fertilizers from Morocco and Russia in April 2021.[46]

[41] 82 FR 8403, January 25, 2017.
[42] 82 FR 12842, March 7, 2017.
[43] 82 FR 13094, March 9, 2017.
[44] 86 FR 9479 and 86 FR 9482, February 16, 2021.
[45] 86 FR 17642, April 5, 2021.
[46] 86 FR 18037, April 7, 2021.

Nature and extent of alleged subsidies and sales at LTFV

Alleged subsidies

On July 26, 2021, Commerce published a notice in the Federal Register of the initiation of its countervailing duty investigation on UAN from Russia and Trinidad and Tobago.[47]

Commerce identified the following government programs in Russia:[48]

A. Provision of Goods and Services for Less than Adequate Renumeration ("LTAR")
    1. Provision of Natural Gas for LTAR
    2. Provision of Natural Gas Extraction Rights for LTAR
    3. Provision of Phosphate Mining Rights for LTAR
B. Tax Programs
    1. Tax Incentives for Mining Operations—Reduction in Extraction Tax
    2. Tax Incentives for Mining Operations—Income Tax Deduction for Exploration Expenses
C. Regional Government Subsidies
    1. Murmansk Region's Support of Industrial Development
    2. Tula Region's Support of Industrial Development
    3. Stavropol Krai's Region's Support of Industrial Development
    4. Krasnodar Krai's Region's Support of Industrial Development
    5. Special Investment Contract (SPIC) with Perm Krai
D. Loan Program
    1. Preferential Debt Financing of Projects Aimed at Introducing the Best Available Technologies

Commerce identified the following government programs in Trinidad and Tobago:[49]

A. Provision of Goods and Services for LTAR
    1. Provision of Natural Gas for LTAR
B. Tax Programs
    2. Corporate Tax Exemption
    3. Import Duty Exemption
    4. VAT Exemption

[47] 86 FR 40004, July 26, 2021.

[48] Countervailing Duty Investigation Initiation Checklist, Urea Ammonium Nitrate Solutions from the Russian Federation, C-821-832, July 20, 2021, pp. 7-19.

[49] Countervailing Duty Investigation Initiation Checklist, Urea Ammonium Nitrate Solutions from the Republic of Trinidad and Tobago, C-274-809, July 20, 2021, pp. 6-9.

Alleged sales at LTFV

On July 26, 2021, Commerce published a notice in the Federal Register of the initiation of its antidumping duty investigations on UAN from Russia and Trinidad and Tobago. Commerce has initiated its antidumping duty investigation based on an estimated dumping margin of 158.81 percent for UAN from Trinidad and Tobago. Under Commerce's market economy methodology, Commerce's estimated dumping margins for UAN from Russia are 169.96 percent and 391.65 percent for purposes of initiation. In light of the petitioner's allegation that Russia is a nonmarket economy under Commerce's nonmarket economy methodology, Commerce's estimated dumping margins for UAN from Russia are 245.98 percent and 433.37 percent for purposes of initiation.[50]

The subject merchandise

Commerce's scope

In the current proceeding, Commerce has defined the scope as follows:[51]

> *The merchandise covered by these investigations is all mixtures of urea and ammonium nitrate in aqueous or ammonia solution, regardless of nitrogen concentration by weight, and regardless of the presence of additives, such as corrosion inhibiters and soluble micro or macronutrients (UAN).*
>
> *Subject merchandise includes merchandise matching the above description that has been processed in a third country, including by commingling, diluting, adding or removing additives, or performing any other processing that would not otherwise remove the merchandise from the scope of the investigations if performed in the subject country.*
>
> *The scope also includes UAN that is commingled with UAN from sources not subject to these investigations. Only the subject component of such commingled products is covered by the scope of these investigations.*

[50] 86 FR 40008, July 26, 2021.
[51] 86 FR 40004 and 86 FR 40008, July 26, 2021.

Tariff treatment

Based upon the scope set forth by Commerce, information available to the Commission indicates that the merchandise subject to these investigations are provided for in HTS subheading 3102.80.00, mixtures of urea and ammonium nitrate in aqueous or ammoniacal solution. The 2021 general rate of duty is free. In addition to the general rate, U.S. imports of UAN produced in China classified under 3102.80.00 were included in the modified Section 301 action against China as of September 21, 2018 (List 3). Items on this list were subject to additional duties 10 percent ad valorem as of September 24, 2018, with this additional duty increasing to 25 percent ad valorem as of January 1, 2019.[52] Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

The product

Description and applications

UAN is a directly applied liquid nitrogen fertilizer composed of the two independent fertilizers urea and ammonium nitrate.[53] The two fertilizers activate at different time scales, with ammonium nitrate rapidly making its nitrogen content available to crops while urea provides a slower release.[54] It is most commonly, but not exclusively, applied to row crops like corn.[55] Because UAN is a liquid preparation, it can more easily be mixed with some other plant nutrients or other agricultural chemicals than solid nitrogen fertilizers.[56] UAN is a relatively new fertilizer, only coming into widespread usage over the past two decades. It is favorable for some users because of its nitrogen content, ranging from 28 to 32 percent, and for its ease of

[52] 83 FR 47974, September 21, 2018.

[53] Petition, p. I-6; Conference transcript, pp. 22–23 (Bilby); Petitioner's postconference brief, Responses to Staff Questions, p. 2.

[54] The timing of application or re-application throughout the season depends on the crop and region. Petition, pp. I-7 and I-10; Conference transcript, p. 37 (Szamosszegi).

[55] Conference transcript, p. 24 (Bilby).

[56] Because it is a liquid preparation, it is marketed as being more easily mixed with other plant nutrients than solid nitrogen fertilizers. Mosaic, "Urea Ammonium Nitrate," https://www.cropnutrition.com/resource-library/urea-ammonium-nitrate (accessed July 16, 2021); CF Industries, "Urea Ammonium Nitrate (UAN)," https://www.cfindustries.com/products/uan (accessed July 16, 2021).

handling.[57] UAN can be easily sprayed onto fields, included in irrigation systems, or applied with other farm implements.[58] It can also be combined with other agricultural chemicals, such as certain pesticides and other fertilizers, which are applied together in the aqueous phase.[59] UAN has become the most popular nitrogen fertilizer in the United States, overtaking liquid ammonia over a decade ago and seeing consistently higher use than urea, the most popular solid nitrogen fertilizer.[60]

Manufacturing processes

The production of UAN is dependent on the upstream natural gas feedstock that is used to synthesize the two nitrogen fertilizer components within it.[61] The process begins with the splitting of natural gas (CH_4) into hydrogen (H_2) and carbon dioxide (CO_2) through steam reforming and the water-gas shift reactions (Figure 1). The cost of natural gas makes up a substantial portion of the cost to manufacture UAN, estimated by the petitioner to account for one third of production costs.[62] The United States, Russia, and Trinidad and Tobago have unique advantages for natural gas availability and the resulting manufacturing of UAN. The United States benefits from the decade-long shale gas boom that has driven down the cost of domestic natural gas.[63] Trinidad and Tobago is the largest natural gas producer in the

[57] Conference transcript, pp. 21-24 (Bilby). The choice of UAN grade depends on the local climate in which it will be applied, with cooler regions sometime preferring lower concentrations of fertilizer to prevent salting out (i.e., crystallization) at low temperatures. Petition, p. I-9. While less nitrogen dense than alternative fertilizers, UAN is substantially less volatile, that is, more nitrogen remains within the soil available to crops. Ammonia, in contrast, is a gas at room temperature, requiring it be injected in a liquified state about twenty centimeters below ground. Urea by itself also tends to volatilize in warmer climates. Successful Farming Staff, "How to Apply Springtime Anhydrous Ammonia," March 25, 2019, https://www.agriculture.com/crops/corn/how-to-apply-springtime-anhydrous-ammonia; Petition, p. I-8.

[58] Petition, pp. I-9 and I-10; Conference transcript, p. 22 (Bilby). The equipment used for applying liquid fertilizers like UAN is different than those used for solid fertilizers, limiting interchangeability between this and other nitrogen fertilizer products. Petitioner's postconference brief, Responses to Staff Questions, p. 4.

[59] Agrico, "Urea Ammonium Nitrate Solution," https://www.agricocanada.com/fertilizers/urea-ammonium-nitrate-solution/ (accessed July 16, 2021); Petition, p. I-8.

[60] Petition, p. I-6.

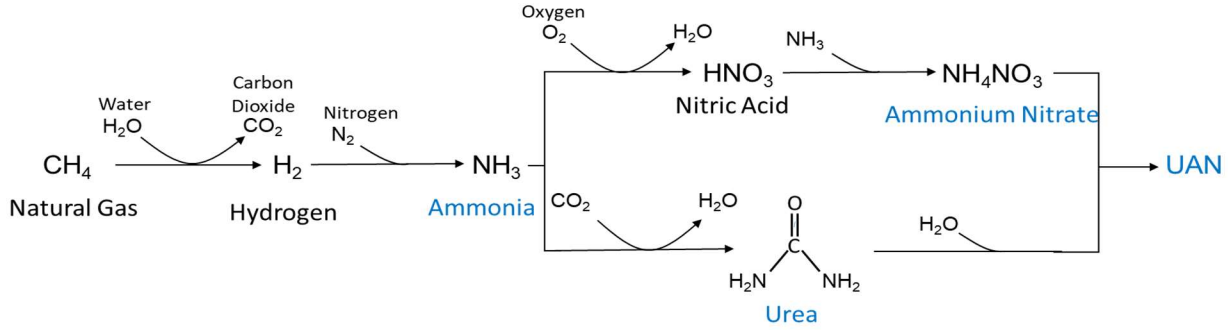
[61] Petition, p. I-11; Conference transcript, p. 53 (Will).

[62] Petition, p. I-23.

[63] Conference transcript, pp. 52 and 56 (Will).

Caribbean, with substantial offshore reserves.[64] Russia is the world's second largest natural gas producer.[65]

Figure 1. Chemical Manufacturing pathway for UAN



Source: Goodman, "The Impact of EU Anti-dumping Duties on Urea Ammonium Nitrate Solution," October 2020, p. 3.

Note: Blue-highlighted chemicals are fertilizers. Stoichiometry is omitted for clarity.

The hydrogen produced from natural gas is used to pull nitrogen from the air and form the fertilizer components. Hydrogen is reacted with atmospheric nitrogen (N_2) to yield ammonia (NH_3) through the Haber-Bosch process. Ammonia is both the starting point for further fertilizer production and a fertilizer in its own right, being the second most commonly used nitrogen fertilizer in the United States. Ammonium nitrate is produced in a two-step process from ammonia. The first involves the oxidation of ammonia to nitric acid (HNO_3) through the Ostwald process. While an important industrial chemical in its own right, nitric acid is not a nitrogen fertilizer. The addition of more ammonia completes an acid-base reaction to yield the ammonium nitrate salt (NH_4NO_3). Urea synthesis is accomplished in a parallel process that also starts with ammonia. Carbon dioxide is reacted with two equivalents of ammonia to yield urea.[66]

The final stage of UAN production involves mixing the two components in the desired ratio.[67] For example, UAN-32, which contains 32 percent nitrogen by weight, is a mixture of

[64] U.S. Energy Information Administration, "Trinidad and Tobago," January 2016, https://www.eia.gov/international/analysis/country/TTO.

[65] U.S. Energy Information Administration, "Russia," October 31, 2017, https://www.eia.gov/international/analysis/country/RUS.

[66] Goodman, "The Impact of EU Anti-dumping Duties on Urea Ammonium Nitrate Solution," October 2020, p. 3.

[67] Petitioner's postconference brief, Response to Staff Questions, p. 2.

about 45 percent ammonium nitrate, 35 percent urea, and 20 percent water.[68] This can either be done by mixing water with urea and ammonium nitrate that was synthesized separately or by skipping the intermediate step of synthesizing distinct ammonium nitrate and urea.[69] CF Industries, for example, combines urea with nitric acid and ammonia to create UAN directly in a single process.[70] There are three primary configurations for producing UAN in a single process: (1) wholly dedicated production of urea and ammonium nitrate for UAN; (2) dedicated ammonium nitrate production supplemented with urea diverted from its primary manufacturing; and (3) dedicated urea supplemented with ammonium nitrate diverted from its primary manufacturing.[71] While many manufacturers are integrated producers of UAN, some combine externally purchased urea for mixing with ammonium nitrate produced on-site.[72]

Because it is a liquid solution, UAN can be transported by rail, truck, ship, and barge to and from terminals, depending on the local distribution network's ability to handle it.[73] A corrosion inhibitor is added during manufacturing to protect production equipment and subsequent transport vessels from attack by the nitrate component of the mixture, while the acidity (i.e., pH) is adjusted with a small amount of additional ammonia.[74] The ease of

[68] Other common UAN grades include UAN-30 (42.2 percent ammonium nitrate, 32.7 percent urea, and 25.1 percent water) and UAN-28 (39.3 percent ammonium nitrate, 30.6 percent urea, and 30.2 percent water). UAN is typically made in its most concentrated from first, then diluted to manufacture the other grades. Petition, pp. I-7 and I-11. Lower concentration UAN is more common in the northern United States and Canada to avoid salting out issues at lower temperatures in those climates. Conference transcript, p. 209 (O'Neill).

[69] Petition, p. I-11.

[70] CF Industries, "Urea Ammonium Nitrate (UAN)," https://www.cfindustries.com/products/uan (accessed July 16, 2021).

[71] The major difference between the three are what other primary products, if any, are or can be manufactured at the same site. Petition, pp. I-12–I-13. Some, but not all, domestic manufacturing sites are capable of manufacturing the constituent nitrogen fertilizers as distinct products. Conference transcript, pp. 55–56 (Will). The underlying chemical manufacturing process for UAN is functionally the same regardless of manufacturer. Respondents MHTL and Helm's postconference brief, Responses to ITC Staff Questions, pp. 1–2.

[72] The majority of UAN produced in the United States is produced in a continuous process. Gubler et al, "Ammonium Nitrate," October 1, 2019, p. 12, https://ihsmarkit.com/products/ammonium-nitrate-chemical-economics-handbook.html; Petition, p. I-11.

[73] The National Academies of Sciences, Engineering, and Medicine, "Reducing the Threat of Improvised Explosive Device Attacks by Restricting Access to Explosive Precursor Chemicals," 2018, pp. 171–172, https://www.nap.edu/catalog/24862/reducing-the-threat-of-improvised-explosive-device-attacks-by-restricting-access-to-explosive-precursor-chemicals; Petition, p. I-12; Conference transcript, pp. 37 (Szamosszegi) and 119–120 (Frost).

[74] Petition, pp. I-8 and I-11.

transporting UAN relative to its individual components has reportedly been a factor in its adoption.[75] Unlike ammonia, UAN can be stored at ambient pressures.[76]

UAN is manufactured year-round, but only used by farmers during specific parts of the planting season.[77] Most UAN is delivered and applied during a six-week window in spring to coincide with emergent crop growth, unlike other fertilizers that are applied throughout the growing season.[78] Outside of this time, manufacturers deliver their product into storage, predominantly held by wholesalers, where it accumulates until the following application season.[79] The overall availability of specialized transportation and storage capacity in the United States serves as a constraint on the amount of UAN that can be produced or delivered.[80]

Domestic like product issues

No issues with respect to domestic like product have been raised in these investigations. Petitioners argue that the factors that the Commission generally considers support defining a single domestic like product co-extensive with the scope of these investigations, covering all UAN solutions.[81] Respondent Gavilon stated that, solely for purposes of these preliminary investigations, it does not challenge the domestic like product definition proposed by the petitioners.[82] Additionally, respondents MTHL and Helm also stated that they do not contest the petitioner's definition of a single domestic like product coextensive with the definition of the subject merchandise.[83] No other respondents raised any domestic like product issues during the staff conference or in their post-conference briefs.

[75] One would not be able to apply the solid forms of urea and ammonium nitrate together as a mixture of the two solids would absorb too much water from the atmosphere. Petition, p. I-7.

[76] Petition, p. I-8; Conference transcript, p. 23 (Bilby).

[77] Conference transcript, p. 30 (O'Connell).

[78] Conference transcript, pp. 24–25 (Bilby) and 29–30 (O'Connell).

[79] This volume is commonly pre-sold ahead of the next year's delivery. Conference transcript, pp. 30–31 (O'Connell). Some northern storage locations require additional heating equipment to account for salting-out at lower temperatures. Conference transcript, p. 68 (Will).

[80] Conference transcript, pp. 11 (Kessler) and 13 (Rosenthal). Importers are reportedly subject to the same constraints. Conference transcript, p. 33 (O'Connell).

[81] Petitioner's postconference brief, pp. 7-8.

[82] Respondent Gavilon's postconference brief, p. 4.

[83] Respondents MTHL and Helm's postconference brief, p. 3.

Part II: Conditions of competition in the U.S. market

U.S. market characteristics

UAN is urea and ammonium nitrate dissolved in water and is typically sold with a nitrogen content by weight of 28, 30, or 32 percent.[1] UAN is used as a fertilizer by farmers in all regions of the United States with the 32-percent solution being the most widely used. The 28-percent UAN solution is mostly used in states with a relatively colder climate because the solution does not freeze as easily as the 32-percent solution.[2] UAN is produced year-round but farmers generally apply UAN to field crops during the spring months while U.S. producers make most of their sales to customers (primarily wholesalers/distributors and retailers) during the summer "fill" months of July through September.[3]

Apparent U.S. consumption of UAN increased during 2018-20. Overall, apparent U.S. consumption in 2020 was 8.4 percent higher than in 2018.

Channels of distribution

U.S. producers and importers from subject countries sold mainly to wholesalers/distributors; importers from Trinidad and Tobago sold mostly to wholesalers/distributors while importers from Russia sold mostly to retailers, as shown in table II-1.[4]

[1] Petition, p. I-6.

[2] Petition, p. I-9.

[3] Petition, pp. I-10, I-20.

[4] Commingling of UAN can occur at each level of distribution where the product loses its origin identity. Commingling allows firms to pool inventory as opposed to having to have separate storage in bins. Conference transcript, pp. 64-67 (Will).

Table II-1
UAN: Share of U.S. shipments by source, by channel of distribution, and by period

Shares in percent

Source	Channel	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
United States	Wholesalers/distributors	***	***	***	***	***
Russia	Wholesalers/distributors	***	***	***	***	***
Trinidad and Tobago	Wholesalers/distributors	***	***	***	***	***
Subject sources	Wholesalers/distributors	***	***	***	***	***
Nonsubject sources	Wholesalers/distributors	***	***	***	***	***
All import sources	Wholesalers/distributors	***	***	***	***	***
United States	Retailers	***	***	***	***	***
Russia	Retailers	***	***	***	***	***
Trinidad and Tobago	Retailers	***	***	***	***	***
Subject sources	Retailers	***	***	***	***	***
Nonsubject sources	Retailers	***	***	***	***	***
All import sources	Retailers	***	***	***	***	***
United States	End users	***	***	***	***	***
Russia	End users	***	***	***	***	***
Trinidad and Tobago	End users	***	***	***	***	***
Subject sources	End users	***	***	***	***	***
Nonsubject sources	End users	***	***	***	***	***
All import sources	End users	***	***	***	***	***

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

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

Geographic distribution

U.S. producers and importers reported selling UAN to all regions in the contiguous United States (table II-2). For U.S. producers, approximately 32 percent of sales were within 100 miles of their production facility, 62 percent were between 101 and 1,000 miles, and 6 percent were over 1,000 miles. Importers sold approximately 55 percent within 100 miles of their U.S. point of shipment, 39 percent between 101 and 1,000 miles, and 5 percent over 1,000 miles.[5]

[5] Importer IRM notes that U.S. producers are located primarily within the Mississippi River basin and do not ship enough product to supply the needs of farmers on the West Coast and that the distance, cost, and timeliness of shipping to the West Coast all pose challenges to U.S. producers. Conference transcript, pp. 147-148 (O'Neill).

Table II-2
UAN: Count of U.S. producers' and U.S. importers' geographic markets

Count in number of firms reporting

Region	U.S. producers	Russia	Trinidad and Tobago	Subject sources
Northeast	4	5	1	6
Midwest	6	2	1	3
Southeast	5	4	2	6
Central Southwest	6	2	1	3
Mountain	7	4	1	5
Pacific Coast	7	5	2	7
Other	0	0	0	0
All regions (except Other)	4	1	0	1
Reporting firms	8	9	2	10

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

Note: Other U.S. markets include AK, HI, PR, and VI.

Supply and demand considerations

U.S. supply

Table II-3 provides a summary of the supply factors regarding UAN from U.S. producers and from foreign producers in Russia and Trinidad and Tobago. U.S. and Trinidadian producers reported increasing capacity while Russian producers reported decreasing capacity during 2018-20. U.S. and Russian producers reported decreasing capacity utilization while the Trinidadian producer reported an increase. U.S., Russian, and Trinidadian producers reported decreasing inventories. Subject country producers reported modest home market shipments and relatively large export shipments to the United States.[6]

[6] The Trinidadian producer (MHTL) reported *** during 2018-20.

Table II-3
UAN: Supply factors that affect the ability to increase shipments to the U.S. market, by country

Quantity in short tons gross weight; ratio and share in percent; count is number of "yes" responses

Factor	Measure	United States	Russia	Trinidad and Tobago
Capacity 2018	Quantity	15,568,226	***	***
Capacity 2020	Quantity	16,065,941	***	***
Capacity utilization 2018	Ratio	***	***	***
Capacity utilization 2020	Ratio	***	***	***
Inventories to total shipments 2018	Ratio	***	***	***
Inventories to total shipments 2020	Ratio	***	***	***
Home market shipments 2020	Share	***	***	***
Non-US export market shipments 2020	Share	***	***	***
Ability to shift production (firms reporting "yes")	Count	***	***	***

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

Note: Responding U.S. producers accounted for virtually all U.S. production of UAN in 2020. Responding foreign producer/exporter firms accounted for more than 75 percent of U.S. imports of UAN from Russia and for all of U.S. imports of UAN from Trinidad and Tobago during 2020. For additional data on the number of responding firms and their share of U.S. production and of U.S. imports from each subject country, please refer to Part I, "Summary data and data sources."

Domestic production

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

Domestic capacity and production increased during 2018-20 but capacity increased at a higher rate than production, resulting in a slight decrease in capacity utilization.[7] Inventories decreased slightly during 2018-20; inventories as a ratio to total shipments during the interim periods of January-March 2020 and January-March 2021 were *** percent and *** percent, respectively.[8] Domestic export shipments as a share of U.S. producers' total shipments

[7] Capacity increased by 3.2 percent and production increased by 1.7 percent during 2018-20.

[8] Inventories are seasonal and are likely to be the highest of the year during the winter months of the first quarter and the lowest after the spring growing season during the second quarter. Conference transcript, pp. 202-203 (McMullin).

decreased from *** percent in 2018 to *** percent in 2020.[9] Other products that U.S. producers can reportedly produce on the same equipment as UAN are urea solutions (35-60 percent), granular urea and urea liquor, ammonium nitrate/calcium nitrate blends, and nitric acid. Factors affecting U.S. producers' ability to shift production include costs and constraints associated with storing the alternate product.

Subject imports from Russia

Based on available information, producers of UAN from Russia have the ability to respond to changes in demand with small changes in the quantity of shipments of UAN to the U.S. market. The main contributing factor to this degree of responsiveness of supply is the ability to shift shipments from alternative markets.[10] Factors mitigating responsiveness of supply include limited availability of unused capacity or inventories, decreasing exports to other non-U.S. markets, and no ability to shift production to or from alternate products.

Capacity and production decreased during 2018-20, resulting in a slight decrease in capacity utilization. *** inventories decreased slightly during 2018-20. Export shipments to non-U.S. markets as a share of total shipments decreased from *** percent in 2018 to *** percent in 2020.

Subject imports from Trinidad and Tobago

Based on available information, the sole producer of UAN from Trinidad and Tobago (MHTL) has the ability to respond to changes in demand with small changes in the quantity of shipments of UAN to the U.S. market. The main contributing factor to this degree of responsiveness of supply is the ability to shift shipments from alternative markets. Factors mitigating responsiveness of supply include limited availability of unused capacity or inventories and no ability to shift production to or from alternate products.

Capacity and production increased during 2018-20, resulting in an increase in capacity utilization from *** percent in 2018 to *** percent in 2020. The ratio of inventories to total shipments decreased from *** percent in 2018 to *** percent of total shipments in 2020; the ratio of inventories to total shipments during the interim period of January-March 2021 were

[9] Principal export markets reported by U.S. producers *** include Argentina, Canada, Mexico, Europe and South America. In 2019, the European Union issued an antidumping order on UAN from Russia, Trinidad and Tobago, and the United States.

[10] Non-U.S. export markets include Argentina, Australia, France, Israel, Kazakhstan, Lithuania, Moldova, and Romania.

*** percent. Export shipments to non-U.S. markets as a share of total shipments were relatively stable at *** percent in 2018, *** in 2019, and *** in 2020.[11]

Imports from nonsubject sources

Nonsubject imports accounted for 18.4 percent of total U.S. imports in 2020. The largest source of nonsubject imports during 2018-20 was Canada, accounting for the vast majority of nonsubject imports. Other nonsubject sources include Belarus, Estonia, Lithuania, the Netherlands, and Poland.

Supply constraints

Three U.S. producers and seven importers reported that they had experienced supply constraints since January 1, 2018. U.S. producer *** reported that it sells on a forward basis and that infrequent and unplanned production outages have occasionally resulted in delayed deliveries of a few weeks.[12] U.S. producer *** reported that it allocated truck shipments from one of its plants from March 5 to March 15, 2021. U.S. producer *** reported a freeze event, planned turnarounds, and unplanned outages.

Importer *** reported that seasonality and weather-driven consumption can result in positions where it is unable to always meet customer demand. Importer *** reported that *** puts its customers on allocation regularly, misses delivery timelines, and in general ships UAN when it suits its needs rather than adhering to contractual commitments. Importer *** reported that *** withdrawal from the U.S. East Coast market in 2012 and the U.S. West Coast market in 2015 forced customers to seek alternative supply sources. Importer *** reported vessel delays and a lack of availability.[13]

U.S. demand

Based on available information, the overall demand for UAN is likely to experience moderate changes in response to changes in price. The main contributing factors are planted acreage, the availability and viability of substitute products, the cost share of UAN in farming crops, crop inventories and prices, and weather.

[11] Non-U.S. export markets include Argentina, Belgium, Canada, France, Germany, Mexico, Spain, Ukraine, and Uruguay.

[12] CF Industries noted that it and some other U.S. producers were affected by Winter Storm Uri during February 2021 and that CF Industries needed to take production offline for 7 to 10 days. Conference transcript, pp. 112-113 (Will).

[13] This firm reported importing UAN from Russia, Poland, Lithuania, Estonia, and the Netherlands.

End uses and cost share

U.S. demand for UAN depends on the demand for U.S.-grown agricultural crops. UAN likely accounts for at least a moderate-to-high share of the cost to grow crops.[14] U.S. producer *** reported that UAN's cost share of the total cost of farming agricultural goods (crops) is 20 percent. Importer *** reported that UAN's share of the total cost is 30 percent for corn and other nitrogen intensive crops such as wheat and rice.

Business cycles

All eight U.S. producers and 10 of 11 importers indicated that the market was subject to business cycles or conditions of competition. Specifically, most firms reported that the majority of their UAN purchases occur during the summer months while the UAN application season by farmers is during the spring months. U.S. producer *** reported that, as a condition of competition, levels of demand for UAN and the length of application seasons are impacted by the weather. Importer *** reported that U.S. exports of UAN dropped significantly after the European Union antidumping duty order on UAN from Russia, Trinidad and Tobago, and the United States in 2019 and that these exports were redirected back to the United States. Importer *** reported that 95 percent of the UAN production capacity in the United States is east of the Rocky Mountains and that shipping by rail to the West Coast impacts the timeliness of deliveries due to weather delays.

[14] "From 2010 to 2019, fertilizer was a major expense in U.S. corn production, accounting for 33 to 44 percent of operating costs—a category that includes other variable expenses like seed, chemicals, fuel, and repairs. Fertilizer also comprised 16 to 24 percent of the average corn producer's total costs, which include overhead charges like land costs, machinery depreciation, and farm taxes." U.S. Department of Agriculture (USDA), Economic Research Service (ERS), Commodity Costs and Returns. https://www.ers.usda.gov/data-products/chart-gallery/gallery/chart-detail/?chartId=100882.

Demand trends

Most firms reported an increase in U.S. demand since January 1, 2018 (table II-4).

Table II-4
UAN: Count of firms' responses regarding overall domestic and foreign demand

Count in number of firms reporting

Market	Firm type	Increase	No change	Decrease	Fluctuate
Domestic demand	U.S. producers	6	1	0	1
Domestic demand	Importers	6	1	0	4
Foreign demand	U.S. producers	5	1	0	2
Foreign demand	Importers	4	2	0	4

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

Demand for UAN is driven by agricultural plantings and is concentrated in the Midwest/Corn Belt region, Texas, and California with Nebraska being the largest consumer of UAN of any state.[15] [16] Total commercial sales of 32-percent UAN in Nebraska was 1.3 million tons in 2018, 1.6 million tons in 2019, and 1.5 million tons in 2020 and commercial sales of 28-percent UAN in Nebraska was 83 thousand tons in 2018, 89 thousand tons in 2019, and 82 thousand tons in 2020.[17] UAN is applied primarily during April-June in a given year, with weather, crop rotations, fertilizer use rates, crop prices relative to fertilizer prices, and UAN prices relative to other nitrogen fertilizer prices on a nutrient-content basis also impacting demand.[18]

UAN can be used on a wide variety of crops including corn, wheat, cotton, rice, sugar cane and other grains.[19] The area planted for principal crops grown in the United States was 317.2 million acres in 2021, down 0.7 percent from 319.3 million acres in 2018 (figure II-1).[20] As shown in the figure, the area planted for corn was 92.7 million acres in 2021, up 4.0 percent

[15] Petition, p. I-20.

[16] The Corn Belt region covers Illinois, Indiana, Iowa, Minnesota, Nebraska, and Ohio. https://agclass.nal.usda.gov/mtwdk.exe?k=glossary&l=60&w=3861&s=5&t=2.

[17] Nebraska Fertilizer, Soil Conditioner and Ag Lime Tonnage and Sampling Report, Calendar years 2018, 2019, and 2020. https://nda.nebraska.gov/plant/fertilizer/index.html.

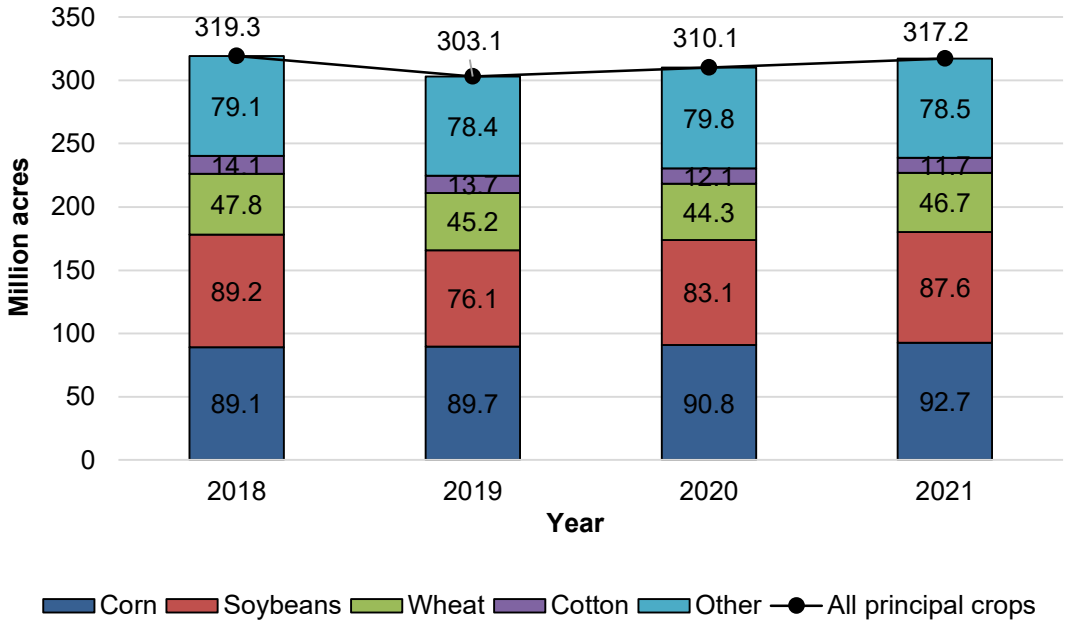
[18] Petition, *supra* note 1.

[19] Petition, pp. I-9-10.

[20] Principal crops included in area planted are corn, sorghum, oats, barley, rye, winter wheat, durum wheat, other spring wheat, rice, soybeans, peanuts, sunflower, cotton, dry edible beans, chickpeas, potatoes, sugar beets, canola, and proso millet. Harvested acreage is used for all hay, tobacco, and sugarcane in computing total area planted. This includes double cropped acres and unharvested small grains planted as cover crops.

from 89.1 million acres in 2018.[21] The area planted for soybeans was 87.6 million acres in 2021, down 1.8 percent from 89.2 million acres in 2018. The area planted for wheat decreased 2.2 percent and the area planted for cotton decreased 16.9 percent from 2018 to 2021.[22]

Figure II-1
Principal crops: United States size of area planted in acres by crop type, 2018-2021



Source: National Agricultural Statistics Service (NASS), Agricultural Statistics Board, United States Department of Agriculture (USDA), Acreage, June 28, 2019, June 30, 2020, and June 30, 2021. https://usda.library.cornell.edu/concern/publications/j098zb09z.

Note: Underlying data for figures in Part II are in Appendix G.

[21] The area planted for corn grown in the Corn Belt region was 50.6 million acres in 2018, 49.7 million acres in 2019, 52.1 million acres in 2020, and 51.5 million acres in 2021.

[22] In recent years, U.S. wheat and cotton growers have struggled with volatile prices, high production costs, and weather issues. https://www.uswheat.org/wheatletter/usda-predicts-slight-decline-in-u-s-spring-wheat-planted-area/. https://www.cottonfarming.com/breakingnews/ncc-survey-points-to-5-2-reduction-in-planted-acres-for-2021/.

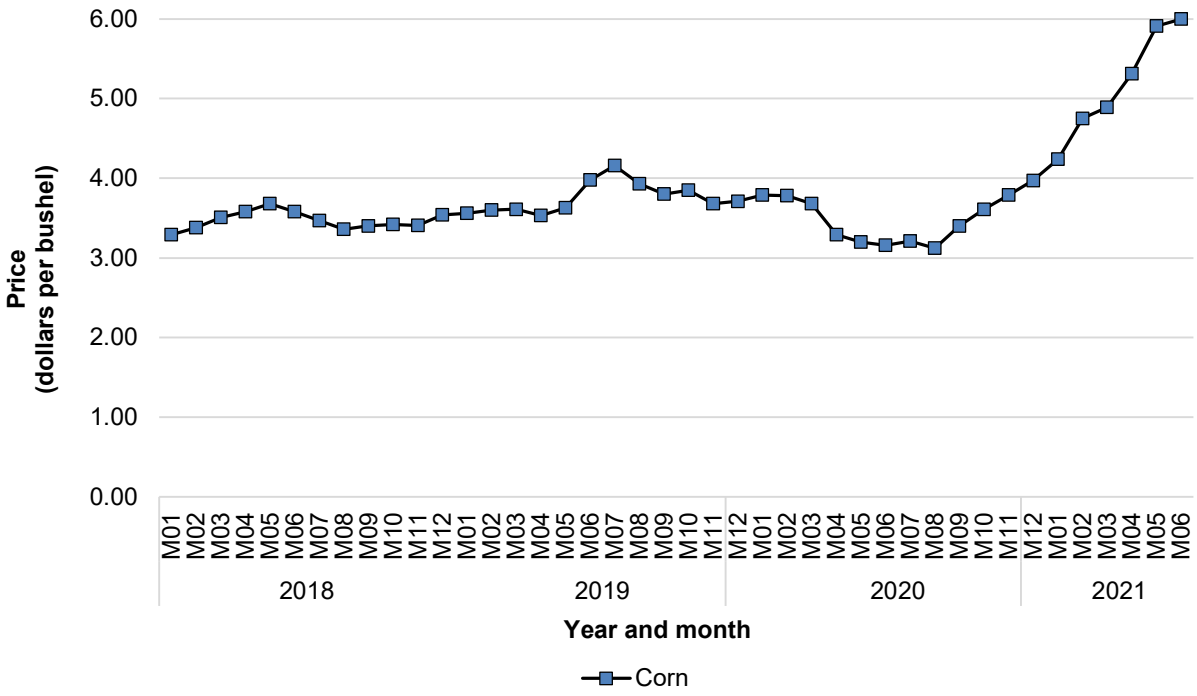
Demand for UAN can also stem from crop inventories (stock) and the use rates of crops. The stock-to-use ratio for corn was 15.5 percent in marketing year 2018/2019, 13.7 percent in 2019/2020, and 7.2 percent in 2020/2021, and is projected to be 9.6 percent in 2021/2022.[23] As the price for grains increases, demand for fertilizer from farmers tends to increase.[24] The average price received by farmers for corn during January 2018 was $3.29 per bushel, with a period-low of $3.12 per bushel in August 2020 and a period-high of $6.00 per bushel in June 2021 (figure II-2).

[23] The marketing year for corn is September through August. Stocks are inventories at a given point in time and corn uses include feed, food, ethanol, and other industrial productions. High stock-to-use ratios indicate that more supply is available, generally leading to lower prices, while low stock-to-use ratios indicate tight supply and higher prices. Zulauf, C., G. Schnitkey, K. Swanson and N. Paulson. "Stock-to-Use Ratios of U.S. Corn, Soybeans, and Wheat Since 1960." farmdoc daily (11):92, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, June 14, 2021.

For marketing year 2018/19, stocks were 2,221 million bushels and use was 14,288 million bushels; 2019/20, stocks were 1,919 million bushels and use was 13,963 million bushels; 2020/21, stocks were 1,082 million bushels and use was 15,045 million bushels; and 2021/22 projected, stocks are 1,432 million bushels and use is 14,840 million bushels. United States Department of Agriculture (USDA), World Agricultural Supply and Demand Estimates, July 10, 2020 and July 12, 2021.

[24] Conference transcript, p. 127 (Will).

Figure II-2
Corn: Prices by month, January 2018 through June 2021



Source: National Agricultural Statistics Service (NASS), Quick Stats, Corn, Grain - Price Received, Measured in dollars per bushel, United States Department of Agriculture (USDA), accessed August 3, 2021.

Note: Underlying data for figures in Part II are in Appendix G.

Substitute products

Most U.S. producers (6 of 8) and importers (11 of 12) reported that there were substitutes for UAN, including anhydrous ammonia, urea, and ammonium nitrate (aqueous or solid). However, U.S. producer *** reported that UAN is generally superior to other nitrogenous fertilizer in terms of irrigation, use in spray with chemicals, and a longer time frame for application during the farming season. Importer *** reported that it can be expensive for end users to switch to a substitute as it involves different application methods. Several U.S. producers and importers reported that prices for all nitrogen fertilizers tend to be correlated so as the prices for substitutes increase or decrease, prices for UAN will follow.

Substitutability issues

This section will assess the degree to which U.S.-produced UAN and imports of UAN from subject countries can be substituted for one another by examining the importance of certain purchasing factors and the comparability of UAN from domestic and imported sources based on those factors. Based on available data, staff believes that there is a moderate-to-high degree of substitutability between domestically produced UAN and UAN imported from subject sources.[25] The primary factor contributing to this level of substitutability is the similar quality and interchangeability between domestic and subject sources. Factors reducing substitutability include some availability issues and different lead times from domestic and subject sources.

Factors affecting purchasing decisions

Purchasers responding to lost sales lost revenue allegations[26] were asked to identify the main purchasing factors their firm considered in their purchasing decisions for UAN. The major purchasing factors identified by firms include availability/supply, price/cost, and delivery/timing.

The most often cited top three factors that firms consider in their purchasing decisions for UAN were availability/supply (5 firms), price/cost (4 firms), and delivery/timing (3 firms), as shown in table II-5. Availability/supply was the most frequently cited first-most important factor (cited by 4 firms), followed by price/cost (1 firm); price/cost was the most frequently reported second-most important factor (3 firms); and delivery/timing was the most frequently reported third-most important factor (2 firms).

[25] The degree of substitution between domestic and imported UAN depends upon the extent of product differentiation between the domestic and imported products and reflects how easily purchasers can switch from domestically produced UAN to the UAN imported from subject countries (or vice versa) when prices change. The degree of substitution may include such factors as relative prices (discounts/rebates), quality differences (e.g., grade standards, defect rates, etc.), and differences in sales conditions (e.g., lead times between order and delivery dates, reliability of supply, product services, etc.).

[26] This information is compiled from responses by purchasers identified by Petitioners to the lost sales lost revenue allegations. See Part V for additional information.

Table II-5
UAN: Count of ranking of factors used in purchasing decisions as reported by U.S. purchasers, by factor

Count in number of firms reporting

Factor	First	Second	Third	Total
Availability / Supply	4	1	0	5
Price / Cost	1	3	0	4
Delivery / Timing	0	1	2	3
All other factors	0	0	2	NA

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

Note: Other factors include logistic advantages and contractual integrity.

Lead times

UAN is primarily sold from inventory. U.S. producers reported that *** percent of their commercial shipments came from inventories, with lead times averaging *** days.[27] Most of the sales of UAN are forward sales under short-term contracts with durations ranging from 77 to 95 days.[28] The remaining *** percent of their commercial shipments were produced to order, with lead times averaging *** days. Importers reported that *** percent of their commercial shipments came from U.S. inventories, with lead times averaging *** days.[29] The

[27] ***. Petitioner's postconference brief, Responses to Staff Questions, p. 11.

[28] Conference transcript, p. 30 (O'Connell), p. 71 (Frost). For more information on contracts, please see "Pricing methods" in Part V.

[29] Importer ***. ***, email to USITC staff, July 15, 2021.

Respondent importer Helm reported that rail deliveries to its customers from its Theodore, Alabama distribution facility takes *** days. Respondents MHTL and Helm's postconference brief, Affidavit of Michael Peyton, p. 2.

Respondent importer IRM stated that it receives UAN into a distribution system by ocean vessel, river barge and/or rail car, and it is delivered to its customers by truck on "a just in time basis" to satisfy demand when the customer wants it. Delivery to its customers takes hours. Conference transcript, pp. 146, 184 (O'Neill).

remaining *** percent of their commercial shipments came from foreign inventories, with lead times averaging *** days.

Comparison of U.S.-produced and imported UAN

In order to determine whether U.S.-produced UAN can generally be used in the same applications as imports from Russia and Trinidad and Tobago, U.S. producers and importers were asked whether the products can always, frequently, sometimes, or never be used interchangeably. As shown in tables II-6 and II-7, most firms reported that UAN produced in the United States and in other countries is always interchangeable.

Table II-6
UAN: Count of U.S. producers reporting the interchangeability between UAN produced in the United States and in other countries, by country pair

Count in number of firms reporting

Country pair	Always	Frequently	Sometimes	Never
United States vs. Russia	6	2	0	0
United States vs. Trinidad and Tobago	6	2	0	0
Russia vs. Trinidad and Tobago	4	1	0	0
United States vs. Other	5	2	0	0
Russia vs. Other	4	1	0	0
Trinidad and Tobago vs. Other	4	1	0	0

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

Table II-7
UAN: Count of importers reporting the interchangeability between UAN produced in the United States and in other countries, by country pair

Count in number of firms reporting

Country pair	Always	Frequently	Sometimes	Never
United States vs. Russia	10	1	0	0
United States vs. Trinidad and Tobago	9	1	0	0
Russia vs. Trinidad and Tobago	9	1	0	0
United States vs. Other	10	1	0	0
Russia vs. Other	10	1	0	0
Trinidad and Tobago vs. Other	9	1	0	0

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

In addition, U.S. producers and importers were asked to assess how often differences other than price were significant in sales of UAN from the United States, subject, or nonsubject countries. As seen in tables II-8 and II-9, most U.S. producers reported that factors other than price are "never" or "sometimes" significant, while most importers reported factors other than price as "frequently" or "always" significant.

Table II-8
UAN: Count of U.S. producers reporting the significance of differences other than price between UAN produced in the United States and in other countries, by country pair

Count in number of firms reporting

Country pair	Always	Frequently	Sometimes	Never
United States vs. Russia	0	0	2	6
United States vs. Trinidad and Tobago	0	0	2	6
Russia vs. Trinidad and Tobago	0	0	1	5
United States vs. Other	0	0	2	5
Russia vs. Other	0	0	1	5
Trinidad and Tobago vs. Other	0	0	1	5

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

Table II-9
UAN: Count of importers reporting the significance of differences between UAN produced in the United States and in other countries, by country pair

Count in number of firms reporting

Country pair	Always	Frequently	Sometimes	Never
United States vs. Russia	3	4	2	2
United States vs. Trinidad and Tobago	2	4	1	2
Russia vs. Trinidad and Tobago	2	3	1	2
United States vs. Other	2	3	1	2
Russia vs. Other	2	3	1	2
Trinidad and Tobago vs. Other	2	3	2	2

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

Importer *** reported that product availability is the most important factor. Importer *** reported that access to transportation networks is a key factor in its sales of UAN. Importers *** reported availability and transportation networks as important factors. Importer *** reported that U.S. producers have consistently declined to supply the West Coast by vessel which has led consumers to buy from Russia and Trinidad and Tobago.

Part III: U.S. producers' production, shipments, and employment

The Commission analyzes a number of factors in making injury determinations (see 19 U.S.C. §§ 1677(7)(B) and 1677(7)(C)). Information on the subsidies and dumping margins was presented in *Part I* of this report and information on the volume and pricing of imports of the subject merchandise is presented in *Part IV* and *Part V*. Information on the other factors specified is presented in this section and/or *Part VI* and (except as noted) is based on the questionnaire responses of eight firms that accounted for the vast majority of U.S. production of UAN during 2020.

U.S. producers

The Commission issued a U.S. producer questionnaire to eight firms based on information contained in the petition, and all eight firms provided usable data on their operations: CF Industries Nitrogen, LLC and its affiliate companies ("CF Industries");[1] CVR Partners, LP ("CVR Partners"); Dyno Nobel Inc. ("Dyno Nobel"); Iowa Fertilizer Company LLC ("Iowa Fertilizer"); Koch Fertilizer, LLC ("Koch"); LSB Industries, Inc. ("LSB Industries"); PCS Nitrogen Fertilizer L.P./ PCS Nitrogen Ohio L.P./ Agrium U.S. Inc. / PCS Sales (USA), Inc. ("PCS");[2] and ("TradeMark Nitrogen"). Staff believes that these responses represent the vast majority of U.S. production of UAN.

Table III-1 lists U.S. producers of UAN, their production locations, positions on the petition, and shares of total production. Of the seven non-petitioner firms, *** the petition (***); ***; and ***. *** comprised *** of U.S. UAN production in 2020, while the next three biggest firms of *** collectively accounted for approximately *** percent of U.S. UAN production in 2020.

[1] CF Industries' consolidated questionnaire response covers the petitioners CF Industries Nitrogen, LLC (UAN producer) and its subsidiaries, Terra Nitrogen, Limited Partnership (UAN producer), and Terra International (Oklahoma) LLC (UAN producer), and affiliated sales and employment entities, whose ultimate parent company is CF Industries Holdings, Inc.

[2] ***

Table III-1
UAN: U.S. producers, their position on the petition, location of production, and share of reported production, by firm, 2020

Firm	Position on petition	Production location(s)	Share of production
CF Industries	Petitioner	Deerfield, IL Woodward, OK Donaldsonville, LA Port Neal, IA Yazoo City, MS Verdigris, OK	***
CVR Partners	***	Coffeyville, KS East Dubuque, IL	***
Dyno Nobel	***	Cheyenne, WY Deer Island, OR	***
Iowa Fertilizer	***	Wever, IA	***
Koch	***	Enid, OK Beatrice, NE Fort Dodge, IA Dodge City, KS	***
LSB Industries	***	Cherokee, AL Pryor, OK	***
PCS	***	Geismar, LA Augusta, GA Lima, OH Kennewick, WA	***
TradeMark Nitrogen	***	Tampa, FL	***
All firms	Various	Various	100.0

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

Table III-2 presents information on U.S. producers' ownership and related and/or affiliated firms. Six of the eight firms reported ownership information. *** reported being related to ***. Five companies reported related producers: ***, ***, ***, ***, and ***.

Table III-2
UAN: U.S. producers' ownership and related and/or affiliated firms

Reporting firm	Relationship type and related firm	Details of relationship
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***

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

Table III-3 presents U.S. producers' reported changes in operations since January 1, 2018. ***. Four firms (***) reported shutdowns or curtailments during the period of investigation. *** reported ***. Lastly, *** reported that ***.

Table III-3
UAN: U.S. producers' reported changes in operations, since January 1, 2018

Item	Firm name and accompanying narrative response
Expansions	***
Prolonged shutdowns or curtailments	***
Prolonged shutdowns or curtailments	***
Prolonged shutdowns or curtailments	***
Prolonged shutdowns or curtailments	***
Revised labor agreements	***
Other	***

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

Three of the eight firms reported on the impact of the COVID-19 pandemic on their firms' supply chain arrangements, UAN production, employment, and shipments in their questionnaire responses. *** reported that ***. *** also reported that ***. *** reported that ***.[3]

Additionally, starting in 2018, the EU initiated antidumping investigations concerning UAN from Russia, Trinidad and Tobago, and the United States, leading to the imposition of antidumping duties in 2019. U.S. producers were asked to comment on how the U.S. market had been impacted by the EU's antidumping duties in 2019. Five of the eight companies (***) commented on the impact of the EU antidumping duties with respect to Russia and Trinidad and Tobago on the U.S. UAN market and noted that the duties had led to increased imports from Russia and Trinidad and Tobago and had lowered UAN prices in the U.S. market. The same five companies commented on how the EU antidumping duties with respect to the United States had impacted the U.S. UAN market. U.S. producers noted that the EU duties imposed on the United States had led to declines in U.S. exports of UAN.[4]

[3] See table D-1 in appendix D for full narratives from each responding U.S. producer and importer companies explaining the impacts of the COVID-19 pandemic.

[4] See tables D-2 and D-3 in appendix D for full narratives from each company explaining the impacts of the EU duties with respect to Russia and Trinidad and Tobago and with respect to the United States on the U.S. UAN market.

U.S. production, capacity, and capacity utilization

Table III-4 and figure III-1 present U.S. producers' production, capacity, and capacity utilization. Capacity increased 3.2 percent between 2018 and 2020[5] and was 0.1 percent lower in the 2021 interim period than in the 2020 interim period.

Production increased irregularly between 2018 and 2020: it fell 0.1 percent between 2018 and 2019 and then increased 1.8 percent between 2019 and 2020 for a total increase of 1.7 percent from 2018-20. ***.[6] Comparatively, ***. Total production decreased 0.7 percent in interim 2021 as compared to interim 2020. Five of the eight firms reported decreased production in interim 2021 as compared to interim 2020. *** production, however, was *** percent higher in interim 2021 than in interim 2020.

Because the total increase in industry capacity was greater than the total increase in industry production from 2018-20, overall capacity utilization decreased from 82.0 percent in 2018 to 80.8 percent in 2020, a 1.2 percentage point decrease. Five of the eight firms reported increases in their capacity utilizations from 2018-20, the capacity utilization of one firm (***) was flat, and two firms (***) reported decreases of *** and *** percentage points in their capacity utilizations, respectively. Capacity utilization for all firms also decreased from 75.5 percent in interim 2020 to 75.1 percent in interim 2021, a 0.4 percentage point decrease.

[5] Between 2018 and 2020, ***.

[6] ***.

Table III-4
UAN: U.S. producers' capacity by firm and by period

Capacity in short tons gross weight

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
CF Industries	***	***	***	***	***
CVR Partners	***	***	***	***	***
Dyno Nobel	***	***	***	***	***
Iowa Fertilizer	***	***	***	***	***
Koch	***	***	***	***	***
LSB Industries	***	***	***	***	***
PCS	***	***	***	***	***
Trademark Nitrogen	***	***	***	***	***
All firms	15,568,226	15,936,181	16,065,941	4,015,303	4,011,303

Table continued.

Table III-4 continued
UAN: U.S. producers' production by firm and by period

Production in short tons gross weight

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
CF Industries	***	***	***	***	***
CVR Partners	***	***	***	***	***
Dyno Nobel	***	***	***	***	***
Iowa Fertilizer	***	***	***	***	***
Koch	***	***	***	***	***
LSB Industries	***	***	***	***	***
PCS	***	***	***	***	***
Trademark Nitrogen	***	***	***	***	***
All firms	12,759,795	12,748,555	12,981,430	3,032,839	3,012,664

Table continued.

Table III-4 continued
UAN: U.S. producers' capacity utilization ratio by firm and by period

Capacity utilization ratios in percent

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
CF Industries	***	***	***	***	***
CVR Partners	***	***	***	***	***
Dyno Nobel	***	***	***	***	***
Iowa Fertilizer	***	***	***	***	***
Koch	***	***	***	***	***
LSB Industries	***	***	***	***	***
PCS	***	***	***	***	***
Trademark Nitrogen	***	***	***	***	***
All firms	82.0	80.0	80.8	75.5	75.1

Table continued.

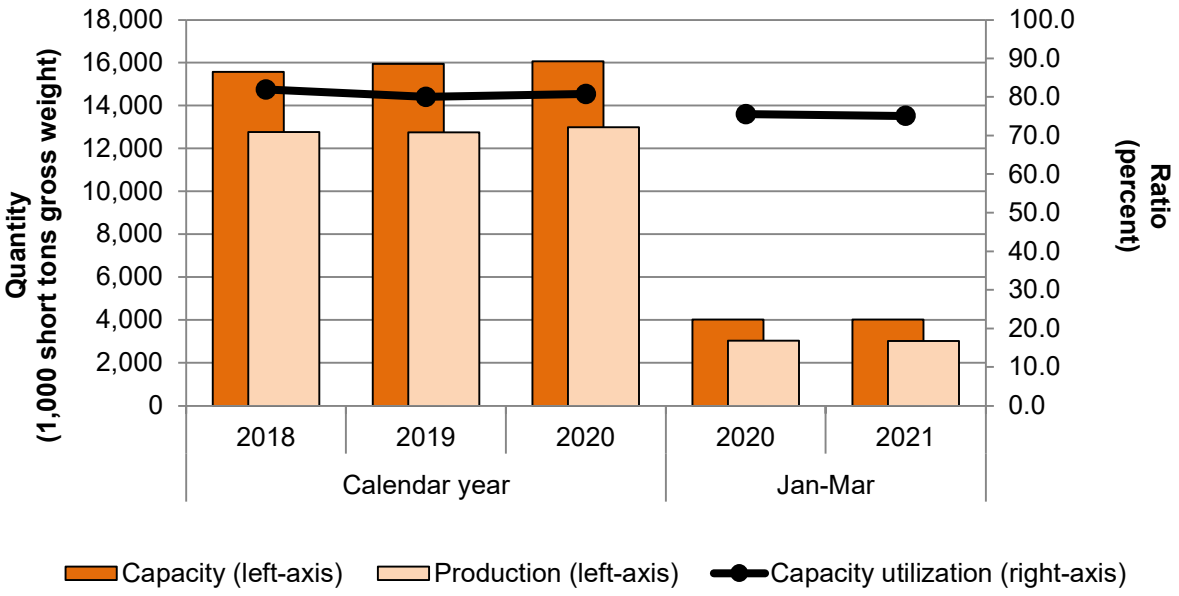
Table III-4 continued
UAN: U.S. producers' share of production by firm and by period

Share of production in percent

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
CF Industries	***	***	***	***	***
CVR Partners	***	***	***	***	***
Dyno Nobel	***	***	***	***	***
Iowa Fertilizer	***	***	***	***	***
Koch	***	***	***	***	***
LSB Industries	***	***	***	***	***
PCS	***	***	***	***	***
Trademark Nitrogen	***	***	***	***	***
All firms	100.0	100.0	100.0	100.0	100.0

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

Figure III-1
UAN: U.S. producers' capacity, production, and capacity utilization, by period



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

Alternative products

*** was the only U.S. producer that reported the ability to produce alternative products (aside from constituent products urea and ammonium nitrate) using the same equipment, machinery, or employees as used to produced UAN. The company reported it could produce ***.

*** of the eight producers reported that they internally produce urea, and *** producers reported that they internally produce ammonium nitrate, products that are both upstream in the production of UAN and are themselves fertilizer products. Table III-5 shows the amount of internally produced urea by each producer that was used in the production of UAN, that was used in the production of other products, or that was sold as urea liquor.

In the periods examined, between *** and *** percent of the U.S. producers' total internally produced urea by weight was used in the production of UAN, while between *** and *** percent of internally produced urea was used in the production of other products, and between *** and *** percent of internally produced urea was sold as urea liquor. Seven of the eight producers reported that they had used internally produced urea in the production of other products, including granular urea, feed grade urea, prill urea, SuperU,[7] and diesel exhaust fluid ("DEF").[8] With respect to how demand for urea liquor, granular urea, or DEF impacts UAN production, *** responded, "***."

Table III-6 shows the amount of internally produced ammonium nitrate by U.S. producers that was used in the production of UAN, used in the production of another product, or that was sold as is. In the periods examined, between *** and *** percent of the U.S. producers' total internally produced ammonium nitrate by weight was used in the production of UAN, while between *** and *** percent of internally produced ammonium nitrate was used in the production of other products, and between *** and *** percent of internally produced ammonium nitrate was sold as is. Four of the eight producers reported that they had used internally produced ammonium nitrate in the production of other products, including ammonium nitrate solutions (60-83 percent), industrial grade ammonium nitrate ("IGAN"), ammonium nitrate fertilizer ("ANF"), and ammonium nitrate prill. *** commented, "***." *** commented, "***."

[7] SuperU is a proprietary urea fertilizer granule product manufactured and marketed by Koch Agronomic Services that's designed to prevent nitrogen loss through volatilization and leaching.

[8] DEF is a urea solution that is used to reduce air pollution produced by diesel engines.

Table III-7 shows U.S. producers' 2020 productions of urea and ammonium nitrate by firm and the shares that each firm used of each input in the production of UAN. Of the firms that internally produce urea, the shares of the firm's urea production that went into UAN in 2020 ranged between *** and *** percent, and of the firms that internally produce ammonium nitrate, the shares of the firm's ammonium nitrate production that went into UAN production in 2020 ranged between *** and *** percent.

Table III-5
Urea: U.S. producers' production by end use and by period

Quantities in short tons gross weight; shares in percent

Item	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Used for UAN production	Quantity	***	***	***	***	***
Used for other production	Quantity	***	***	***	***	***
Sold as urea	Quantity	***	***	***	***	***
Total urea production	Quantity	***	***	***	***	***
Used for UAN production	Share	***	***	***	***	***
Used for other production	Share	***	***	***	***	***
Sold as urea	Share	***	***	***	***	***
Total urea production	Share	100.0	100.0	100.0	100.0	100.0

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

Table III-6
Ammonium nitrate: U.S. producers' production by end use and by period

Quantities in short tons gross weight; shares in percent

Item	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Used for UAN production	Quantity	***	***	***	***	***
Used for other production	Quantity	***	***	***	***	***
Sold as ammonium nitrate	Quantity	***	***	***	***	***
Total ammonium nitrate production	Quantity	***	***	***	***	***
Used for UAN production	Share	***	***	***	***	***
Used for other production	Share	***	***	***	***	***
Sold as ammonium nitrate	Share	***	***	***	***	***
Total ammonium nitrate production	Share	100.0	100.0	100.0	100.0	100.0

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

Table III-7
UAN: U.S. producers' production of UAN and its upstream inputs in 2020, by firm and by product type

Production in short tons gross weight; shares in percent

Firm	Urea production	Urea share used for UAN	Ammonium nitrate production	Ammonium nitrate share used for UAN	UAN production
CF Industries	***	***	***	***	***
CVR Partners	***	***	***	***	***
Dyno Nobel	***	***	***	***	***
Iowa Fertilizer	***	***	***	***	***
Koch	***	***	***	***	***
LSB Industries	***	***	***	***	***
PCS	***	***	***	***	***
Trademark Nitrogen	***	***	***	***	***

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

U.S. producers' U.S. shipments and exports

Table III-8 presents U.S. producers' U.S. shipments, export shipments, and total shipments. U.S. producers' U.S. shipments by quantity increased 2.9 percent from 2018-19 and then increased again by 6.9 percent from 2019-20 for a total increase of 10.0 percent from 2018-20 (***). U.S. producers' U.S. shipments by value, however, decreased irregularly by 7.3 percent from 2018-20 (U.S. shipment values increased by 10.8 percent from 2018-19 and then decreased by 16.3 percent from 2019-20). ***. U.S. producers' U.S. shipments were lower in the interim 2021 period than in the interim 2020 period by both quantity and by value, by 4.4 and 12.5 percent, respectively.

*** were the only two U.S. producers to report export shipments. *** export shipments *** percent by quantity and *** percent by value from 2018-20. The company reported its primary export markets to be ***. Comparatively, *** export shipments *** percent by quantity and *** percent by value from 2018-20. *** reported exporting to ***. Resultingly, total export shipments decreased by *** percent by quantity and *** percent by value from 2018-20.

U.S. producers' total shipments by quantity decreased *** percent from 2018-19 and then increased *** percent from 2019-20 for a total increase of *** percent from 2018-20. ***.

***. U.S. producers' total shipments by value decreased by *** percent from 2018-20 (total shipment values increased by *** percent from 2018-19 and then decreased by *** percent from 2019-20). ***. U.S. producers' total shipments were lower in the interim 2021 period than in the interim 2020 period by both quantity and by value, by *** and *** percent, respectively.

U.S. producers' U.S. shipments as a share of total shipments by quantity increased from *** percent in 2018 to *** percent in 2019 and to *** percent in 2020. Conversely, U.S. producers' export shipments as a share of total shipments decreased from *** percent in 2018 to *** percent in 2018 and to *** percent in 2020. This represented a *** percentage point swing from 2018-20. By value, U.S. producers' U.S. shipments as a share of total shipments increased from *** percent in 2018 to *** percent in 2020, and U.S. producers' export shipments as a share of total shipments decreased from *** percent in 2018 to *** percent in 2020, a *** percentage point swing. U.S. producers' U.S. shipments as a share of total shipments were lower in in the interim 2021 period than in the interim 2020 period by both quantity and by value, by *** and *** percentage points, respectively.

Table III-8
UAN: U.S. producers' shipments, by location of shipment and by period

Quantity in short tons gross weight; Value in 1,000 dollars; Unit values in dollars per short ton gross weight; Shares in percent

Item	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
U.S. shipments	Quantity	11,308,589	11,636,574	12,444,984	2,789,235	2,666,244
Export shipments	Quantity	***	***	***	***	***
Total shipments	Quantity	***	***	***	***	***
U.S. shipments	Value	1,898,534	2,102,538	1,759,704	431,326	377,371
Export shipments	Value	***	***	***	***	***
Total shipments	Value	***	***	***	***	***
U.S. shipments	Unit value	168	181	141	155	142
Export shipments	Unit value	***	***	***	***	***
Total shipments	Unit value	***	***	***	***	***
U.S. shipments	Share of quantity	***	***	***	***	***
Export shipments	Share of quantity	***	***	***	***	***
Total shipments	Share of quantity	100.0	100.0	100.0	100.0	100.0
U.S. shipments	Share of value	***	***	***	***	***
Export shipments	Share of value	***	***	***	***	***
Total shipments	Share of value	100.0	100.0	100.0	100.0	100.0

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

U.S. exports of UAN have primarily served the EU market, with minority shares directed to other global markets like Latin America. The imposition of antidumping duties by the EU on U.S. product in 2019 correlates with a collapse in U.S. exports to that market and a substantial reduction in U.S. exports in general. Table III-9 and figure III-2 show monthly U.S. exports of UAN between January 2018 and May 2021 to the EU27,[9] the United Kingdom, to all other markets, and to all markets.

Table III-9
UAN: Quantity of U.S. domestic exports, by year, by month, and by destination market

Quantity in short tons gross weight

Year	Month	EU27	United Kingdom	All other markets	All markets
2018	January	44,095	17	52,714	96,825
2018	February	98,173	---	5,394	103,567
2018	March	79,913	---	20,151	100,065
2018	April	36,574	---	4,869	41,442
2018	May	88,269	---	84,413	172,681
2018	June	134,339	---	129,358	263,697
2018	July	44,095	32,679	99,252	176,026
2018	August	78,927	---	122,508	201,434
2018	September	135,693	---	7,394	143,088
2018	October	76,791	---	41,047	117,838
2018	November	79,077	---	8,120	87,196
2018	December	41,340	---	64,119	105,459
2019	January	31,968	10	4,926	36,904
2019	February	11	---	13,903	13,914
2019	March	40,789	---	38,165	78,954
2019	April	44,095	---	44,865	88,960
2019	May	---	---	41,869	41,869
2019	June	---	---	188,782	188,782
2019	July	44,101	---	104,268	148,369
2019	August	---	---	123,306	123,306
2019	September	---	---	53,254	53,254
2019	October	44,095	---	96,760	140,854
2019	November	39,695	---	96,233	135,928
2019	December	---	---	15,192	15,192

Table continued

[9] Prior to the United Kingdom leaving in February 2021, the EU had 28 member countries. EU27 data shows exports to the EU with exports to the United Kingdom not included in the total. Exports to the United Kingdom are shown separately throughout the periods displayed.

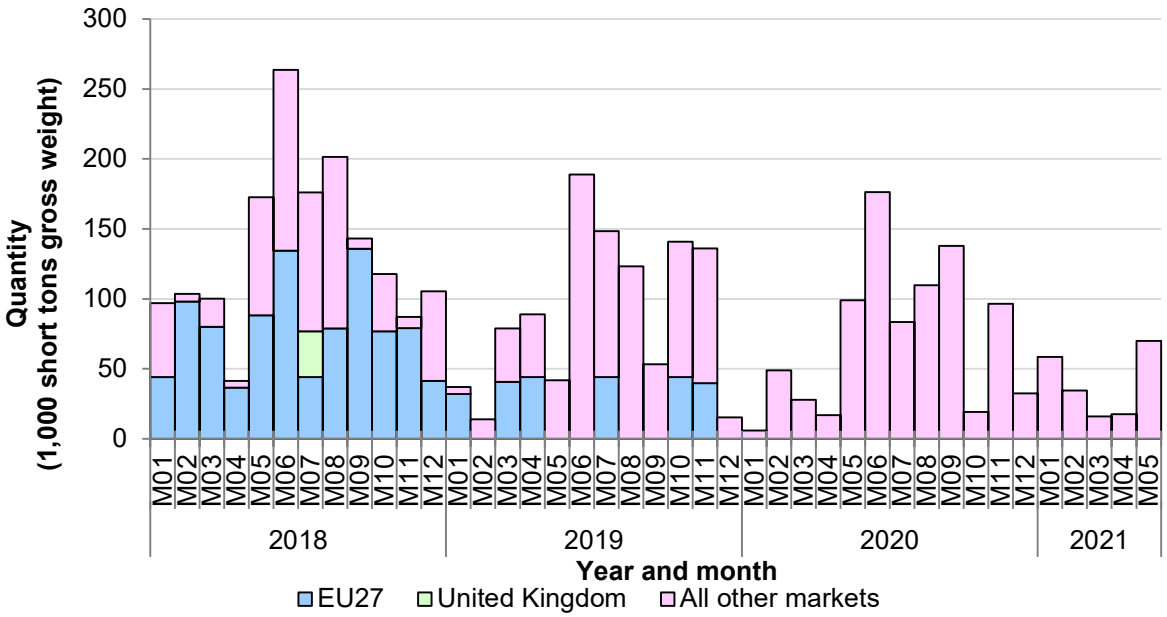
Table III-9 continued
UAN: Quantity of U.S. domestic exports, by year, by month, and by destination market

Quantity in short tons gross weight

Year	Month	EU27	United Kingdom	All other markets	All markets
2020	January	---	---	6,001	6,001
2020	February	---	1	48,929	48,930
2020	March	7	---	27,970	27,977
2020	April	---	---	16,979	16,979
2020	May	---	---	98,921	98,921
2020	June	---	---	176,314	176,314
2020	July	---	---	83,404	83,404
2020	August	---	---	109,648	109,648
2020	September	---	---	137,764	137,764
2020	October	---	---	19,112	19,112
2020	November	---	---	96,394	96,394
2020	December	---	---	32,364	32,364
2021	January	---	---	58,597	58,597
2021	February	6	8	34,384	34,398
2021	March	---	1	16,040	16,041
2021	April	10	---	17,510	17,520
2021	May	---	10	69,842	69,852

Source: Official U.S. export statistics for HTS statistical reporting number 3102.80.0000, accessed on August 3, 2021.

Figure III-2
UAN: U.S. domestic exports, by year, by month, and by destination market



Source: Official U.S. export statistics of the U.S. Department of Commerce Census Bureau using schedule B number 3102.80.0000, accessed on August 3, 2021.

Table III-10 presents U.S. producers' U.S. shipments by whether they were classified as commercial U.S. shipments, internal consumption, or transfer to related firms. *** was the only firm to report internal consumption, and ***. Three firms (***) reported transfers to related firms. *** reported all of its U.S. shipments as transfers to its related firm.[10] *** reported transfers to its related firm *** comprised between *** and *** percent of its total U.S. shipments by quantity in the periods examined. *** transfers comprised between *** percent and *** percent of the company's total U.S. shipments by quantity in the periods examined.[11]

The firms' transfers constituted between *** and *** percent of the share of total U.S. shipments by quantity and between *** and *** percent of the share of total U.S. shipments by value. In total, commercial U.S. shipments comprised between *** and *** percent of total U.S. shipments by quantity and between *** and *** percent of total U.S. shipments by value.

[10] ***

[11] ***

Table III-10
UAN: U.S. producers' U.S. shipments, by shipment type and by period

Quantity in short tons gross weight; Value in 1,000 dollars; Unit values in dollars per short ton gross weight

Item	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Commercial U.S. shipments	Quantity	***	***	***	***	***
Internal consumption	Quantity	***	***	***	***	***
Transfers to related firms	Quantity	***	***	***	***	***
U.S. shipments	Quantity	11,308,589	11,636,574	12,444,984	2,789,235	2,666,244
Commercial U.S. shipments	Value	***	***	***	***	***
Internal consumption	Value	***	***	***	***	***
Transfers to related firms	Value	***	***	***	***	***
U.S. shipments	Value	1,898,534	2,102,538	1,759,704	431,326	377,371
Commercial U.S. shipments	Unit value	***	***	***	***	***
Internal consumption	Unit value	***	***	***	***	***
Transfers to related firms	Unit value	***	***	***	***	***
U.S. shipments	Unit value	168	181	141	155	142
Commercial U.S. shipments	Share of quantity	***	***	***	***	***
Internal consumption	Share of quantity	***	***	***	***	***
Transfers to related firms	Share of quantity	***	***	***	***	***
U.S. shipments	Share of quantity	100.0	100.0	100.0	100.0	100.0
Commercial U.S. shipments	Share of value	***	***	***	***	***
Internal consumption	Share of value	***	***	***	***	***
Transfers to related firms	Share of value	***	***	***	***	***
U.S. shipments	Share of value	100.0	100.0	100.0	100.0	100.0

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

U.S. producers' inventories and storage capacity

Table III-11 presents U.S. producers' end-of-period storage capacities and inventories and the ratio of these inventories to U.S. producers' production, U.S. shipments, and total shipments. The U.S. industry's ending inventories by quantity decreased irregularly from 2018-20: end-of-period inventories increased *** percent from 2018 to 2019 and then decreased *** percent from 2019 to 2020 for a total decrease of *** percent from 2018-20. ***. End-of-period inventories for the 2021 interim period were *** percent lower as compared to the end-of-period inventories for the 2020 interim period.

U.S. producers' total reported end-of-period storage capacity increased 3.4 percent from 2018-20.[12] *** reported increased storage capacities in 2020 as compared to 2018. Total end-of-period inventories increased 20.6 percent from 2018-19 and then decreased 21.7 percent from 2019-20 for a 5.6 percent decrease from 2018-20. End-of-period storage capacity utilization increased from 37.2 percent in 2018 to 43.5 percent in 2019 and then decreased to 34.0 percent in 2020, a 3.2 percentage point decrease from 2018-20.[13] The U.S. industry's ratio of inventories to U.S. production, U.S. shipments, and total shipments all decreased irregularly from 2018-20: increasing by 1.5, 1.4, and *** percentage points from 2018-19, respectively, and then decreasing by 2.1, 2.6, and *** percentage points from 2019-20, respectively (for total decreases of 0.5, 1.2, and *** percentage points, respectively).

[12] U.S. producers also provided the locations on their storage facilities. See appendix F for a list of storage locations by firm.

[13] In comparing calendar year and interim year inventory levels, it should be noted that UAN is a product impacted by seasonality. In most parts of the country, farmers apply UAN primarily during a four- to six-week window of the year, starting in April or May. Conference transcript, p. 24 (Bilby).

Table III-11
UAN: U.S. producers' storage capacity, inventories, and inventory ratios, by period

Quantity in short tons gross weight; capacity utilization and inventory ratios in percent

Item	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
End-of-period storage capacity	2,550,855	2,631,494	2,638,032	2,653,494	2,638,888
End-of-period storage capacity utilization	37.2	43.5	34.0	50.9	44.2
End-of-period inventory quantity	948,976	1,144,431	895,716	1,351,263	1,167,150
Inventory ratio to U.S. production	7.4	9.0	6.9	11.1	9.7
Inventory ratio to U.S. shipments	8.4	9.8	7.2	12.1	10.9
Inventory ratio to total shipments	***	***	***	***	***

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

U.S. producers' imports

U.S. producers' imports of UAN are presented in tables III-12 and III-13 and the companies' reasons for importing are presented in table III-14. *** reported having imported UAN from a nonsubject source (***) during the period of investigation through its ***. *** imports from *** represented between *** and *** percent of its U.S. production in the periods examined. The company noted, "***."

*** reported imports from *** and *** during the period of investigation. It reported imports from foreign producer *** in ***, and its imports from *** represented between *** and *** percent of its U.S. production in the periods examined. It also reported imports from its ***. *** imports from *** represented between *** and *** percent of its U.S. production in the periods examined. The company noted, "***."

Table III-12
UAN: *'s U.S. production, U.S. imports, and ratio of imports to production, by period**

Quantity in short tons gross weight; ratios are ratios of imports to U.S. production in percent

Item	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
U.S. production	Quantity	***	***	***	***	***
Imports from nonsubject sources (***)	Quantity	***	***	***	***	***
Imports from nonsubject sources (***) to U.S. production	Ratio	***	***	***	***	***

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

Table III-13
UAN: *'s U.S. production, U.S. imports, and ratio of imports to production, by period**

Item	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
U.S. production	Quantity	***	***	***	***	***
Imports from subject sources (***)	Quantity	***	***	***	***	***
Imports from nonsubject sources (***)	Quantity	***	***	***	***	***
Imports from subject sources (***) to U.S. production	Ratio	***	***	***	***	***
Imports from nonsubject sources (***) to U.S. production	Ratio	***	***	***	***	***

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

Table III-14
UAN: U.S. producers' reasons for imports by firm

Item	Firm's narrative response
***'s reason for importing	***
***'s reason for importing	***

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

U.S. employment, wages, and productivity

Table III-15 shows U.S. producers' employment-related data. Between 2018 and 2020, all employment-related indicators increased, except for hours worked per production and related worker ("PRW") and productivity as measured in dollars per short ton gross weight.

Average PRWs increased by 3.8 percent from 2018-20. In particular, *** PRWs increased by *** percent, and *** PRWs increased by *** percent. Average PRWs were also 7.3 percent higher in interim 2021 as compared to interim 2020. Total hours worked increased irregularly from 2018-20: total hours increased by 4.0 percent from 2018-19 and then decreased by 0.7 percent from 2019-20 for a total increase of 3.3 percent from 2018-20. Total hours worked also increased by 5.3 percent in interim 2021 as compared to interim 2020. Wages paid increased 13.5 percent from 2018-20 and hourly wages increased by 9.9 percent across the period. Unit labor costs increased 11.5 percent from 2018-20 and increased 8.7 percent in interim 2021 as compared to interim 2020.

Hours worked per PRW decreased 0.5 percent from 2018-20 and were also 1.9 percent lower in interim 2021 as compared to interim 2020. Productivity decreased 1.5 percent from 2018-20 and was also 5.6 percent lower in interim 2021 as compared to interim 2020.

Table III-15
UAN: U.S. producers' employment related data, by period

Item	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Production and related workers (PRWs) (number)	1,381	1,417	1,434	1,317	1,413
Total hours worked (1,000 hours)	2,962	3,080	3,059	721	759
Hours worked per PRW (hours)	2,145	2,174	2,133	547	537
Wages paid ($1,000)	162,220	172,621	184,064	44,545	48,120
Hourly wages (dollars per hour)	$54.77	$56.05	$60.17	$61.78	$63.40
Productivity (short tons gross weight per hour)	4,308	4,139	4,244	4,206	3,969
Unit labor costs (dollars per short ton gross weight)	$12.71	$13.54	$14.18	$14.69	$15.97

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

Captive consumption

Section 771(7)(C)(iv) of the Act states that–[14]

> *If domestic producers internally transfer significant production of the domestic like product for the production of a downstream article and sell significant production of the domestic like product in the merchant market, and the Commission finds that–*
>
> *(I) the domestic like product produced that is internally transferred for processing into that downstream article does not enter the merchant market for the domestic like product,*
>
> *(II) the domestic like product is the predominant material input in the production of that downstream article, and*
>
> *then the Commission, in determining market share and the factors affecting financial performance . . ., shall focus primarily on the merchant market for the domestic like product.*

Transfers and sales

As reported in table III-10 above, internal consumption accounted for approximately *** of U.S. producers' U.S. shipments of UAN in each period examined. *** was the only firm to report internal consumption. Transfers to related firms accounted for between *** and *** percent of U.S. producers' U.S. shipments of UAN in the periods examined. *** reported transfers to related firms.

First statutory criterion in captive consumption

The first requirement for application of the captive consumption provision is that the domestic like product that is internally transferred for processing into that downstream article not enter the merchant market for the domestic like product. *** did not report diverting UAN intended for internal consumption to the merchant market.

Second statutory criterion in captive consumption

The second criterion of the captive consumption provision concerns whether the domestic like product is the predominant material input in the production of the downstream article that is captively produced. As described by ***, "***

[14] Amended by PL 114-27 (as signed, June 29, 2015), Trade Preferences Extension Act of 2015.

***”.[15]

[15] Email with attachments from *** to USITC staff, July 23, 2021.

Part IV: U.S. imports, apparent U.S. consumption, and market shares

U.S. importers

The Commission issued importer questionnaires to 15 firms believed to be importers of UAN, as well as to all U.S. producers of UAN.[1] Usable questionnaire responses were received from 13 companies, representing *** U.S. imports from Russia, *** percent of U.S. imports from Trinidad and Tobago, and *** percent of U.S. imports from nonsubject sources in 2020 under HTS statistical reporting number 3102.80.0000. Table IV-1 lists all responding U.S. importers of UAN from Russia, Trinidad and Tobago, and other sources, their locations, and their shares of U.S. imports, in 2020.

Table IV-1
UAN: U.S. importers, their headquarters, and share of reported U.S. imports within source in 2020, by firm

Shares in percent

Firm	Headquarters	Russia	Trinidad and Tobago	Subject sources	Nonsubject sources	All import sources
Acron USA	Aventura, FL	***	***	***	***	***
Agrico Canada	Mississauga, ON	***	***	***	***	***
Agrium PCS	Deerfield, IL	***	***	***	***	***
EuroChem North America	Tulsa, OK	***	***	***	***	***
Gavilon	Savannah, GA	***	***	***	***	***
Helm	Tampa, FL	***	***	***	***	***
IRM	Philadelphia, PA	***	***	***	***	***
J.R. Simplot	Boise, ID	***	***	***	***	***
Koch	Wichita, KS	***	***	***	***	***
Nutrien	Loveland, CO	***	***	***	***	***
Terra International	Courtright, ON	***	***	***	***	***
The Andersons	Maumee, OH	***	***	***	***	***
Yara	Tampa, FL	***	***	***	***	***
All firms	Various	100.0	100.0	100.0	100.0	100.0

Source: Compiled from data submitted in response to Commission questionnaires.
Note: Data shown as "---" represents an item for which no information was reported, whether that be a true zero, null, or non-numeric response.

[1] The Commission issued questionnaires to those firms identified in the petition, along with firms that, based on a review of data from third-party sources, may have accounted for more than one percent of total imports under HTS statistical reporting number 3102.80.0000 in 2020.

Three firms, *** certified not having imported any UAN since January 1, 2018.

Firms were asked whether the COVID-19 pandemic or related government actions taken to contain the spread of the COVID-19 virus resulted in changes to the firm's supply chain arrangements, production, employment, and shipments related to UAN. Four of thirteen responding U.S. importers (***) indicated that there had been changes.[2] *** reported that because of COVID-19 and in light of an unstable and changing environment, end consumers on the farming side made purchasing decisions more cautiously and conservatively than they had previously. *** noted that COVID-19 impacted numerous sectors of the U.S. economy, including the downstream agriculture sector businesses and that this major market event caused ripple effects across the industry. *** indicated that in response to the COVID-19 pandemic, its firm had transitioned to working remotely. *** reported, ***, that the COVID-19 pandemic did not meaningfully impact its UAN operations, although it did implement additional safety measures to protect the health of its employees.

Additionally, firms were asked about whether there was an impact on the U.S. UAN market as a result of the European Union's imposition of antidumping duties on UAN from Russia, Trinidad and Tobago, and the United States in 2019. Ten of twelve responding U.S. importers (***) indicated that the U.S. UAN market had been impacted by the EU's antidumping orders.[3] Generally, these U.S. importers reported that following the EU's imposition of antidumping duties in 2019, U.S. exports of UAN previously destined for the EU declined significantly and were redirected to the U.S. market.

[2] See table D-4 in appendix D for full narratives from each responding U.S. importer regarding the impacts of the COVID-19 pandemic.

[3] See table D-5 in appendix D for full narratives from each responding U.S. importer regarding the impacts of the EU antidumping duties on the U.S. UAN market.

U.S. imports

Table IV-2 and figure IV-1 present data for U.S. imports of UAN from Russia, Trinidad and Tobago, and all other sources based on official U.S. import statistics under HTS statistical reporting number 3102.80.0000. U.S. imports, by quantity, from subject sources increased by 32.7 percent from 2018 to 2019, but then decreased by 17.6 percent from 2019 to 2020, ending 9.3 percent higher in 2020 than in 2018. The increase in subject imports during 2018-19 corresponds with the European Union's imposition of antidumping duties on imports of UAN from Russia, Trinidad and Tobago, and the United States in 2019. U.S. imports, by quantity, from subject sources were 21.0 percent lower in January-March 2021 than in January-March 2020. During 2018-20, the quantity of U.S. imports of UAN from Russia fluctuated, increasing by 39.1 percent from 2018 to 2019, but then decreasing by 30.5 percent from 2019 to 2020, ending 3.3 percent lower in 2020 than in 2018. In contrast, the quantity of U.S. imports from Trinidad and Tobago increased by 22.5 percent from 2018 to 2019 and by 5.7 percent from 2019 to 2020, ending 29.4 percent higher in 2020 than in 2018. U.S. imports, by quantity, of UAN from Russia and Trinidad and Tobago were 6.7 percent and 36.6 percent lower, respectively in January-March 2021 compared with January-March 2020. U.S. imports, by quantity, from nonsubject sources decreased by 20.8 percent from 2018 to 2019 and by 3.5 percent from 2019 to 2020, decreasing overall by 23.6 percent during 2018-20. These imports were 58.4 percent higher in January-March 2021 than in January-March 2020.

By value, U.S. imports from subject sources fluctuated but decreased by 12.7 percent during 2018-20, increasing by 30.2 percent from 2018 to 2019 before falling by 33.0 percent in 2020. U.S. imports, by value, from subject sources were 9.9 percent lower in January-March 2021 compared to January-March 2020. During 2018-20, the value of U.S. imports from Russia fluctuated but decreased, increasing by 37.2 percent from 2018 to 2019, but then falling by 44.0 percent in 2020, overall ending 23.1 percent lower in 2020 than in 2018. U.S. imports, by value, from Russia were 9.4 percent higher in January-March 2021 compared with January-March 2020. In contrast, the value of U.S. imports from Trinidad and Tobago fluctuated but increased overall during 2018-20, increasing by 18.5 percent from 2018 to 2019, but then falling by 12.0 percent in 2020, ending 4.3 percent higher in 2020 than in 2018. U.S. imports, by value, from Trinidad and Tobago were 31.9 percent lower in January-March 2021 compared with January-March 2020. U.S. imports, by value, from nonsubject sources decreased by 17.0 percent during 2018-19 and by 15.3 percent from 2019-20, ending 29.8 percent lower in 2020 than in 2018. By value, U.S. imports from nonsubject sources were 74.3 percent higher during January-March 2021 than during January-March 2020.

The unit value of U.S. imports from Russia decreased from $173 per short ton gross weight in 2018 to $171 per short ton gross weight in 2019 and to $138 per short ton gross weight in 2020, amounting to a 20.4 percent decrease during 2018-20. Similarly, the unit value of U.S. imports from Trinidad and Tobago decreased from $167 per short ton gross weight in 2018 to $162 per short ton gross weight in 2019 and to $135 per short ton gross weight in 2020, equaling a decrease of 19.4 percent from 2018 to 2020. In contrast, the unit value of U.S. imports from nonsubject sources increased from $203 per short ton gross weight in 2018 to $212 per short ton gross weight in 2019, but then decreased to $186 per short ton gross weight in 2020, amounting to a decrease of 8.0 percent during 2018-20. Unit values for imports from Russia, Trinidad and Tobago, and nonsubject sources were all higher in January-March 2021 than in January-March 2020.

U.S. imports of UAN from subject sources, by both quantity and value, accounted for the majority of total imports during the period for which data were collected. The share of imports by quantity from Russia decreased irregularly (increasing from 46.5 percent in 2018 to 54.0 percent in 2019 before decreasing to 44.4 percent in 2020) during 2018-20, while the share of imports by quantity from Trinidad and Tobago increased from 29.1 percent in 2018 to 37.2 percent in 2020. The share of imports by quantity from Russia was higher in January-March 2021 (44.2 percent) compared with January-March 2020 (43.6 percent), while the share of imports by quantity from Trinidad and Tobago was lower (27.5 percent in January-March 2021 compared with 39.9 percent in January-March 2020). The share of imports by value from Russia decreased irregularly (increasing from 45.0 percent in 2018 to 52.8 percent in 2019 before falling to 42.0 percent in 2020) during 2018-20, while the share of imports by value from Trinidad and Tobago increased from 27.3 percent in 2018 to 34.5 percent in 2020. By value, the share of imports from Russia was slightly higher in January-March 2021 (41.6 percent) than in January-March 2020 (41.4 percent). In contrast, the share of imports, by value, from Trinidad and Tobago was lower in January-March 2021 (22.7 percent) compared with January-March 2020 (36.2 percent). The share of imports, by quantity and value, from nonsubject sources decreased irregularly by 6.0 percentage points and 4.1 percentage points, respectively from 2018 to 2020. By quantity, the share of imports from nonsubject sources was 28.3 percent in January-March 2021 compared with 16.5 percent in January-March 2020. By value, the share of imports from nonsubject sources was 35.7 percent in January-March 2021 compared with 22.3 percent in January-March 2020.

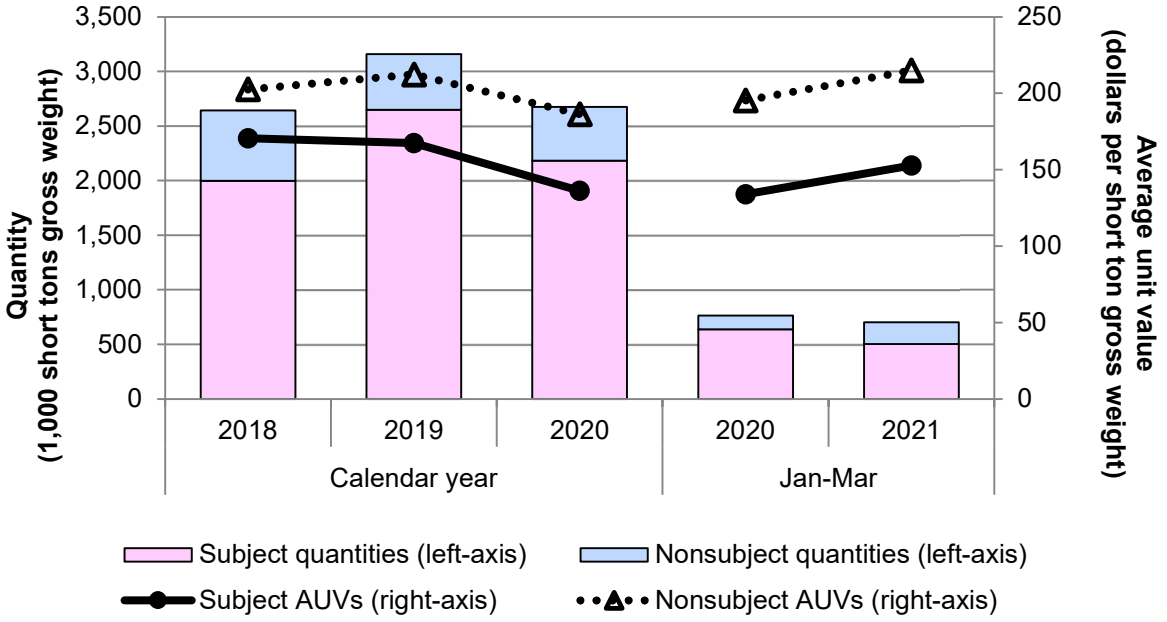
Table IV-2
UAN: U.S. imports, by source and by period

Quantity in short tons gross weight; Value in 1,000 dollars; Unit value in dollars per short ton gross weight; Share of quantity is the share of U.S. imports by quantity in percent; Share of value is the share of U.S. imports by value in percent; Ratio are U.S. imports to production in percent

Source	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Russia	Quantity	1,227,254	1,706,932	1,186,296	332,280	309,943
Trinidad and Tobago	Quantity	769,643	942,579	996,137	304,134	192,696
Subject sources	Quantity	1,996,896	2,649,511	2,182,433	636,414	502,640
Nonsubject sources	Quantity	644,375	510,366	492,267	125,424	198,613
All import sources	Quantity	2,641,271	3,159,877	2,674,700	761,838	701,253
Russia	Value	212,205	291,249	163,225	45,439	49,702
Trinidad and Tobago	Value	128,533	152,310	134,105	39,769	27,097
Subject sources	Value	340,738	443,559	297,330	85,208	76,799
Nonsubject sources	Value	130,591	108,367	91,740	24,507	42,705
All import sources	Value	471,329	551,926	389,069	109,715	119,504
Russia	Unit value	173	171	138	137	160
Trinidad and Tobago	Unit value	167	162	135	131	141
Subject sources	Unit value	171	167	136	134	153
Nonsubject sources	Unit value	203	212	186	195	215
All import sources	Unit value	178	175	145	144	170
Russia	Share of quantity	46.5	54.0	44.4	43.6	44.2
Trinidad and Tobago	Share of quantity	29.1	29.8	37.2	39.9	27.5
Subject sources	Share of quantity	75.6	83.8	81.6	83.5	71.7
Nonsubject sources	Share of quantity	24.4	16.2	18.4	16.5	28.3
All import sources	Share of quantity	100.0	100.0	100.0	100.0	100.0
Russia	Share of value	45.0	52.8	42.0	41.4	41.6
Trinidad and Tobago	Share of value	27.3	27.6	34.5	36.2	22.7
Subject sources	Share of value	72.3	80.4	76.4	77.7	64.3
Nonsubject sources	Share of value	27.7	19.6	23.6	22.3	35.7
All import sources	Share of value	100.0	100.0	100.0	100.0	100.0
Russia	Ratio	9.6	13.4	9.1	11.0	10.3
Trinidad and Tobago	Ratio	6.0	7.4	7.7	10.0	6.4
Subject sources	Ratio	15.6	20.8	16.8	21.0	16.7
Nonsubject sources	Ratio	5.1	4.0	3.8	4.1	6.6
All import sources	Ratio	20.7	24.8	20.6	25.1	23.3

Source: Compiled from official U.S. imports statistics of the U.S. Department of Commerce Census Bureau using HTS statistical reporting number 3102.80.0000, accessed July 9, 2021. Imports are based on the imports for consumption data series. Value data reflect landed duty-paid values.

Figure IV-1
UAN: U.S. import quantities and average unit values, by source and by period



Source: Compiled from official U.S. imports statistics of the U.S. Department of Commerce Census Bureau using HTS statistical reporting number 3102.80.0000, accessed July 9, 2021. Imports are based on the imports for consumption data series.

Negligibility

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.[4] Negligible imports are generally defined in the Act, 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

[4] 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)).

imports from such countries are deemed not to be negligible.[5] By quantity, U.S. imports from Russia and Trinidad and Tobago accounted for 39.7 percent and 36.6 percent, respectively, of total U.S. imports of UAN in the twelve-month period preceding the filing of the petition (from June 2020 through May 2021). Table IV-3 presents the shares of total U.S. imports, by quantity, accounted for by Russia, Trinidad and Tobago, and nonsubject sources during June 2020 through May 2021.

Table IV-3
UAN: U.S. imports in the twelve-month period preceding the filing of the petition (June 2020 through May 2021), by source

Quantity in short tons gross weight; Share of quantity is the share of total imports by quantity in percent

Source of imports	Quantity	Share of quantity
Russia	1,023,019	39.7
Trinidad and Tobago	944,762	36.6
Subject sources	1,967,781	76.3
Nonsubject sources	611,700	23.7
All import sources	2,579,481	100.0

Source: Compiled from official U.S. imports statistics of the U.S. Department of Commerce using HTS statistical reporting number 3102.80.0000, accessed July 9, 2021. Imports are based on the imports for consumption data series.

Cumulation considerations

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

[5] Section 771 (24) of the Act (19 U.S.C § 1677(24)).

Fungibility

Table IV-4 and figure IV-2 present data for U.S. shipments of UAN by nitrogen concentration and source in 2020 based on responses to the Commission's U.S. importer and U.S. producer questionnaires. The vast majority of U.S. producers' U.S. shipments (*** percent), U.S. importers' shipments of imports from Russia (*** percent), and U.S. importers' shipments of imports from Trinidad and Tobago (*** percent) were UAN with 32 percent nitrogen concentration.[6]

Table IV-4
UAN: Quantity of U.S. producers' and U.S. importers' U.S. shipments in 2020, by nitrogen concentration and by source

Quantity in short tons gross weight

Source	32 percent	30 percent	28 percent	Other	All nitrogen concentrations
U.S. producers	***	***	***	***	***
Russia	***	***	***	***	***
Trinidad and Tobago	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
All sources	***	***	***	***	***

Table continued.

Table IV-4 Continued
UAN: Share of U.S. producers' and U.S. importers' U.S. shipments in 2020 within source, by nitrogen concentration

Share across in percent

Source	32 percent	30 percent	28 percent	Other	All nitrogen concentrations
U.S. producers	***	***	***	***	***
Russia	***	***	***	***	***
Trinidad and Tobago	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
All sources	***	***	***	***	***

Table continued on next page.

[6] See appendix E for tables containing more detailed breakdowns of U.S. producers' and U.S. importers' U.S. shipments of UAN by nitrogen concentration.

Table IV-4 Continued
UAN: Share of U.S. producers' and U.S. importers' U.S. shipments in 2020 within nitrogen concentration, by source

Share down in percent

Source	32 percent	30 percent	28 percent	Other	All nitrogen concentrations
U.S. producers	***	***	***	***	***
Russia	***	***	***	***	***
Trinidad and Tobago	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
All sources	100.0	100.0	100.0	100.0	100.0

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

Note: Data shown as "---" represents an item for which no information was reported, whether that be a true zero, null, or non-numeric response.

Figure IV-2
UAN: Share of U.S. producers' and U.S. importers' U.S. shipments in 2020 within source, by nitrogen concentration

* * * * * * *

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

Geographical markets

According to official U.S. import statistics, U.S. imports of UAN from Russia and nonsubject sources entered through all four borders of entry during 2020, while imports from Trinidad and Tobago entered through all borders of entry except for the North. Consistent with their geographic locations relative to the United States, the majority of U.S. imports from Russia entered through the East and the majority of U.S. imports from Trinidad and Tobago entered through the South. The vast majority of U.S. imports from nonsubject sources (primarily Canada) entered through the North. Combined subject imports accounted for 98.9 percent, 97.3 percent, and 92.6 percent of total imports of UAN that entered through the East, South, and West, respectively, during 2020, while nonsubject imports accounted for 96.8 percent of total imports of UAN that entered through the North.

Table IV-5
UAN: Quantity of U.S. imports in 2020, by border of entry and by source

Quantity in short tons gross weight

Source	East	North	South	West	All borders
Russia	657,784	13,812	200,907	313,793	1,186,296
Trinidad and Tobago	91,147	---	634,943	270,046	996,137
Subject sources	748,931	13,812	835,851	583,839	2,182,433
Nonsubject sources	8,266	414,170	23,149	46,682	492,267
All import sources	757,197	427,982	858,999	630,521	2,674,700

Table continued.

Table IV-5 Continued
UAN: Share of quantity of U.S. imports in 2020 within source, by border of entry region

Share across in percent

Source	East	North	South	West	All borders
Russia	55.4	1.2	16.9	26.5	100.0
Trinidad and Tobago	9.2	---	63.7	27.1	100.0
Subject sources	34.3	0.6	38.3	26.8	100.0
Nonsubject sources	1.7	84.1	4.7	9.5	100.0
All import sources	28.3	16.0	32.1	23.6	100.0

Table continued on next page.

Table IV-5 Continued
UAN: Share of quantity of U.S. imports in 2020 within border of entry, by source

Share down in percent

Source	East	North	South	West	All borders
Russia	86.9	3.2	23.4	49.8	44.4
Trinidad and Tobago	12.0	---	73.9	42.8	37.2
Subject sources	98.9	3.2	97.3	92.6	81.6
Nonsubject sources	1.1	96.8	2.7	7.4	18.4
All import sources	100.0	100.0	100.0	100.0	100.0

Source: Official U.S. import statistics for HTS statistical reporting number 3102.80.0000, accessed on July 9, 2021.

Note: Data shown as "---" represents an item for which no information was reported, whether that be a true zero, null, or non-numeric response.

Presence in the market

Table IV-6, figure IV-3, and figure IV-4 present monthly data on U.S. imports of UAN, by source, during January 2018 through May 2021. Imports of UAN from Russia were present in each month during January 2018 through May 2021, except for September 2018. During the same period, imports of UAN from Trinidad and Tobago were present in each month except for October 2019.

Table IV-6
UAN: Quantity of U.S. imports, by year, by month, and by source

Quantity in short tons gross weight

Year	Month	Russia	Trinidad and Tobago	Subject sources	Nonsubject sources	All import sources
2018	January	137,927	39,371	177,298	50,921	228,219
2018	February	52,285	35,825	88,110	61,287	149,397
2018	March	124,730	75,785	200,515	99,475	299,990
2018	April	132,091	39,981	172,072	59,239	231,311
2018	May	220,506	83,415	303,922	66,812	370,734
2018	June	69,805	84,105	153,910	69,858	223,768
2018	July	84,006	60,109	144,115	32,453	176,568
2018	August	121,427	96,493	217,920	28,534	246,455
2018	September	---	60,216	60,216	35,795	96,011
2018	October	120,921	87,119	208,040	29,008	237,049
2018	November	843	72,435	73,278	42,961	116,240
2018	December	162,712	34,788	197,500	68,029	265,529
2019	January	182,112	68,915	251,027	59,164	310,192
2019	February	169,808	85,157	254,965	36,822	291,786
2019	March	182,835	155,530	338,364	68,801	407,165
2019	April	124,350	65,700	190,049	38,614	228,663
2019	May	186,296	133,948	320,245	43,278	363,522
2019	June	82,587	44	82,631	38,026	120,658
2019	July	131,048	149,317	280,365	54,175	334,540
2019	August	50,194	60,100	110,294	51,898	162,192
2019	September	125,214	70,625	195,839	33,613	229,452
2019	October	205,000	---	205,000	22,505	227,505
2019	November	192,607	98,809	291,416	29,917	321,333
2019	December	74,882	54,433	129,315	33,553	162,869

Table continued on next page.

Table IV-6 Continued
UAN: Quantity of U.S. imports, by year, by month, and by source

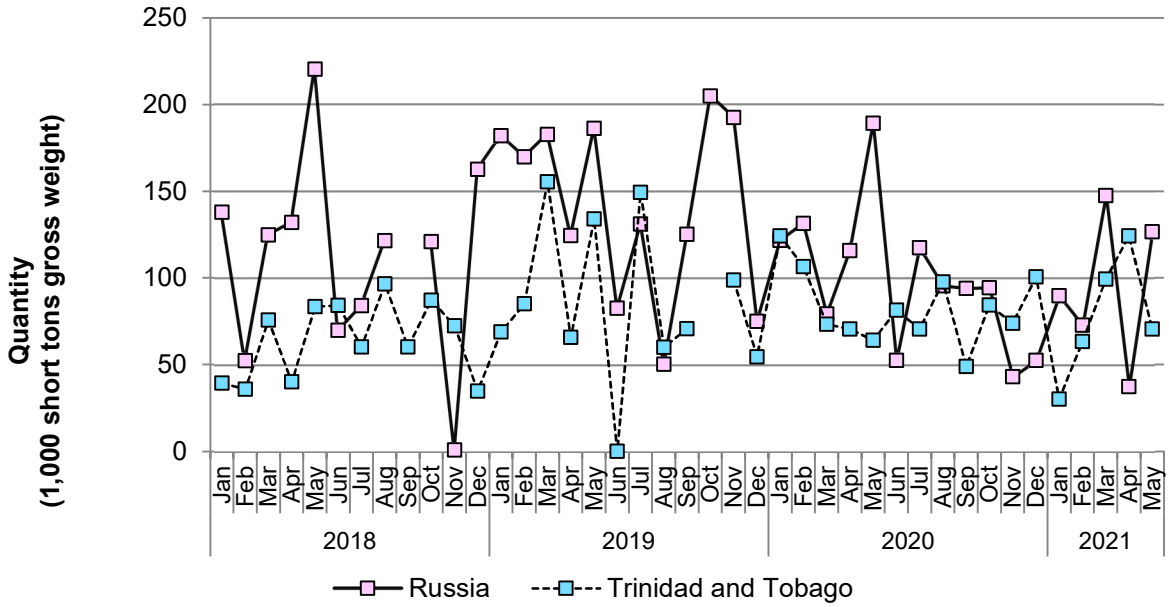
Quantity in short tons gross weight

Year	Month	Russia	Trinidad and Tobago	Subject sources	Nonsubject sources	All import sources
2020	January	121,636	124,262	245,898	40,323	286,221
2020	February	131,480	106,545	238,025	42,458	280,483
2020	March	79,164	73,327	152,490	42,644	195,134
2020	April	115,770	70,566	186,336	58,434	244,769
2020	May	189,248	64,069	253,317	70,011	323,328
2020	June	52,490	81,482	133,972	45,729	179,701
2020	July	117,403	70,579	187,982	17,812	205,794
2020	August	95,419	97,622	193,041	10,030	203,071
2020	September	93,942	48,862	142,804	37,780	180,584
2020	October	94,302	84,413	178,714	36,354	215,069
2020	November	43,051	73,868	116,919	47,183	164,102
2020	December	52,392	100,543	152,935	43,509	196,444
2021	January	89,800	30,093	119,893	54,099	173,992
2021	February	72,711	63,355	136,066	40,347	176,413
2021	March	147,433	99,248	246,681	104,167	350,848
2021	April	37,361	124,235	161,596	67,798	229,393
2021	May	126,716	70,463	197,179	106,891	304,070

Source: Official U.S. import statistics for HTS statistical reporting number 3102.80.0000, accessed on July 9, 2021.

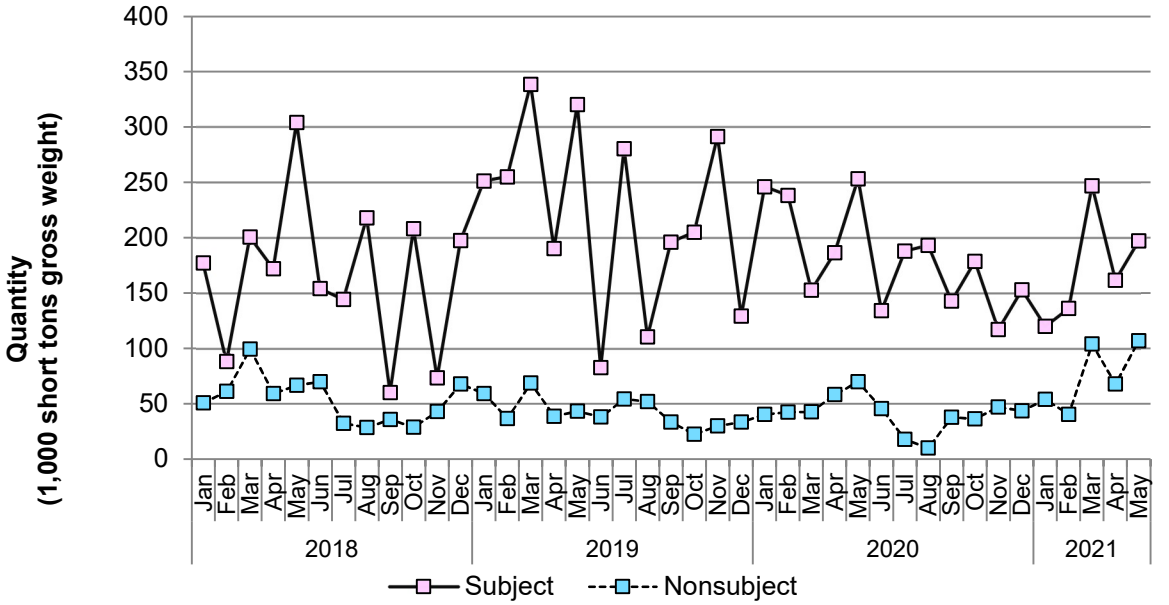
Note: Data shown as "---" represents an item for which no information was reported, whether that be a true zero, null, or non-numeric response.

Figure IV-3
UAN: U.S. imports from individual subject sources, by month and by source



Source: Official U.S. import statistics for HTS statistical reporting number 3102.80.0000, accessed on July 9, 2021.

Figure IV-4
UAN: U.S. imports from aggregated subject and nonsubject sources, by month and by source



Source: Official U.S. import statistics for HTS statistical reporting number 3102.80.0000, accessed on July 9, 2021.

Apparent U.S. consumption

Table IV-7 and figure IV-5 present data on apparent U.S. consumption of UAN. Apparent U.S. consumption of UAN, by quantity, increased from 13.9 million short tons gross weight in 2018 to 14.8 million short tons gross weight in 2019 and to 15.1 million short tons gross weight in 2020, amounting to an overall increase of 8.4 percent during 2018-20. Apparent U.S. consumption, by quantity, of U.S. producers' U.S. shipments and imports from Trinidad and Tobago was higher in 2020 than in 2018, while apparent U.S. consumption of imports from Russia and nonsubject sources was lower. Apparent U.S. consumption of UAN, by quantity, was 5.2 percent lower during January-March 2021 (3.4 million short tons gross weight) compared to January-March 2020 (3.6 million short tons gross weight).

Apparent U.S. consumption of UAN, by value, increased from $2.4 billion in 2018 to $2.7 billion in 2019, but then decreased to $2.1 billion in 2020, representing an overall decrease of 9.3 percent during 2018-20. Apparent U.S. consumption of UAN, by value, of U.S. producers' U.S. shipments, imports from Russia, and imports from nonsubject sources was lower in 2020 than in 2018, while apparent U.S. consumption of imports from Trinidad and Tobago was higher. Apparent U.S. consumption of UAN, by value, was 8.2 percent lower during January-March 2021 ($496.9 million) compared to January-March 2020 ($541.0 million).

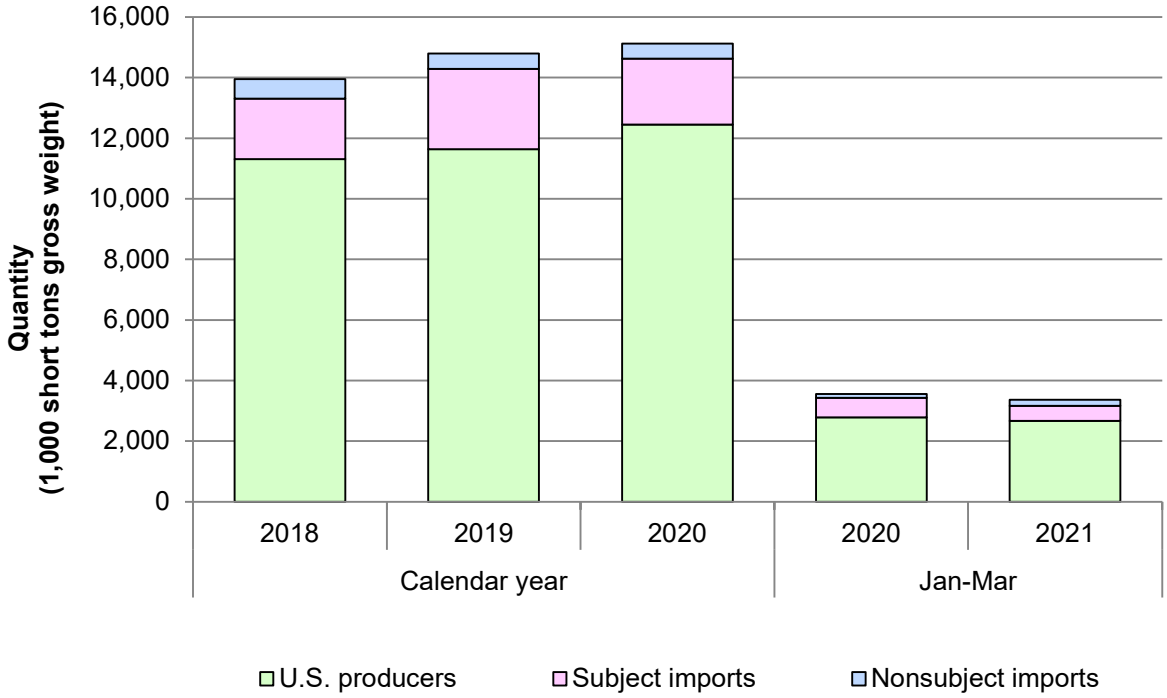
Table IV-7
UAN: Apparent U.S. consumption, by source and by period

Quantity in short tons gross weight; value in 1,000 dollars

Source	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
U.S. producers	Quantity	11,308,589	11,636,574	12,444,984	2,789,235	2,666,244
Russia	Quantity	1,227,254	1,706,932	1,186,296	332,280	309,943
Trinidad and Tobago	Quantity	769,643	942,579	996,137	304,134	192,696
Subject sources	Quantity	1,996,896	2,649,511	2,182,433	636,414	502,640
Nonsubject sources	Quantity	644,375	510,366	492,267	125,424	198,613
All import sources	Quantity	2,641,271	3,159,877	2,674,700	761,838	701,253
All sources	Quantity	13,949,860	14,796,451	15,119,684	3,551,073	3,367,497
U.S. producers	Value	1,898,534	2,102,728	1,759,704	431,326	377,371
Russia	Value	212,205	291,249	163,225	45,439	49,702
Trinidad and Tobago	Value	128,533	152,310	134,105	39,769	27,097
Subject sources	Value	340,738	443,559	297,330	85,208	76,799
Nonsubject sources	Value	130,591	108,367	91,740	24,507	42,705
All import sources	Value	471,329	551,926	389,069	109,715	119,504
All sources	Value	2,369,863	2,654,654	2,148,773	541,041	496,875

Source: Compiled from data submitted in response to Commission questionnaires and official U.S. import statistics of the U.S. Department of Commerce Census Bureau for HTS statistical reporting number 3102.80.0000, accessed on July 9, 2021. Imports are based on the imports for consumption data series. Value data reflect landed duty-paid values.

Figure IV-5
UAN: Apparent U.S. consumption, by source and by period



Source: Compiled from data submitted in response to Commission questionnaires and official U.S. import statistics of the U.S. Department of Commerce Census Bureau for HTS statistical reporting number 3102.80.0000, accessed on July 9, 2021. Imports are based on the imports for consumption data series. Value data reflect landed duty-paid values.

U.S. market shares

U.S. market share data are presented in table IV-8. U.S. producers' market share, by quantity, decreased from 81.1 percent in 2018 to 78.6 percent in 2019, but then increased to 82.3 percent in 2020, ending 1.2 percentage points higher in 2020 than in 2018. It was higher in January-March 2021 (79.2 percent) compared to January-March 2020 (78.5 percent). The market share, by quantity, of U.S. imports from Russia increased from 8.8 percent in 2018 to 11.5 percent in 2019, but then decreased to 7.8 percent in 2020, while the market share of U.S. imports from Trinidad and Tobago increased from 5.5 percent in 2018 to 6.4 percent in 2019 and to 6.6 percent in 2020. The market shares of U.S. imports from Russia and Trinidad and Tobago were lower during January-March 2021 (9.2 percent and 5.7 percent, respectively) compared with January-March 2020 (9.4 percent and 8.6 percent, respectively). Overall, combined subject imports' market share, by quantity, increased irregularly during 2018-20, rising from 14.3 percent in 2018 to 17.9 percent in 2019 and then falling to 14.4 percent in 2020. In contrast, the market share, by quantity, of nonsubject imports decreased from 4.6 percent in 2018 to 3.4 percent in 2019 and to 3.3 percent in 2020.

U.S. producers' market share, by value, increased irregularly from 80.1 percent in 2018 to 81.9 percent in 2020. It was lower during January-March 2021 (75.9 percent) compared with January-March 2020 (79.7 percent). The market share, by value, of U.S. imports from Russia increased from 9.0 percent in 2018 to 11.0 percent in 2019, but then decreased to 7.6 percent in 2020, while the market share of U.S. imports from Trinidad and Tobago increased from 5.4 percent in 2018 to 5.7 percent in 2019 and to 6.2 percent in 2020. Overall, combined subject imports' market share, by value, decreased irregularly during 2018-20, rising from 14.4 percent in 2018 to 16.7 percent in 2019 and then falling to 13.8 percent in 2020. Similarly, the market share, by value, of nonsubject imports decreased irregularly from 5.5 percent in 2018 to 4.3 percent in 2020.

Table IV-8
UAN: Market shares, by source and by period

Share of quantity is the share of apparent U.S. consumption by quantity in percent; Share of value is the share of apparent U.S. consumption by value in percent

Source	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
U.S. producers	Share of quantity	81.1	78.6	82.3	78.5	79.2
Russia	Share of quantity	8.8	11.5	7.8	9.4	9.2
Trinidad and Tobago	Share of quantity	5.5	6.4	6.6	8.6	5.7
Subject sources	Share of quantity	14.3	17.9	14.4	17.9	14.9
Nonsubject sources	Share of quantity	4.6	3.4	3.3	3.5	5.9
All import sources	Share of quantity	18.9	21.4	17.7	21.5	20.8
All sources	Share of quantity	100.0	100.0	100.0	100.0	100.0
U.S. producers	Share of value	80.1	79.2	81.9	79.7	75.9
Russia	Share of value	9.0	11.0	7.6	8.4	10.0
Trinidad and Tobago	Share of value	5.4	5.7	6.2	7.4	5.5
Subject sources	Share of value	14.4	16.7	13.8	15.7	15.5
Nonsubject sources	Share of value	5.5	4.1	4.3	4.5	8.6
All import sources	Share of value	19.9	20.8	18.1	20.3	24.1
All sources	Share of value	100.0	100.0	100.0	100.0	100.0

Source: Compiled from data submitted in response to Commission questionnaires and official U.S. import statistics from the U.S. Department of Commerce Census Bureau for HTS statistical reporting number 3102.80.0000, accessed on July 9, 2021.

U.S. importers' inventories of imported merchandise

Table IV-9 presents U.S. importers' inventories of UAN and storage capacity during 2018-20, January-March 2020, and January-March 2021.[7] U.S. importers' reported end-of-period inventories of UAN increased by *** percent from 2018 to 2019, but then decreased by *** percent from 2019 to 2020, ending overall slightly above 2018 levels. These reported inventories of imported UAN were *** percent lower during January-March 2021 compared to January-March 2020. U.S. importers' end-of-period storage capacity remained relatively stable during 2018-20, increasing by *** percent from 2018 to 2019 and decreasing by *** percent from 2019 to 2020, ending overall *** percent higher in 2020 compared to 2018.[8] Reported end-of-period storage capacity was *** percent lower during January-March 2021 compared to January-March 2020. U.S. importers' storage capacity utilization increased irregularly from *** percent in 2018 to *** percent in 2019 to *** percent in 2020, representing an overall increase of *** percentage points during 2018-20. Storage capacity utilization was lower during January-March 2021 (*** percent) compared with January-March 2020 (*** percent).

Table IV-9
UAN: U.S. importers' storage capacity, inventories, and storage utilization rate, by period

Quantity in short tons gross weight; Storage utilization rate in percent

Item	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
End-of-period storage capacity	***	***	***	***	***
End-of-period inventory quantity	***	***	***	***	***
End-of-period storage utilization rate	***	***	***	***	***

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

[7] *** responding U.S. importers (***) did not maintain inventories of imported UAN during the period for which data were collected.

[8] These data do not include UAN storage capacity data for U.S. importer ***. *** U.S. importer questionnaire, sections II-3a, II-3b, II-10, and II-11.

Part V: Pricing data

Factors affecting prices

Raw material costs

Natural gas is the major feedstock from which UAN is produced, as ammonia is manufactured from natural gas, which in turn is used to produce urea and ammonium nitrate.[1] The higher the cost of natural gas, the higher the proportion of UAN production costs accounted for by this input. At the benchmark Henry Hub, natural gas spot prices averaged $3.87 per million British thermal units (MMBtu) in January 2018 and decreased 15.8 percent to an average of $3.26 per MMBtu in June 2021, with a low of $1.63 per MMBtu in June 2020 and a high of $5.35 MMBtu in February 2021 (figure V-1).[2] Raw materials as a share of the total cost of goods sold ("COGS") reported by U.S. producers was 32.7 percent in 2018, 31.0 percent in 2019, 27.8 percent in 2020, and 32.4 percent in interim January-March 2021.[3] [4]

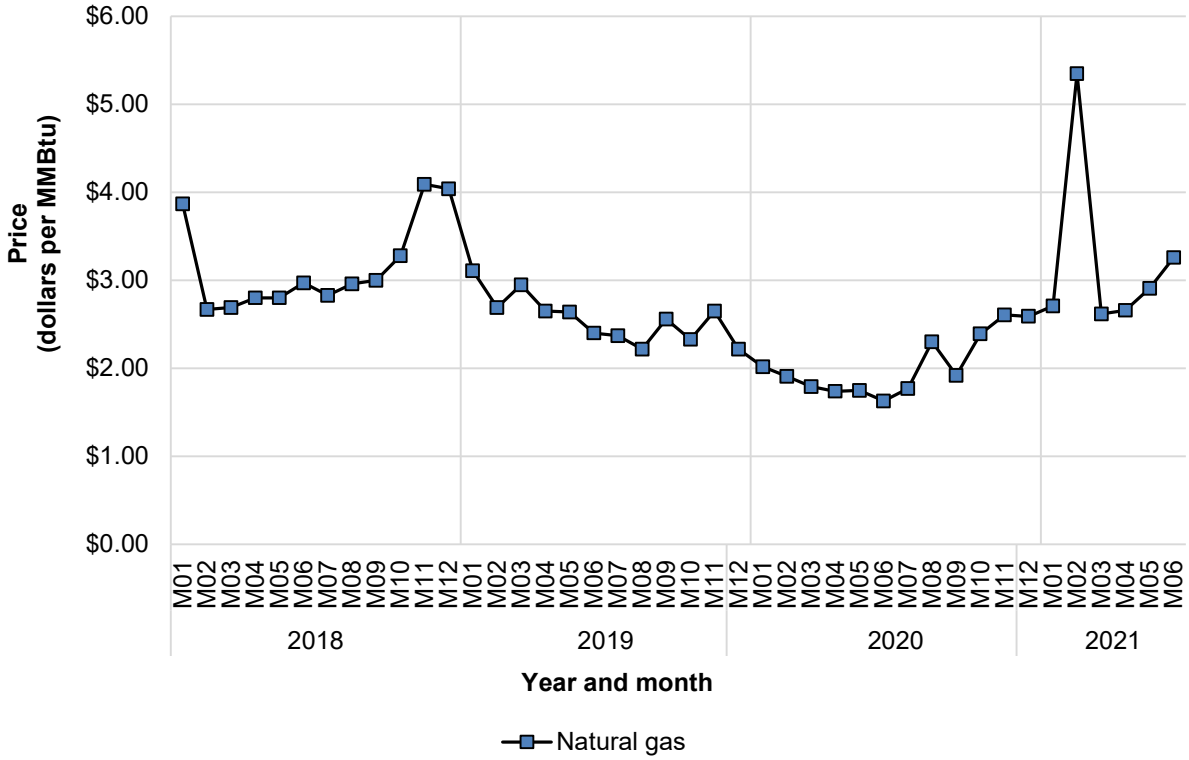
[1] Petition, pp. I-11, I-23.

[2] Natural gas spot prices approached record highs during the week of February 14, 2021 as colder-than-normal weather led to imbalances in natural gas supply and demand. Natural gas production declined because of freeze-offs during a period of high demand for heating and power. https://www.eia.gov/todayinenergy/detail.php?id=47016#.

[3] Natural gas costs were 75.0 percent of all raw material costs in 2020.

[4] CF Industries reported in its 2020 Form 10-K annual report that natural gas is the principal raw material and primary fuel source used in the ammonia production process at its nitrogen manufacturing facilities. In 2020, natural gas accounted for approximately one-third of total production costs for nitrogen products. In 2020, its nitrogen manufacturing facilities consumed, in the aggregate, approximately 365 million MMBtus of natural gas. Petition, Exhibit I-30.

Figure V-1
Natural gas: Prices by month, January 2018 through June 2021



Source: U.S. Energy Information Administration, Henry Hub Natural Gas Spot Price (MHHNGSP), retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/MHHNGSP, accessed July 12, 2021.

Note: Underlying data for figures in Part V are in Appendix H.

Transportation costs to the U.S. market

Transportation costs as a percentage of total costs for UAN shipped from Russia to the United States averaged 14.0 percent during 2018, 15.9 percent during 2019, and 18.5 percent during 2020.[5] [6] Transportation costs as a percentage of total costs for UAN shipped from Trinidad and Tobago to the United States averaged 32.8 percent during 2018, 27.8 percent during 2019, and 34.5 percent during 2020.[7] These estimates were derived from official import data and represent the transportation and other charges on imports.[8]

[5] Petitioner CF Industries describes the transportation of UAN from Russia to the United States as having a plant in the middle of Russia railing to a port in the Baltics, to a terminal, putting it on a vessel, shipping it 5,000 to 6,000 miles through the Panama Canal, paying an expense, going upriver to Sacramento, unloading into a terminal, paying a terminal fee, loading on top of a truck, and shipping directly to where that terminal is. It describes shipments from Trinidad and Tobago as loading from a plant on to a vessel, through a tank, shipping 4,000 miles through the Panama Canal to California or 2,500 miles to the East Coast. Conference transcript, p. 120 (Frost).

When asked if it had been affected by any escalations in ocean shipping rates recently, Respondent importer Acron USA reported that it had been paying the market rate for all its shipments and that the freight is going up. Conference transcript, p. 196 (Knopov).

[6] CF Industries reports that ocean freight rates from the Baltic Sea to Stockton, CA fluctuated over the period between $*** per short ton, with a spike in 2020 to $*** per short ton. Petitioner's postconference brief, Responses to Staff Questions, pp. 11-12.

[7] Respondent importer Helm reported that it identified the Houston market as favorable because the cost of shipping UAN from Trinidad and Tobago to Houston on smaller ocean-going vessels was lower than the U.S. industries' cost of barging UAN from their production facilities in Louisiana on the Mississippi River. Helm estimates that shipping UAN from Trinidad and Tobago to Houston cost about $*** per short ton, compared to CF Industries' costs to barge UAN from its Donaldsonville, LA plant to Houston at $*** per short ton. Helm further reported shipping costs of $*** per short ton via vessel from Trinidad and Tobago to the West Coast and $*** per short ton via vessel to the East Coast. Respondents MHTL and Helm's postconference brief, pp. 23-24, Responses to ITC Staff Questions, pp 2-4.

[8] The estimated transportation costs were obtained by subtracting the customs value from the c.i.f. value of the imports for 2018, 2019, and 2020 and then dividing by the customs value based on the HTS statistical reporting number 3102.80.0000.

U.S. inland transportation costs

Three of 8 U.S. producers (***) and 3 of 11 responding importers (***) reported that they typically arrange transportation to their customers. These three U.S. producers reported U.S. inland transportation costs of 14, 20, and 18 percent, respectively, while the three importers reported costs of 9, 7, and 15 percent, respectively.[9] [10] [11]

[9] ***. Petitioner's postconference brief, Responses to Staff Questions, pp. 9-10.

Respondent importer Helm reports that it has a freight advantage of about $30 per short ton delivering to the Stockton California terminal by ocean vessel from Trinidad and Tobago versus CF Industries delivering by rail from its domestic production facilities. Conference transcript, p. 163 (Peyton).

[10] Respondent importer Helm notes that it developed a terminal in Theodore, Alabama after it concluded that neither CF Industries or any other U.S. UAN producer had production facilities on the CSX Railway network and that it worked closely with CSX to develop this terminal. Conference transcript, pp. 162-163 (Peyton). Helm estimates that customer rail deliveries from Theodore cost about $*** per short ton. Respondents MHTL and Helm's postconference brief, Responses to ITC Staff Questions, p. 3.

[11] Respondent importer IRM notes that UAN must have special tankers, rail cars, trucks, and storage facilities for shipping the product, which must be transported in liquid form and often results in price competition for still space. Conference transcript, p. 13 (Rosenthal).

Pricing practices

Pricing methods

U.S. producers and importers reported using transaction-by-transaction negotiations, contracts, and price lists to set prices for UAN (table V-1). The "other" method reported by importer *** is that prices are set by market publication, then a "true-up" is submitted on cargo volumes for actual prices as sold.

Table V-1
UAN: U.S. producers' and importers' reported price setting methods, count

Number of firms reporting

Method	U.S. producers	Importers
Transaction-by-transaction	7	12
Contract	3	8
Set price list	2	5
Other	0	1
Responding firms	8	12

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

Note: The sum of responses down may not add up to the total number of responding firms as each firm was instructed to check all applicable price setting methods employed.

Prices for UAN are relatively transparent as several trade publications, such as Green Markets, publish price lists and general market intelligence frequently. Figure V-2 shows average monthly U.S. prices of UAN-32 at the wholesale-level (U.S. Gulf Spot Barge Prices) and the retail level (in the Midwest Corn Belt region) during January 2018-June 2021, calculated from the Green Markets' weekly price data.[12] In general, prices increased in 2018, decreased in 2019 and 2020, followed by an increase in 2021. This pattern is similar to that for natural gas prices shown in figure V-1.

[12] Green Markets' price quotes do not reflect actual transactions but represent current market conditions as perceived by selected buyers and sellers.

Figure V-2
UAN-32: Average monthly f.o.b. prices, January 2018 through June 2021

* * * * * * *

Source: Green Markets price scan, accessed July 19, 2021.

Note: Underlying data for figures in Part V are in Appendix H.

U.S. producers and importers reported selling the majority of their UAN under short-term contracts, although U.S. producers also had appreciable sales made through spot sales, and importers had considerable sales through annual contracts (table V-2).

Table V-2
UAN: U.S. producers' and importers' shares of U.S. commercial shipments by type of sale, 2020

Share in percent

Method	U.S. producers	Subject U.S. importers
Long-term contracts	11.2	4.8
Annual contracts	3.7	25.1
Short-term contracts	64.0	58.6
Spot sales	21.1	11.5
Total	100.0	100.0

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

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

Four U.S. producers reported using short-term contracts to set prices, with durations ranging from 77 to 95 days. All four firms did not allow for price renegotiation. One firm reported a fixed quantity provision, and three firms reported a provision that fixed both quantity and price. None of these four firms indexed short-term contracts to the cost of raw materials during the contract period.

Eight importers reported using short-term contracts, with durations ranging from 30 to 90 days. All eight firms did not allow for price renegotiation and had a fixed price and quantity provision. No short-term contracts reported by importers were indexed to raw material costs. One importer (***) reported using annual contracts that fixed quantity and were not indexed to raw material prices.

Sales terms and discounts

U.S. producers and importers reported various combinations of sales terms, though firms were slightly more likely to quote prices on an f.o.b. basis than on a delivered basis. Two U.S. producers and one importer reported quoting prices on both a delivered and f.o.b. basis, while four U.S. producers and six importers reported quoting prices on an f.o.b. basis only and two U.S. producers and four importers reported quoting prices on a delivered basis only.[13]

U.S. producers and importers reported offering a variety of discounts. Four U.S. producers and four importers offer annual total volume discounts and two U.S. producers and two importers offer quantity discounts. U.S. producer *** offers both quantity and total volume discounts based on truck, railcar, and barge volume. Importer ***, who offers discounts based on annual total volume, has a volume target and a subsequent rebate for reaching the volume. Other rebates include using certain types of transportation, prepay discounts, and discounts depending on customer category and account size. Importer *** reported that the West Coast market is predominately a truck market and Midwest producers exclusively ship by rail to this market, thereby having to provide price discounts to incentivize customers to receive UAN by rail.

[13] Reported f.o.b. locations by U.S. producers include Tampa, FL; Pryor, OK; Enid, OK; Dodge City, KS; Beatrice, NE; and Fort Dodge, IA.

Reported f.o.b. locations by importers in the United States include Toledo, OH; Corpus Christie, TX; Dubuque, IA; Pekin, IL; Peru, IL; Marseilles, IL; Granite City, IL; Norfolk, VA; Wilmington, NC; Victoria, TX; Philadelphia, PA; Baltimore, MD; Portland, OR; Stockton, CA; Hanford, CA; Pasco, WA; Umatilla, OR; and Central Ferry, WA.

Price leadership

Most firms reported CF Industries as the price leader in the UAN market. Importer Helm reported that CF Industries is the largest supplier throughout the United States and is the price leader.[14] Importer *** reported that CF Industries leads the market setting of UAN prices for fill programs as it represents 52 percent of the U.S. production capacity. Importer/purchaser *** stated that CF Industries is the price leader in the U.S. market, and that its setting of prices during the summer fill campaign will impact other domestic producers and foreign producers' prices. Importer/purchaser *** reported that CF Industries is the price leader for UAN in the United States. Purchaser *** stated that U.S. production determines the price for UAN.

Price data

The Commission requested U.S. producers and importers to provide monthly data for the total quantity and f.o.b. value of the following UAN product shipped to unrelated U.S. customers during January 2018-March 2021.[15]

Product 1.--Standard-grade Urea Ammonium Nitrate (UAN) in an aqueous solution of 32 percent nitrogen concentration ("32% UAN"), sold on an f.o.b. basis to U.S. agricultural sector customers who are retailers.

Six U.S. producers and ten importers provided usable pricing data for sales of the requested product, although not all firms reported pricing for the product for all months.[16] [17]

[14] Conference transcript, p. 161 (Peyton).

[15] Petitioner asserts that it would be distortive to compare domestic industry prices reflecting a mix of shipments to wholesalers/distributors and shipments to retailers to U.S. importer prices for shipments only to retailers. Petition, Exhibit I-44, p. 2.

In 2020, U.S. shipments to wholesalers/distributors was *** percent and shipments to retailers was *** percent, and subject sources shipments to wholesalers/distributors was *** percent and shipments to retailers was *** percent; Russian import shipments to wholesalers/distributors was *** percent and shipments to retailers was *** percent; Trinidadian import shipments to wholesalers/distributors was *** percent and shipments to retailers was *** percent. For more information, see "Channels of distribution" in Part II.

[16] Per-unit pricing data are calculated from total quantity and total value data provided by U.S. producers and importers. The precision and variation of these figures may be affected by rounding, limited quantities, and producer or importer estimates.

[17] U.S. producer *** submitted price data that was inclusive of sales to wholesalers/distributors and was unable to allocate price data for sales to retailers. This data is not included in the price data analysis.

Pricing data reported by these firms accounted for approximately *** percent of U.S. commercial shipments of UAN, *** percent of U.S. commercial shipments of subject imports from Russia, and *** percent of U.S. commercial shipments of subject imports from Trinidad and Tobago in 2020.[18]

Price data for product 1 are presented in table V-3 and figure V-3.

Table V-3
UAN: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 and margins of underselling/(overselling), by month

Price in dollars per short ton gross weight, quantity in short tons gross weight, margin in percent.

Period	U.S. price	U.S. quantity	Russia price	Russia quantity	Russia margin	Trinidad and Tobago price	Trinidad and Tobago quantity	Trinidad and Tobago margin
2018 M01	157	345,538	159	48,678	(1.4)	***	***	***
2018 M02	164	349,539	178	84,254	(8.4)	***	***	***
2018 M03	177	350,591	188	87,072	(5.7)	***	***	***
2018 M04	197	334,655	192	116,935	2.7	***	***	***
2018 M05	184	462,387	192	131,156	(4.1)	***	***	***
2018 M06	194	380,583	202	128,812	(4.2)	***	***	***
2018 M07	170	618,775	202	61,506	(18.9)	***	***	***
2018 M08	166	315,578	184	35,810	(11.1)	***	***	***
2018 M09	164	359,088	192	36,443	(16.6)	***	***	***
2018 M10	165	392,650	192	49,049	(16.9)	***	***	***
2018 M11	169	311,823	211	42,203	(24.9)	***	***	***
2018 M12	195	375,464	204	75,282	(4.8)	***	***	***
2019 M01	218	340,613	***	***	***	***	***	***
2019 M02	210	262,877	192	64,820	8.7	***	***	***
2019 M03	208	403,465	200	113,284	3.5	***	***	***
2019 M04	202	520,997	198	210,335	1.9	***	***	***
2019 M05	205	418,528	198	231,558	3.8	***	***	***
2019 M06	205	338,106	198	170,874	3.4	***	***	***
2019 M07	215	274,382	197	84,469	8.3	***	***	***
2019 M08	159	675,607	163	107,451	(2.5)	***	***	***
2019 M09	180	511,848	***	***	***	***	***	***
2019 M10	178	392,805	155	107,499	12.5	***	***	***
2019 M11	162	261,079	167	62,524	(3.1)	***	***	***
2019 M12	175	377,616	151	59,554	14.0	***	***	***

Table continued on next page.

[18] Pricing coverage is based on U.S. commercial shipments reported in questionnaires.

Table V-3 Continued
UAN: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 and margins of underselling/(overselling), by month

Price in dollars per short ton gross weight, quantity in short tons gross weight, margin in percent.

Period	U.S. price	U.S. quantity	Russia price	Russia quantity	Russia margin	Trinidad and Tobago price	Trinidad and Tobago quantity	Trinidad and Tobago margin
2020 M01	163	480,913	168	73,247	(2.5)	***	***	***
2020 M02	156	412,563	166	70,472	(7.0)	***	***	***
2020 M03	171	367,897	180	98,312	(5.2)	***	***	***
2020 M04	163	427,649	215	76,448	(32.0)	***	***	***
2020 M05	166	312,076	191	158,189	(14.6)	***	***	***
2020 M06	149	617,898	186	95,500	(24.6)	***	***	***
2020 M07	139	652,976	147	114,465	(5.7)	***	***	***
2020 M08	139	357,945	165	36,075	(18.7)	***	***	***
2020 M09	139	377,818	149	74,363	(6.6)	***	***	***
2020 M10	135	375,774	150	78,014	(11.4)	***	***	***
2020 M11	138	403,711	***	***	***	***	***	***
2020 M12	137	448,844	141	39,978	(2.7)	***	***	***
2021 M01	154	378,360	***	***	***	***	***	***
2021 M02	160	226,105	158	93,163	1.0	***	***	***
2021 M03	166	355,323	228	131,599	(36.9)	***	***	***

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

Note: Product 1: Standard-grade Urea Ammonium Nitrate (UAN) in an aqueous solution of 32 percent nitrogen concentration (“32% UAN”), sold on an f.o.b. basis to U.S. agricultural sector customers who are retailers.

Figure V-3
UAN: Weighted-average prices and quantities of domestic and imported product 1, by month

Price of product 1

* * * * * * *

Volume of product 1

* * * * * * *

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

Note: Product 1: Standard-grade Urea Ammonium Nitrate (UAN) in an aqueous solution of 32 percent nitrogen concentration ("32% UAN"), sold on an f.o.b. basis to U.S. agricultural sector customers who are retailers.

Price trends

In general, prices increased during January 2018-March 2021, with increases in 2018, decreases in 2019 and 2020, and increases in 2021.[19] Table V-4 and figure V-4 summarize the price trends, by country. As shown in the table, the domestic and Russian prices increased 5.7 percent and *** percent respectively, during January 2018-March 2021, while the Trinidadian price decreased *** percent.

Table V-4
UAN: Summary of price data, by product and source

Volume in short tons gross weight, price in dollars per short ton gross weight

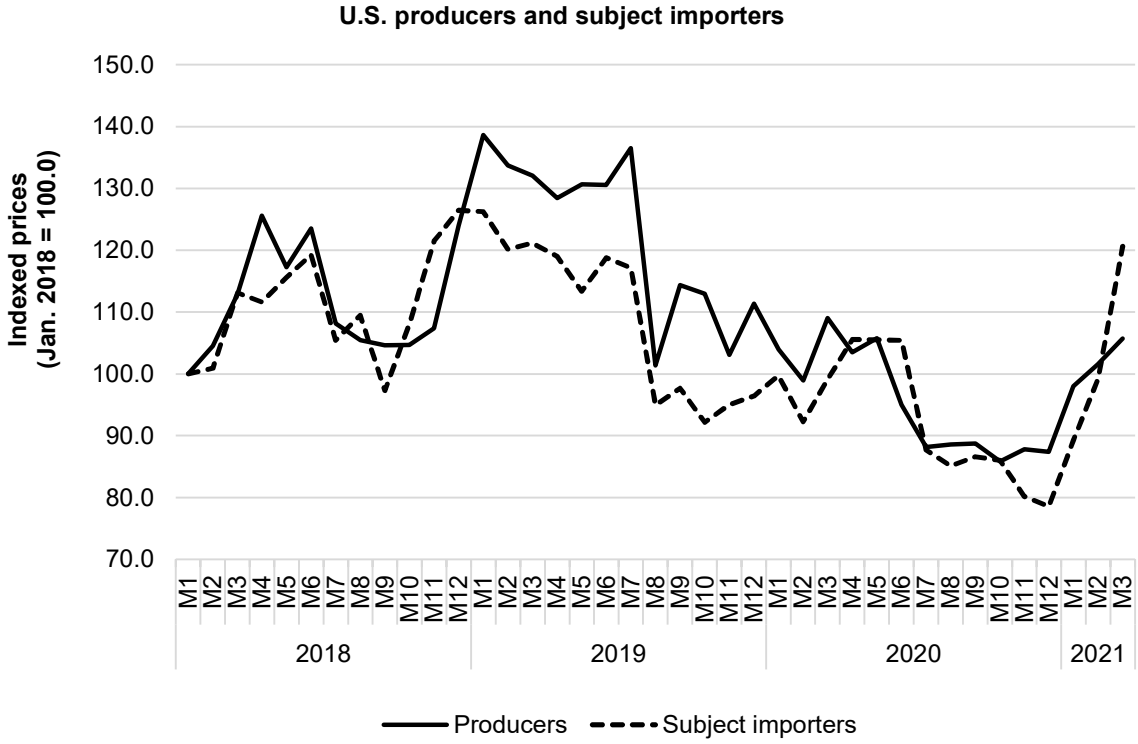
Product	Source	Number of months	Volume of shipments	Low price	High price	First month price	Last month price	Percent change in price between first and last month
Product 1	United States	39	15,570,446	135	218	157	166	5.7
Product 1	Russia	39	***	***	***	***	***	***
Product 1	Trinidad and Tobago	39	***	***	***	***	***	***

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

Note: Percent change column is percentage change from January 2018 to March 2021.

[19] Generally, prices increase to the highest levels of the year during the spring UAN application season as demand increases and inventories decrease, and prices decrease to the lowest levels of the year during the summer fill period as demand decreases and inventories increase. Conference transcript, pp. 134, 201-203 (O'Connell, McMullin).

Figure V-4
UAN: Indexed U.S. producer prices and subject importers, January 2018 through March 2021



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

Price comparisons

As shown in table V-5, prices for product imported from subject countries were below those for U.S.-produced product in 32 of 78 instances (*** short tons gross weight); margins of underselling ranged from 1.0 to 14.0 percent. Prices for product imported from Russia were below those for U.S.-produced product in 12 instances (*** short tons gross weight); margins of underselling ranged from *** to *** percent. Prices for product imported from Trinidad and Tobago were below those for U.S.-produced product in 20 instances (*** short tons gross weight); margins of underselling ranged from *** to *** percent.[20]

In the remaining 46 instances (*** short tons gross weight), prices for product from subject countries were between 1.4 percent and 36.9 percent above prices for the domestic product (table V-6). Prices for product from Russia were above those for U.S.-produced product in 27 instances (*** short tons gross weight); prices were between *** percent and *** percent above prices for domestic product. Prices for product from Trinidad and Tobago were above those for U.S.-produced product in 19 instances (*** short tons gross weight); prices were between *** percent and *** percent above prices for the domestic product.

Table V-5
UAN: Instances of underselling and the range and average of margins, by product

Quantity in short tons gross weight; margin in percent

Source	Number of months	Quantity	Average margin	Min margin	Max margin
Russia	12	***	***	***	***
Trinidad and Tobago	20	***	***	***	***
Total, underselling	32	***	7.3	1.0	14.0

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

Note: These data include only months in which there is a comparison between the U.S. and subject product.

[20] Petitioner CF Industries asserts that the pricing product data reported by *** and that these data should be excluded in the price comparisons analysis. Petitioner asserts that prices for product imported from subject countries were below those for U.S.-produced product in 39 of 78 instances (27 of 39 from Russia and 12 of 39 from Trinidad and Tobago) when data from these firms is excluded from the data set. Petitioner CF Industries' postconference brief, pp. 24-25, Exhibit 2.

Table V-6
UAN: Instances of overselling and the range and average of margins, by source

Quantity in short tons gross weight; margin in percent

Source	Number of months	Quantity	Average margin	Min margin	Max margin
Russia	27	***	***	***	***
Trinidad and Tobago	19	***	***	***	***
Total, overselling	46	***	(10.1)	(1.4)	(36.9)

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

Note: These data include only months in which there is a comparison between the U.S. and subject product.

Lost sales and lost revenue

The Commission requested that U.S. producers of UAN report purchasers with which they experienced instances of lost sales or revenue due to competition from imports of UAN from Russia and Trinidad and Tobago during January 2018-March 2021. Of the eight responding U.S. producers, five reported that they had to either reduce prices or roll back announced price increases, and three firms reported that they had lost sales. Two U.S. producers submitted lost sales and lost revenue allegations.[21] The two responding U.S. producers identified 35 firms with which they lost sales or revenue (7 consisting of lost sales allegations and 28 consisting of both types of allegations).

Staff contacted six purchasers and received responses from five purchasers.[22] Responding purchasers reported purchasing and importing *** short tons gross weight of UAN during 2018-20 (table V-7).[23]

[21] CF Industries submitted lost sales and lost revenue allegations in its petition and *** submitted its lost sales and lost revenue allegations with its U.S. producer questionnaire response.

[22] The six purchasers contacted were provided in the petition. The purchaser list provided by *** in its lost sales and lost revenue allegations was provided after questionnaires were mailed out.

[23] All five purchasers reported purchasing UAN by 32-percent nitrogen weight and two reported purchasing UAN by 28-percent nitrogen weight. UAN is generally manufactured and is primarily distributed in its most concentrated form (32-percent nitrogen). Petition, pp. I-11, I-18.

Table V-7
UAN: Purchasers' U.S. purchases and U.S. imports, 2018-20

Quantity in short tons gross weight, change in shares in percentage points

Purchaser	Domestic quantity	Subject quantity	All other quantity	Change in domestic share	Change in subject country share
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All firms	***	***	***	***	***

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

Note: All other includes all other sources and unknown sources. Change is the percentage point change in the share of the firm's total purchases of domestic and/or subject country imports between first and last years.

During 2020, responding purchasers purchased *** percent from U.S. producers, *** percent from Russia, *** percent from Trinidad and Tobago, and *** percent from "unknown source" countries.[24] Purchasers were asked about changes in their purchasing patterns from different sources since 2018. Of the five responding purchasers, three reported increasing purchases from domestic producers and two reported fluctuating purchases (table V-8).[25] Explanations for increasing purchases of domestic product included better availability and timing of deliveries (***), and continued business growth and a desire to limit logistics constraints (***). The primary explanation for fluctuating purchases of domestic product was that CF Industries did not offer volume to wholesalers on a consistent basis during times when demand was at its highest, and that it did not offer product to locations of certain distribution hubs (***).

[24] No purchases were reported for UAN from nonsubject countries.

[25] Of the five responding purchasers, one purchaser indicated that it did not know the source of some of the UAN it purchased. In 2020, *** purchased *** short tons gross weight of UAN from unknown sources, *** percent of its total purchases for the year.

Table V-8
UAN: Count of changes in purchase patterns from U.S., subject, and nonsubject countries

Number of firms reporting

Source of purchases	Decreased	Increased	Constant	Fluctuated	Did not purchase
United States	0	3	0	2	0
Russia	2	0	1	2	0
Trinidad and Tobago	0	0	1	1	2
All other sources	0	0	0	0	3
Sources unknown	1	0	0	0	3

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

Of the five responding purchasers, four reported that, since 2018, they had purchased imported UAN from Russia and/or Trinidad and Tobago instead of U.S.-produced product (three firms reported purchasing from Russia and one reported purchasing from Trinidad and Tobago). None of these purchasers reported that subject import prices were lower than U.S.-produced product, and none of these purchasers reported that price was a primary reason for the decision to purchase imported product rather than U.S.-produced product. No purchasers estimated the quantity of UAN from Russia and/or Trinidad and Tobago purchased instead of domestic product (table V-9). Purchasers identified freight and supply as non-price reasons for purchasing imported rather than U.S.-produced product. *** reported that freight from domestic producers made imported product more attractive. *** reported issues with U.S. producers supplying the east coast.

Of the five responding purchasers, none reported that U.S. producers had reduced prices in order to compete with lower-priced imports from Russia and Trinidad and Tobago; one reported that it did not know.

Table V-9
UAN: Purchasers' responses to purchasing subject imports instead of domestic product

Quantity in short tons gross weight

Purchaser	Purchased subject imports instead of domestic	Imports priced lower	Choice based on price	Quantity	Explanation
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All firms	Yes--4; No--1	Yes--0; No--4	Yes--0; No--4	***	

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

Part VI: Financial experience of U.S. producers

Background

Eight U.S. producers (CF Industries, CVR Partners, Dyno Nobel, Iowa, Koch, LSB Industries, PCS, Trademark Nitrogen) reported financial results on their UAN operations. Most are part of publicly traded companies with the exceptions being Koch and Trademark Nitrogen.[1] *** accounted for *** percent of total reported sales quantity in 2020. The remaining U.S. producers' shares of total 2020 sales quantity ranged from *** percent (***) to *** percent (***).[2]

U.S. producers' narrative descriptions regarding the impact of COVID-19 on their financial results are presented in the *SG&A expenses and operating income or loss* section below.

Operations on UAN

Table VI-1 presents the U.S. industry's UAN financial results. Changes in average per short ton gross weight values on a percentage basis and on a unit basis are presented in table VI-2. Table VI-3 presents a variance analysis of the financial results.[3]

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[1] The majority of U.S. producers' UAN financial results were based on U.S. GAAP (Generally Accepted Accounting Principles). ***, which specified IFRS (International Financial Reporting Standards) as its accounting basis, was the exception. All U.S. producers reported their annual financial results for calendar-year periods. ***. Email with attachment from *** to USITC staff, July 26, 2021.

[2] Most U.S. producers reported that UAN accounts for medium to large shares of relevant establishment sales. U.S. producers' questionnaires, responses to III-5. *** reported the smallest UAN shares of relevant establishment sales at *** percent and *** percent, respectively.

[3] The Commission's variance analysis is calculated in three parts: sales variance, cost of goods sold (COGS) variance, and sales, general, and administrative (SG&A) expenses variance. Each part consists of a price variance (in the case of the sales variance) or a cost or expense variance (in the case of the COGS and SG&A expenses 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. As summarized at the bottom of the table, the price variance is from sales, the cost/expense variance is the sum of those items from COGS and SG&A variances, respectively, and the volume variance is the sum of the volume components of the net sales, COGS, and SG&A expenses variances. Physical differences with respect to UAN generally appear to be limited to nitrogen concentration levels. Conference transcript, p. 82 (Will, Hoker). U.S. producers indicated that there were either no changes in UAN product mix during the period or only minor changes; e.g., ***. Email with attachments from *** to USITC staff, July 27, 2021; Petition, p. I-18. In general, the utility of the Commission's variance analysis is enhanced when product mix remains the same throughout the period.

Table VI-1
UAN: Results of operations of U.S. producers, by item and period

Quantity in short tons gross weight; value in 1,000 of dollars

Item	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Commercial sales	Quantity	***	***	***	***	***
Internal consumption	Quantity	***	***	***	***	***
Transfers to related firms	Quantity	***	***	***	***	***
Total net sales	Quantity	***	***	***	***	***
Commercial sales	Value	***	***	***	***	***
Internal consumption	Value	***	***	***	***	***
Transfers to related firms	Value	***	***	***	***	***
Total net sales	Value	***	***	***	***	***
Natural gas costs	Value	***	***	***	***	***
Other material costs	Value	***	***	***	***	***
Total raw material costs	Value	***	***	***	***	***
Direct labor costs	Value	***	***	***	***	***
Other factory costs	Value	***	***	***	***	***
Cost of goods sold	Value	***	***	***	***	***
Gross profit or (loss)	Value	421,370	526,505	213,927	76,891	(9,938)
SG&A expenses	Value	114,688	122,386	104,631	25,951	27,480
Operating income or (loss)	Value	306,682	404,119	109,296	50,940	(37,418)
Interest expense	Value	***	***	***	***	***
All other expenses	Value	***	***	***	***	***
All other income	Value	***	***	***	***	***
Net income or (loss)	Value	144,208	233,725	(27,430)	16,610	(35,777)
Depreciation/amort.	Value	463,193	440,753	443,415	95,313	98,254
Est. cash flow from operations	Value	607,401	674,478	415,985	111,923	62,477

Table continued on next page.

Table VI-1 Continued
UAN: Results of operations of U.S. producers, by item and period

Ratios in percent and represent ratio to net sales value; shares in percent and represent share of cost of goods sold; unit values in dollars per short ton gross weight; count in number of firms reporting

Item	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Natural gas costs	Ratio	***	***	***	***	***
Other material costs	Ratio	***	***	***	***	***
Raw material costs	Ratio	***	***	***	***	***
Direct labor costs	Ratio	***	***	***	***	***
Other factory costs	Ratio	***	***	***	***	***
Cost of goods sold	Ratio	***	***	***	***	***
Gross profit or (loss)	Ratio	***	***	***	***	***
SG&A expense	Ratio	***	***	***	***	***
Operating income or (loss)	Ratio	***	***	***	***	***
Net income or (loss)	Ratio	***	***	***	***	***
Natural gas costs	Share	26.2	23.7	20.8	21.1	26.7
Other material costs	Share	6.5	7.3	7.0	7.7	5.7
Raw material costs	Share	32.7	31.0	27.8	28.7	32.4
Direct labor costs	Share	7.3	7.3	7.6	8.1	8.2
Other factory costs	Share	60.0	61.7	64.6	63.2	59.3
Cost of goods sold	Share	100.0	100.0	100.0	100.0	100.0
Commercial sales	Unit value	***	***	***	***	***
Internal consumption	Unit value	***	***	***	***	***
Transfers to related firms	Unit value	***	***	***	***	***
Total net sales	Unit value	***	***	***	***	***
Natural gas costs	Unit value	***	***	***	***	***
Other material costs	Unit value	***	***	***	***	***
Raw material costs	Unit value	***	***	***	***	***
Direct labor costs	Unit value	***	***	***	***	***
Other factory costs	Unit value	***	***	***	***	***
Cost of goods sold	Unit value	***	***	***	***	***
Gross profit or (loss)	Unit value	***	***	***	***	***
SG&A expenses	Unit value	***	***	***	***	***
Operating income or (loss)	Unit value	***	***	***	***	***
Net income or (loss)	Unit value	***	***	***	***	***
Operating losses	Count	2	3	5	4	6
Net losses	Count	3	4	6	5	6
Data	Count	8	8	8	8	8

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

Table VI-2
UAN: Changes in average per short ton gross weight, between comparison periods

Change in percent

Item	2018-20	2018-19	2019-20	Jan-Mar 2020-21
Commercial sales	***	***	***	***
Internal consumption	***	***	***	***
Transfers to related firms	***	***	***	***
Total net sales	***	***	***	***
Natural gas costs	***	***	***	***
Other material costs	***	***	***	***
Raw material costs	***	***	***	***
Direct labor costs	***	***	***	***
Other factory costs	***	***	***	***
Cost of goods sold	***	***	***	***

Table continued.

Table VI-2 Continued
UAN: Changes in average per short ton gross weight, between comparison periods

Change in dollars per short ton gross weight

Item	2018-20	2018-19	2019-20	Jan-Mar 2020-21
Commercial sales	***	***	***	***
Internal consumption	***	***	***	***
Transfers to related firms	***	***	***	***
Total net sales	***	***	***	***
Natural gas costs	***	***	***	***
Other material costs	***	***	***	***
Raw material costs	***	***	***	***
Direct labor costs	***	***	***	***
Other factory costs	***	***	***	***
Cost of goods sold	***	***	***	***
Gross profit or (loss)	***	***	***	***
SG&A expense	***	***	***	***
Operating income or (loss)	***	***	***	***
Net income or (loss)	***	***	***	***

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

Table VI-3
UAN: Variance analysis on the operations of U.S. producers between comparison periods

Value in 1,000 dollars

Item	2018-20	2018-19	2019-20	Jan-Mar 2020-21
Net sales price variance	***	***	***	***
Net sales volume variance	***	***	***	***
Net sales total variance	***	***	***	***
COGS cost variance	***	***	***	***
COGS volume variance	***	***	***	***
COGS total variance	***	***	***	***
Gross profit variance	***	***	***	***
SG&A cost variance	***	***	***	***
SG&A volume variance	***	***	***	***
SG&A total variance	***	***	***	***
Operating income price variance	***	***	***	***
Operating income cost variance	***	***	***	***
Operating income volume variance	***	***	***	***
Operating income total variance	***	***	***	***

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

Revenue

UAN sales are generally made to wholesalers and retailers with only limited sales directly to end user farmers.[4] The majority of the U.S. industry's UAN sales was classified as commercial sales, accounting for *** percent of total sales quantity in 2020, followed by transfer sales to related firms (*** percent) and a small amount of internal consumption (*** percent).[5] While fluctuating somewhat these shares remained in a similar range throughout the period. Of the *** U.S. producers reporting export shipments during the

[4] Conference transcript, p. 29 (O'Connell).
[5] ***. *** U.S. producer questionnaire, response to II-12. ***.
***. Email with attachments from *** to USITC staff, July 23, 2021. ***. Ibid.

period (***), *** accounted for the majority (see also footnote 33).

UAN sales reflect a combination of forward and spot sales with each category's share varying by company. Most U.S. producers indicated that forward sales account for a relatively large share of total sales.[6] *** were the exceptions, reporting that their UAN sales are on a spot basis only.[7] For those U.S. producers that sell pursuant to both categories, the actual level and timing of forward sales versus spot sales varies based on factors such as current and expected market conditions.[8] From the perspective of U.S. producers, forward sales reportedly increase available working capital and improve production scheduling and logistics.[9] [10]

[6] For some U.S. producers, forward sales represent all or almost all UAN sales: ***. *** response to staff follow-up questions, July 24, 2021. *** response to staff follow-up questions, July 26, 2021. Email with attachments from *** to USITC staff, July 27, 2021. For other U.S. producers, forward sales were a consistently large share of total UAN sales: ***. Petitioner's postconference brief, Response to Staff Questions, p. 30. Email with attachment from *** to USITC staff, July 26, 2021. Email with attachments from *** to USITC staff, July 23, 2021.

[7] *** response to staff follow-up questions, July 26, 2021. Email with attachment from *** to USITC staff, July 23, 2021.

[8] CF Industries company officials indicated that, while forward sales are prevalent during the company's summer fill campaign (generally July through August), forward sales are not limited to specific times of the year and actual levels vary in each quarter. Conference transcript, pp. 93-94 (Frost), p. 94 (O'Connell), p. 95 (Will). As described in CF Industries' 2020 10-K, ". . . the level of forward sales contracts is affected by many factors including current market conditions and our customers' outlook of future market fundamentals. During periods of declining prices, customers tend to delay purchasing fertilizer in anticipation that prices in the future will be lower than the current prices." CF Industries 2020 10-K, p. 53.

[9] As described in CF Industries' 2020 10-K, "We offer our customers the opportunity to purchase products from us on a forward basis at prices and delivery dates we propose. Under our forward sales programs, customers generally make an initial cash down payment at the time of order and pay the remaining portion of the contract sales value in advance of the shipment date. Forward sales improve our liquidity by reducing our working capital needs due to the cash payments received from customers in advance of shipment of the product and allow us to improve our production scheduling and planning and the utilization of our manufacturing and distribution assets." CF Industries 2020 10-K, pp. 15-16.

[10] While forward sales are not limited to its summer fill campaign, a large share of CF Industries' UAN sales during that period are made on a forward basis. Conference transcript, p. 30 (O'Connell). Actual forward sales revenue recognition occurs when the product is shipped. Conference transcript, p. 84 (Hoker).

Quantity

The U.S. industry's total sales quantity declined somewhat in 2019, increased in 2020, and was lower in January-March 2021 compared to January-March 2020. The revenue section of the variance analysis (table VI-3) indicates that volume variances played a secondary role in terms of explaining changes in total sales value during the period.

While directionally uniform only between 2019 and 2020 (i.e., all U.S. producers reporting increases in sales quantity of varying magnitude), most U.S. producers shared the same industry-wide pattern of sales quantity noted above. *** inasmuch as it reported higher sales quantity in January-March 2021 compared to January-March 2020. ***, the *** U.S. producer in terms of sales quanity, was the *** U.S. producer to report increases in UAN sales quantity throughout the period.

Value

The U.S. industry's average per short ton gross weight UAN sales value increased in 2019, declined in 2020, and was lower in January-March 2021 compared to January-March 2020. The revenue section of the variance analysis (table VI-3) indicates that price variances generally played a primary role in terms of explaining changes in total sales value during the period.

*** U.S. producers reported higher average sales value in 2019, ***. In 2020, the pattern was directionally uniform with *** U.S. producers reporting relatively large declines in average sales value. Between the interim periods the directional pattern was mixed with the majority reporting lower average sales value in January-March 2021 compared to January-March 2020.[11] With regard to variations in average sales value in general, CF Industries reported that UAN sales values are not directly tied

[11] ***. *** response to staff follow-up questions, July 24, 2021.

to natural gas costs.[12] Other U.S. producers also indicated that UAN sales value does not reflect a direct passthrough of primary input costs.[13]

U.S. producers reported a relatively wide range of company-specific UAN average sales values during the period with *** (2018) and *** (2019, 2020 (full-year and interim period), January-March 2021) reporting the lowest average sales values (see table J-1). *** generally reported the highest average UAN sales value during the period with the exception being January-March 2020, when *** reported the highest

[12] Conference transcript, p. 87 (Will, Frost). Noting that in the past matching UAN prices and natural gas cost was a standard practice in the industry, a CF Industries company official stated "In 2003, gas cost in North America was both high and fairly volatile . . . {a}nd so, back in that period of time, all the forward sales were immediately backed up with purchase forward contracts of natural gas to ensure that volatility did not create a negative margin situation. Where we are today, generally speaking, is because we are among the lowest cost producers in the world, the volatility in the natural gas market is not generally sufficient to drive us into a negative margin situation . . . we do a variety of activities, whether it's basis hedging during the winter, so despite the effects of winter storm, Uri, we were able to manage through that situation just fine in terms of our gas costs or buying a month ahead or two months ahead and a certain amount of collars and swaps, and so forth. But in general, we don't tie forward sales directly to gas purchases anymore, because we are so competitive and the natural gas market is in North America, so liquid and deep and plentiful, that we can operate very differently than we did back in 2003." Conference transcript, p. 89 (Will).

[13] ***. *** response to staff follow-up questions, July 26, 2021. ***. Email with attachment from *** to USITC staff, July 26, 2021. ***. *** response to staff follow-up questions, July 26, 2021. ***. Email with attachments from *** to USITC staff, July 27, 2021. ***. Email with attachments from *** to USITC staff, July 23, 2021.

average sales value.[14] Given the general absence of physical differences in terms of product mix at the producer level, likely factors explaining company-specific differences in average sales value were identified as "freight/logistics, the timing of the order (summer fill, late fall/winter sales, or spot sales during the spring application), the transport mode and average quantity sold, and type of sales."[15] Company-specific mix of forward versus spot sales was also noted as a likely explanatory factor.[16]

Cost of goods sold and gross profit or loss

Raw materials

Total raw material cost, the second largest component of UAN COGS, ranged from 27.8 percent of total COGS (2020) to 32.7 percent (2018).[17] For the industry as a whole, natural gas cost as share of total raw material cost ranged from 75.0 percent (2020) to 82.3 percent

[14] ***. Email with attachment from *** to USITC staff, July 23, 2021.

[15] Petitioner's post conference brief, Response to Staff Questions, p. 25. CF Industries confirmed that its sales values were reported net of freight. Conference transcript, p. 85 (Hoker).

[16] As described by CF Industries, "A firm whose sales are weighted toward spot deliveries will have a unit value that more closely reflects prices in the spot market and the volumes sold at those prices. Conversely, a firm more heavily weighted toward forward sales will have a unit value that more closely reflects the prevailing prices at the time(s) at which the forward sales were made, irrespective of how spot prices vary throughout the fertilizer year." Petitioner's post conference brief, Response to Staff Questions, p. 25. Related to this pattern, CF Industries' 2020 10-K notes that ". . . fixing the selling prices of our products, often months in advance of their ultimate delivery to customers, typically causes our reported selling prices and margins to differ from spot market prices and margins available at the time of shipment." CF Industries 2020 10-K, p. 16.

[17] *** reported input purchases from related suppliers. ***. *** U.S. producer questionnaire, response to III-7a. ***. *** response to staff follow-up questions, July 24, 2021. ***. *** response to staff follow-up questions, July 26, 2021. ***. *** U.S. producer questionnaire, response to III-7a. ***. Email with attachments from *** to USITC staff, July 23, 2021.

(January-March 2021). Most U.S. producers identified natural gas as either the only raw material input or the primary raw material input.[18] [19] ***, in contrast, reported that other raw materials are primary inputs or co-equal with natural gas.[20] [21]

Average per short ton gross weight natural gas cost declined during the full-year period (see table VI-2), most notably in 2020, and then was substantially higher in January-March 2021 compared to January-March 2020.[22] While magnitudes varied, this overall pattern was reported

[18] As described in CF Industries' 2020 10-K, "Natural gas is the principal raw material used to produce nitrogen products. We use natural gas both as a chemical feedstock and as a fuel to produce ammonia, granular urea, UAN, AN and other products. Expenditures on natural gas are a significant portion of our production costs, representing approximately one-third of our total production costs in 2020." CF Industries 2020 10-K, p. 53.

[19] While costs associated with natural gas primarily reflect the production of ammonia, relatively smaller amounts of natural gas are also used in urea production and as energy during the UAN stage of production. Conference transcript, p. 103 (Will). Based on company-specific responses to the U.S. producer questionnaire, byproducts that are relevant in terms of acting as an offset to COGS are not generated during the UAN stage of production.

[20] The UAN operations of CVR Partners reflect two facilities (Coffeyville, Kansas and East Dubuque, Illinois) with the Coffeyville facility being unique inasmuch as it is the only North American nitrogen fertilizer plant that uses a petroleum coke gasification process to produce nitrogen fertilizer. CVR Partners 2020 10-K, p. 6. ***. *** U.S. producer questionnaire, responses to III-9a and III-9c. ***. *** U.S. producer questionnaire, responses to III-9a and III-9c. *** identified its primary raw material as ***. *** U.S. producer questionnaire, response to III-9c.

[21] U.S. producers also adopted somewhat different reporting conventions in terms of which costs to include in other raw materials. In some instances, the other raw materials category includes costs that could be classified as other factory costs: *** originally reported *** as its other raw materials. Similarly, *** originally reported that its other raw materials include ***. *** U.S. producer questionnaire, responses to III-9c. ***.

[22] As described in CF Industries' 2021 10-Q (Q1) and with regard to gains realized on the net settlement of certain natural gas contracts, "In February 2021, the central portion of the United States experienced extreme and unprecedented cold weather due to the impact of Winter Storm Uri. Certain natural gas suppliers and natural gas pipelines declared force majeure events due to natural gas well freeze-offs or frozen equipment. This occurred at the same time as large increases in natural gas demand were occurring due to the extreme cold temperatures." CF Industries 2021 10-Q (Q1), p. 17.

by most U.S. producers.[23] While purchasing at least a portion of projected natural gas requirements and related transportation access based on forward purchase agreements appears to be commonplace,[24] the separate use of derivatives to hedge natural gas costs was reported ***.[25]

Direct labor and other factory costs

Direct labor cost, the smallest component of COGS, ranged from 7.3 percent of total COGS (2018, 2019) to 8.2 percent (January-March 2021). For the industry as a whole, average per short ton gross weight direct labor cost fluctuated somewhat but remained in a relatively narrow range. Likely reflecting differences in underlying scope of manufacturing (UAN and related operations), as well as differences in reporting conventions, U.S. producers reported a relatively wide range of average company-specific direct labor costs (see table J-1). Directionally, U.S. producers also reported a mixed pattern: some reporting relatively small changes in average direct labor cost while others reported more notable changes.[26]

[23] Partial exceptions were *** (reporting higher average natural gas cost in 2019) and *** (reporting lower average natural gas cost in January-March 2021 compared to January-March 2020). With regard to its lower average natural gas cost in January-March 2021, ***. *** response to staff follow-up questions, July 24, 2021. As noted previously, ***.

[24] As described in CF Industries' 2020 10-K, "We enter into agreements for a portion of our future natural gas supply and related transportation. As of December 31, 2020, our natural gas purchase agreements have terms that range from one to five years and a total minimum commitment of approximately $430 million, and our natural gas transportation agreements have terms that range from one to ten years and a total minimum commitment of approximately $180 million. Our minimum commitments to purchase and transport natural gas are based on prevailing market-based forward prices excluding reductions for plant maintenance and turnaround activities." CF Industries 2020 10-K, p. 53. Indicating that spot purchases of natural gas are also not uncommon, CVR Partners stated in its 2020 10-K (with regard to its East Dubuque, Illinois facility specifically) "We typically purchase natural gas from third parties on a spot basis and, from time to time, may enter into fixed-price forward purchase contracts." CVR 2020 10-K, p. 15.

[25] *** US producer questionnaire, response to III-9d-e.

[26] Among the larger-volume U.S. producers and in conjunction with lower sales/production volume, *** reported relatively large percentage increases in average direct labor cost in January-March 2021 compared to January-March 2020. ***. *** response to staff follow-up questions, July 24, 2021. ***. Email with attachment from *** to USITC staff, July 26, 2021.

The largest component of UAN COGS is other factory costs, ranging from 59.3 percent of total COGS (January-March 2021) to 64.6 percent (2020). As described by U.S. producers, this category includes a number of underlying costs (e.g., ***) whose company-specific classification can vary. The relatively large share of total COGS accounted for by other factory costs appears consistent with the description of UAN and related manufacturing as a capital intensive process.[27] While some nominally variable costs such as electricity are included in other factory costs, U.S. producers described other factory costs as primarily fixed. In general, this cost structure creates a strong incentive to maximize capacity utilization in order to increase fixed cost absorption and minimize average UAN COGS.[28] [29]

[27] Conference transcript, p. 10 (Kessler), p. 27 (Bilby), p. 52 (Will).

[28] ***. Petitioner's post conference brief (response to staff questions), p. 25. For the most part and also noting the importance of capacity utilization, other company-specific estimates of the share of fixed costs were in a similar range. *** response to staff follow-up questions, July 24, 2021. Email with attachments from *** to USITC staff, July 23, 2021. *** response to staff follow-up questions, July 24, 2021. Email with attachment from *** to USITC staff, July 26, 2021.

[29] Noting the particular importance of capacity utilization at the ammonia stage of production, a CF Industries company official stated "In general, when we think about capacity utilization, it's trying to keep the ammonia plants online as much as possible. Again, all of the nitrogen you ever make is during the ammonia process and then you're just changing its form. And in general, most of the margin that you make is the cracking of methane and converting it into ammonia. Then you make additional margin by upgrading it, but the ammonia production process is the one that we focus on from an asset utilization {perspective}. From there on, we keep the other plants operating at whatever mix is appropriate to maximize our margin opportunity based on prevailing prices in the marketplace, and so if we did end up curtailing some of our UAN production in favor of granular urea, it's not going to be such a big cost differential that you'll see, you know, other costs kind of blow out as a result of that . . . the differentials are small enough to not be highly noticeable." Conference transcript, pp. 100-101 (Will).

For the industry as a whole, average per short ton gross weight other factory costs increased in 2019, declined in 2020, and were higher in January-March 2021 (reaching their highest level of the period) compared to January-March 2020. On a company-specific basis, average other factory costs cover a relatively wide range and reflect a mix of directional patterns (see table J-1). *** reported notably high average other factory costs in 2018 and 2019, which then declined somewhat in 2020.[30] *** were the *** U.S. producers that reported increasing average other factory costs throughout the period.[31] [32] At the end of the period, *** were the *** U.S. producers to

[30] ***. Email with attachments from *** to USITC staff, July 27, 2021.

[31] ***. Petitioner's postconference brief, Response to Staff Questions, p. 30. ***. *** U.S. producer questionnaire, response to III-10.

[32] ***. Email with attachment from *** to USITC staff, July 26, 2021.

report lower average other factory costs in January-March 2021 compared to January-March 2020.

Gross profit or loss

The U.S. industry's total gross profit increased to its highest level (on an absolute basis and as a ratio to net sales value) in 2019, declined in 2020, and transitioned to a gross loss in January-March 2021 compared to gross profit in January-March 2020. With the exception of remaining positive but lower in January-March 2021 compared to January-March 2020, the gross results of *** reflect the industry-wide pattern noted above.

The improvement in the U.S. industry's gross profit ratio (total gross profit divided by total net sales value) in 2019 generally reflects a percentage increase in average sales value that outpaced the corresponding percentage increase in average COGS (see table VI-2), itself reflecting higher average other factory costs that was partially offset by a lower average total raw material cost. The subsequent contraction in the gross profit ratio in 2020 reflects a relatively large percentage decline in average sales value that exceeded the corresponding percentage decline in average COGS, the percentage decline in average total raw material in a similar range as the percentage decline in average sales value while the larger other factory cost component declined at a slower rate. In January-March 2021 compared to January-March 2020, the U.S. industry's transition to a gross loss reflects the impact of lower average sales value and higher average COGS, higher average COGS reflecting a relatively large increase in average total raw material cost and a somewhat smaller increase in average other factory costs.

U.S. producers reported a relatively wide range of gross profit or loss ratios during the period with most reporting positive gross results of varying magnitude throughout all or most of the period.[33] The exceptions were ***, which reported gross losses *** period, and ***, which reported gross losses *** of the period.

[33] As noted previously, of the *** U.S. producers reporting export shipments during the period (***), *** accounted for the majority total exports. ***. Petitioner's post conference brief, Response to Staff Questions, p. 25 and Exhibit 30. ***.

SG&A expenses and operating income or loss

The U.S. industry's total SG&A expenses increased to their highest level in 2019, declined to their lowest level in 2020, and were higher in January-March 2021 compared to January-March 2020. Corresponding SG&A expense ratios (total SG&A expenses divided by total sales) remained in a relatively narrow range during the full-year period, reflecting changes in total sales value and SG&A expenses that were directionally the same and of similar magnitudes. In contrast, the somewhat higher SG&A expense ratio in January-March 2021 reflects the combination of higher SG&A expenses and lower total sales value. Given the relatively modest changes in the level of SG&A expenses and corresponding SG&A expense ratios during the period, SG&A expenses, in general, played a secondary role in terms of explaining the pattern of operating results.

With regard to COVID-19 and the U.S. industry's financial performance, most U.S. producers indicated that there was no substantial impact; e.g. ***.[34] *** were the *** U.S. producers that provided affirmative narrative descriptions regarding COVID-19's impact on financial performance.[35]

[34] *** U.S. producer questionnaire, response to III-18. ***. As described by a CF Industries company official, "We did have some very subtle changes in terms of our operations and the way we do load it, but we never took down time as a result of it. If anything, our on stream factor was a little higher because we moved to major turnarounds out of 2020 and pushed them into 2021 based on the volume of contractors that we would need entering our facility. We wanted to make sure that at the time we did that maintenance work, that we could get as many people vaccinated as possible. So, it was really a safety measure, but to protect our employees, but the plants operated extremely well. In fact I believe we set . . . all-time ammonia production records and several other shipping records as well, and demand was quite strong during the year also." Conference transcript, p. 104 (Will).

[35] ***. *** U.S. producer questionnaire, response to III-18. ***. *** U.S. producer questionnaire, response to III-18.

Interest expense, other expenses and income, and net income or loss

*** were the *** U.S. producers that reported interest expense with *** accounting for a slight majority of the period's total (cumulative) interest expense (see table VI-1). *** were also the *** U.S. producers to report other income with the notably large amount in January-March 2021 primarily reflecting ***.[36] [37] *** was the *** U.S. producer to report other expenses with a large share of the 2019 and January-March 2021 amounts reflecting ***.[38]

While magnitudes of change differed, the U.S. industry's UAN operating income and net income followed the same pattern throughout the period: increasing in 2019, declining in 2020, and lower in January-March 2021 compared to January-March 2020.

Capital expenditures and research and development expenses

Table VI-4 and table VI-5 present the U.S. producers' total capital expenditures and each firm's narrative description, respectively, related to UAN operations. Table VI-6 and table VI-7 present total research and development (R&D) expenses and each firm's narrative description, respectively, related to UAN operations.

Table VI-4
UAN: U.S. producers' capital expenditures, by period

Value in 1,000 dollars

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
All firms	202,063	206,270	152,234	33,994	36,187

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

[36] *** U.S. producer questionnaire, response to III-10.
[37] ***. *** U.S. producer questionnaire, response to III-10.
[38] Ibid.

Table VI-5
UAN: Narrative description of U.S. producers' capital expenditures, by firm

Firm	Narrative
CF Industries	***
CVR Partners	***
Dyno Nobel	***
Iowa	***
Koch	***
LSB Industries	***
PCS	***
Trademark Nitrogen	***

Note.--***. Email with attachment from *** to USITC staff, July 26, 2021.

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

Table VI-6
UAN: U.S. producers' R&D expenses, by period

Values in 1,000 dollars

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
All firms	***	***	***	***	***

Note.--***.

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

Table VI-7
UAN: Narrative description of U.S. producers' R&D expenses, by firm

Firm	Narrative
CF Industries	***
CVR Partners	***
Dyno Nobel	***
Iowa	***
Koch	***
LSB Industries	***
PCS	***
Trademark Nitrogen	***

Note.--***. Email with attachments from *** to USITC staff, July 23, 2021.

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

Assets and return on assets

Table VI-8 and table VI-9 present data on the U.S. producers' total assets and corresponding return on assets (ROA), respectively.[39]

[39] ROA is calculated as operating income divided by total assets. With respect to a firm's overall operations, the total asset value reflects an aggregation of a number of assets which are generally not product specific. High-level allocation factors are therefore often required in order to report a total asset amount on a product-specific basis. ***. USITC auditor notes (preliminary phase).

Table VI-8
UAN: U.S. producers' total net assets, by period

Value in 1,000 dollars

Firm	2018	2019	2020
All firms	8,285,264	7,844,720	7,413,050

Note.--***. USITC auditor notes (preliminary phase).

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

Table VI-9
UAN: U.S. producers' ROA, by period

Ratio in percent

Firm	2018	2019	2020
All firms	3.7	5.2	1.5

Note.--***. USITC auditor notes (preliminary phase).

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

Capital and investment

The Commission requested U.S. producers of UAN to describe any actual or potential negative effects of imports of UAN from Russia and Trinidad and Tobago on their firms' growth, investment, ability to raise capital, development and production efforts, or the scale of capital investments. Table VI-10 presents the number of firms reporting an impact in each category and table VI-11 provides the U.S. producers' firm-specific narrative responses.

Table VI-10
UAN: Count of firms indicating actual and anticipated negative effects as a result of imports from subject sources on investment, growth, and development since January 1, 2018, by effect

Effect	Category	Count
Cancellation, postponement, or rejection of expansion projects	Investment	2
Denial or rejection of investment proposal	Investment	1
Reduction in the size of capital investments	Investment	4
Return on specific investments negatively impacted	Investment	3
Other investment effects	Investment	2
Any negative effects on investment	Investment	5
Rejection of bank loans	Growth	0
Lowering of credit rating	Growth	4
Problem related to the issue of stocks or bonds	Growth	4
Ability to service debt	Growth	2
Other growth and development effects	Growth	3
Any negative effects on growth and development	Growth	5
Anticipated negative effects of imports	Future	6

Table continued on next page.

Table VI-10 Continued
UAN: Count of firms indicating actual and anticipated negative effects as a result of imports from subject sources on investment, growth, and development since January 1, 2018, by effect

Note.--***.

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

Table VI-11
UAN: Narratives relating to actual and anticipated negative effects of imports on investment and growth and development, since January 1, 2018

Item	Firm name and accompanying narrative response
Cancellation, postponement, or rejection of expansion projects	***
Cancellation, postponement, or rejection of expansion projects	***
Denial or rejection of investment proposal	***
Reduction in the size of capital investments	***
Reduction in the size of capital investments	***

Table continued on next page.

Table VI-11 Continued
UAN: Narratives relating to actual and anticipated negative effects of imports on investment and growth and development, since January 1, 2018

Item	Firm name and accompanying narrative response
Reduction in the size of capital investments	***
Reduction in the size of capital investments	***
Return on specific investments negatively impacted	***
Return on specific investments negatively impacted	***
Return on specific investments negatively impacted	***
Other negative impact on investment	***
Other negative impact on investment	***

Table continued on next page.

Table VI-11 Continued
UAN: Narratives relating to actual and anticipated negative effects of imports on investment and growth and development, since January 1, 2018

Item	Firm name and accompanying narrative response
Lowering of credit rating	***
Lowering of credit rating	***
Lowering of credit rating	***
Lowering of credit rating	***
Problem related to the issue of stocks or bonds	***
Problem related to the issue of stocks or bonds	***
Problem related to the issue of stocks or bonds	***
Problem related to the issue of stocks or bonds	***
Ability to service debt	***

Table continued on next page.

Table VI-11 Continued
UAN: Narratives relating to actual and anticipated negative effects of imports on investment and growth and development, since January 1, 2018

Item	Firm name and accompanying narrative response
Ability to service debt	***
Other negative impact on growth and development	***
Other negative impact on growth and development	***
Other negative impact on growth and development	***

Table continued on next page.

Table VI-11 Continued
UAN: Narratives relating to actual and anticipated negative effects of imports on investment and growth and development, since January 1, 2018

Item	Firm name and accompanying narrative response
Anticipated effects of imports	***
Anticipated effects of imports	***
Anticipated effects of imports	***

Table continued on next page.

Table VI-11 Continued
UAN: Narratives relating to actual and anticipated negative effects of imports on investment and growth and development, since January 1, 2018

Item	Firm name and accompanying narrative response
Anticipated effects of imports	***
Anticipated effects of imports	***
Anticipated effects of imports	***

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

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*[1]*--*
>
> *(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,*

[1] 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).[2]

Information on the nature of the alleged subsidies was presented earlier in this report; information on the volume and pricing of imports of the subject merchandise is presented in *Parts IV* and *V*; and information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts is presented in *Part VI*. Information on inventories of the subject merchandise; foreign producers' operations, including the potential for "product-shifting;" any other threat indicators, if applicable; and any dumping in third-country markets, follows. Also presented in this section of the report is information obtained for consideration by the Commission on nonsubject countries.

[2] Section 771(7)(F)(iii) of the Act (19 U.S.C. § 1677(7)(F)(iii)) further provides that, in antidumping investigations, ". . . the Commission shall consider whether dumping in the markets of foreign countries (as evidenced by dumping findings or antidumping remedies in other WTO member markets against the same class or kind of merchandise manufactured or exported by the same party as under investigation) suggests a threat of material injury to the domestic industry."

The industry in Russia

The Commission issued foreign producers' or exporters' questionnaires to four firms believed to produce and/or export UAN from Russia.[3] Usable responses to the Commission's questionnaire were received from two firms: EuroChem and Public Joint Stock Company Acron ("PJSC Acron"). These firms' exports to the United States accounted for approximately *** percent of U.S. imports of UAN from Russia in 2020 based on official import statistics. According to estimates requested of the responding producers in Russia, the production of UAN in Russia reported in questionnaires accounts for approximately *** percent of overall production of UAN in Russia. Table VII-1 presents information on the UAN operations of the responding producers and exporters in Russia.

Table VII-1
UAN: Summary data for producers in Russia in 2020, by firm

Quantity in short tons gross weight; Shares in percent

Firm	Production (short tons gross weight)	Share of reported production (percent)	Exports to the United States (short tons gross weight)	Share of reported exports to the United States (percent)	Total shipments (short tons gross weight)	Share of firm's total shipments exported to the United States (percent)
EuroChem	***	***	***	***	***	***
PJSC Acron	***	***	***	***	***	***
All firms	***	100.0	***	100.0	***	***

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

Changes in operations

As presented in table VII-2, Russian producer *** reported operational and organizational changes since January 1, 2018.

[3] These firms were identified through a review of information submitted in the petition and presented in third-party sources.

Table VII-2
UAN: Reported changes in operations by Russian producer *, since January 1, 2018**

Item	Firm name and accompanying narrative response
Other	***

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

Operations on UAN

Table VII-3 presents information on the UAN operations of the responding producers and exporters in Russia. Russian producers' production capacity increased by *** percent from 2018 to 2019, but then decreased by *** percent from 2019 to 2020, ending *** percent lower in 2020 than in 2018. Russian producers' production capacity was *** percent higher during January-March 2021 compared to January-March 2020. It is projected to increase by *** percent during 2020-21 and remain at projected 2021 levels in 2022. Similarly, Russian producers' UAN production increased by *** percent during 2018-19, but then decreased by *** percent during 2019-20, ending *** percent lower in 2020 than in 2018.[4] Russian producers' UAN production was *** percent higher during January-March 2021 compared to January-March 2020. It is projected to decrease by *** from 2020 to 2021 and remain at projected 2021 levels in 2022. Russian producers' capacity utilization decreased from *** percent in 2018 to *** percent in 2019, but then increased to *** percent in 2020. Capacity utilization was higher in January-March 2021 (*** percent) compared to January-March 202 (*** percent). Russian producers' capacity utilization is projected to decrease from *** percent in 2020 to *** percent in 2021 and remain constant in 2022.

[4] Respondent Russian producer PJSC Acron noted that it recently completed a two-phase multiyear project to modernize its nitrogen fertilizer plant and build granulation capacity. During the first phase of the project, PJSC Acron expanded and modernized its plants producing ammonium nitrate solution and urea solution. In the second phase, completed in 2020, PJSC Acron installed granulation facilities to transform urea solution into granulated urea and to expand prilled ammonium nitrate production. As a result of this two-phase project, there was a temporary increase in UAN production in 2019 as urea solution and ammonium nitrate solution capacity increased. However, once the granulation facilities were completed, urea and ammonium nitrate liquid melt were diverted to granulation plants. This significant reduced the availability of solution for PJSC Acron's UAN plant. Respondent PJSC Acron's postconference brief, pp. 4-5.

Table VII-3
UAN: Data on industry in Russia, by period

Quantity in short tons gross weight

Item	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021	Projection 2021	Projection 2022
Capacity	***	***	***	***	***	***	***
Production	***	***	***	***	***	***	***
End-of-period inventories	***	***	***	***	***	***	***
Internal consumption	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Home market shipments	***	***	***	***	***	***	***
Exports to the United States	***	***	***	***	***	***	***
Exports to all other markets	***	***	***	***	***	***	***
Export shipments	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
Resales exported to the United States	***	***	***	***	***	***	***
Adjusted total exports to the United States	***	***	***	***	***	***	***

Table continued on next page.

Table VII-3 Continued
UAN: Data on industry in Russia, by period

Shares and ratios in percent

Item	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021	Projection 2021	Projection 2022
Capacity utilization ratio	***	***	***	***	***	***	***
Inventory ratio to production	***	***	***	***	***	***	***
Inventory ratio to total shipments	***	***	***	***	***	***	***
Internal consumption share	***	***	***	***	***	***	***
Commercial home market shipments share	***	***	***	***	***	***	***
Home market shipments share	***	***	***	***	***	***	***

Table continued on next page.

Table VII-3 Continued
UAN: Data on industry in Russia, by period

Shares in percent

Item	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021	Projection 2021	Projection 2022
Exports to the United States share	***	***	***	***	***	***	***
Exports to all other markets share	***	***	***	***	***	***	***
Export shipments share	***	***	***	***	***	***	***
Total shipments share	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Exported by producers share of adjusted total exports to United States	***	***	***	***	***	***	***
Exported by resellers share of adjusted total exports to United States	***	***	***	***	***	***	***
Adjusted share of total shipments exported to the United States	***	***	***	***	***	***	***

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

Note: Data shown as "---" represents an item for which no information was reported, whether that be a true zero, null, or non-numeric response.

Russian producers' home shipments of UAN increased by *** percent from 2018 to 2019 and by *** percent from 2019 to 2020, ending *** higher in 2020 than in 2018. Home market shipments were *** percent higher in January-March 2021 than in January-March 2020. Russian producers' home market shipments of UAN are projected to decrease by *** percent during 2020-21 and remain constant during 2022.

Exports accounted for *** of Russian producers' total shipments during the period for which data were collected. Russian producers' exports to the United States decreased irregularly by *** percent during 2018-20, increasing by *** percent from 2018 to 2019 before falling by *** percent from 2019 to 2020. Exports to the United States were *** percent lower in January-March 2021 than in January-March 2020.

Russian producers' exports to the United States are projected to decrease by *** percent during 2020-21 and by *** percent during 2021-22. Russian producers' export shipments to all other markets decreased by *** percent during 2018-19 and by *** percent during 2019-20, ending *** percent lower in 2020 than in 2018. Export shipments to all other markets were *** percent higher in January-March 2021 than in January-March 2020. Russian producers' export shipments to all other markets are projected to increase by *** percent during 2020-21 and by *** percent during 2021-22. Other export markets identified by Russian producers include ***.[5]

Alternative products

The two responding Russian firms indicated that ***.

Exports

According to GTA data presented below in table VII-4, the leading export markets for UAN from Russia are the United States, Australia, and Argentina. During 2020, the United States was the top export market for UAN from Russia, accounting for 75.6 percent of exports by quantity, followed by Australia and Argentina, accounting for 12.8 percent and 3.1 percent of exports by quantity, respectively.

[5] EuroChem and PJSC Acron foreign producer questionnaire responses, section II-8.

Table VII-4
UAN: Quantity and value of exports from Russia by destination market and by period

Quantity in short tons gross weight; Value in 1,000 dollars

Destination market	Measure	2018	2019	2020
United States	Quantity	602,385	795,483	489,241
Australia	Quantity	62,082	68,979	82,891
Argentina	Quantity	21,059	23,334	20,099
Romania	Quantity	8,673	13,074	17,549
France	Quantity	23,228	11,640	11,220
Israel	Quantity	1,164	5,700	7,168
Moldova	Quantity	1,338	2,592	4,983
Lithuania	Quantity	47,851	22,092	4,840
Kazakhstan	Quantity	7,431	4,090	3,817
All other destination markets	Quantity	33,205	20,245	5,086
All destination markets	Quantity	808,416	967,229	646,895
United States	Value	260,294	303,868	149,688
Australia	Value	27,222	26,622	25,337
Argentina	Value	10,774	7,906	6,652
Romania	Value	3,662	5,561	5,143
France	Value	9,284	5,564	3,324
Israel	Value	488	2,067	2,169
Moldova	Value	557	1,149	1,547
Lithuania	Value	16,625	10,124	1,042
Kazakhstan	Value	2,711	1,231	1,578
All other destination markets	Value	14,123	8,451	2,482
All destination markets	Value	345,740	372,543	198,963

Table continued on next page.

Table VII-4 Continued
UAN: Unit value and share of quantity of exports from Russia by destination market and by period

Unit values in dollars per short ton gross weight; Shares in percent

Destination market	Measure	2018	2019	2020
United States	Unit value	432	382	306
Australia	Unit value	438	386	306
Argentina	Unit value	512	339	331
Romania	Unit value	422	425	293
France	Unit value	400	478	296
Israel	Unit value	420	363	303
Moldova	Unit value	416	443	310
Lithuania	Unit value	347	458	215
Kazakhstan	Unit value	365	301	413
All other destination markets	Unit value	425	417	488
All destination markets	Unit value	428	385	308
United States	Share of quantity	74.5	82.2	75.6
Australia	Share of quantity	7.7	7.1	12.8
Argentina	Share of quantity	2.6	2.4	3.1
Romania	Share of quantity	1.1	1.4	2.7
France	Share of quantity	2.9	1.2	1.7
Israel	Share of quantity	0.1	0.6	1.1
Moldova	Share of quantity	0.2	0.3	0.8
Lithuania	Share of quantity	5.9	2.3	0.7
Kazakhstan	Share of quantity	0.9	0.4	0.6
All other destination markets	Share of quantity	4.1	2.1	0.8
All destination markets	Share of quantity	100.0	100.0	100.0

Source: Official exports statistics under HS subheading 3102.80 as reported by Customs Committee of Russia in the Global Trade Atlas database, accessed July 9, 2021.

Note: Top export destinations shown in descending order of 2020 data.

The industry in Trinidad and Tobago

The Commission issued foreign producers' or exporters' questionnaires to one firm believed to produce and/or export UAN from Trinidad and Tobago.[6] The Commission received a usable questionnaire from one firm: Methanol Holdings (Trinidad) Limited ("MHTL"). This firm's exports to the United States accounted for *** U.S. imports of UAN from Trinidad and Tobago in 2020. According to estimates provided by MHTL, its production of UAN in Trinidad and Tobago accounts for *** production of UAN in Trinidad and Tobago. Table VII-5 presents information on the UAN operations of MHTL in Trinidad and Tobago.

Table VII-5
UAN: Summary data for producer MHTL in Trinidad and Tobago in 2020

Quantity in short tons gross weight; Shares in percent

Firm	Production (short tons gross weight)	Share of reported production (percent)	Exports to the United States (short tons gross weight)	Share of reported exports to the United States (percent)	Total shipments (short tons gross weight)	Share of firm's total shipments exported to the United States (percent)
MHTL	***	100.0	***	100.0	***	***
All firms	***	100.0	***	100.0	***	***

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

Changes in operations

MHTL reported *** since January 1, 2018.

[6] This firm was identified through a review of information submitted in the petition and presented in third-party sources.

Operations on UAN

Table VII-6 presents information on MHTL's UAN operations in Trinidad and Tobago. MHTL's production capacity increased by *** percent during 2018-20, was the same during January-March 2021 compared to January-March 2020, and is projected to remain at 2020 levels during 2021 and 2022. MHTL's UAN production increased by *** percent from 2018-19 and by *** percent during 2019-20, ending *** percent higher overall in 2020 than in 2018. MHTL's UAN production was *** percent lower during January-March 2021 compared to January-March 2020. It is projected to increase by *** percent during 2020-21, but then decrease by *** percent during 2021-22. MHTL's capacity utilization increased irregularly from *** percent in 2018 to *** percent in 2020. MHTL's capacity utilization was *** percent during January-March 2021 compared to *** percent during January-March 2020. [7]

***, with exports accounting for *** of MHTL's reported shipments of UAN during the period for which data were collected. MHTL's exports to the United States increased by *** percent during 2018-19 and decreased by *** percent during 2019-20, ending *** percent higher in 2020 than in 2018. MHTL's exports to the United States were *** percent lower during January-March 2021 than in January-March 2020. Exports to the United States are projected to increase by *** percent during 2020-21, but then decrease by *** percent during 2021-22. As a share of total shipments, MHTL's exports to the United States accounted for *** percent in 2018, *** percent in 2019, and *** percent in 2020. MHTL's exports to the United States accounted for *** percent and *** percent, respectively, of total shipments in January-March 2020 and January-March 2021.

MHTL's exports to all other markets increased by *** percent from 2018 to 2019 and by *** percent from 2019 to 2020, ending *** percent higher in 2020 than in 2018. Its exports to all other markets were *** percent higher in January-March 2021 than in January-March 2020. MHTL's exports to all other markets are projected to increase by *** percent during 2020-21, but then decrease by *** percent during 2021-22. Other export markets identified by MHTL include ***.[8]

[7] In 2018, MHTL experienced significant natural gas curtailments, a pipeline failure, and other issues at its UAN plant which reduced MHTL's capacity, production, and export shipments during that time. These issues were largely resolved in 2019, bringing MHTL closer to historic levels of its UAN operations. Conference transcript, pp. 166-167 (Chandool).

[8] MHTL foreign producer questionnaire response, section II-8.

Table VII-6
UAN: Data on industry in Trinidad and Tobago, by period

Quantity in short tons gross weight

Item	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021	Projection 2021	Projection 2022
Capacity	***	***	***	***	***	***	***
Production	***	***	***	***	***	***	***
End-of-period inventories	***	***	***	***	***	***	***
Internal consumption	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Home market shipments	***	***	***	***	***	***	***
Exports to the United States	***	***	***	***	***	***	***
Exports to all other markets	***	***	***	***	***	***	***
Export shipments	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***

Table continued on next page.

Table VII-6 Continued
UAN: Data on industry in Trinidad and Tobago, by period

Shares and ratios in percent

Item	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021	Projection 2021	Projection 2022
Capacity utilization ratio	***	***	***	***	***	***	***
Inventory ratio to production	***	***	***	***	***	***	***
Inventory ratio to total shipments	***	***	***	***	***	***	***
Internal consumption share	***	***	***	***	***	***	***
Commercial home market shipments share	***	***	***	***	***	***	***
Home market shipments share	***	***	***	***	***	***	***
Exports to the United States share	***	***	***	***	***	***	***
Exports to all other markets share	***	***	***	***	***	***	***
Export shipments share	***	***	***	***	***	***	***
Total shipments share	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

Note: Data shown as "---" represents an item for which no information was reported, whether that be a true zero, null, or non-numeric response.

Alternative products

MHTL indicated that ***.

Exports

According to GTA data presented below in table VII-7, the leading export markets for UAN from Trinidad and Tobago are the United States, Argentina, Canada, and France. During 2020, the United States was the top export market for UAN from Trinidad and Tobago, accounting for 74.1 percent of exports by quantity, followed by Argentina, Canada, and France, accounting for 7.7 percent, 6.7 percent, and 6.7 percent of exports by quantity, respectively.

Table VII-7
UAN: Quantity and value of constructed exports from Trinidad and Tobago by reporting country and by period

Quantity in short tons gross weight; Value in 1,000 dollars

Reporting country	Measure	2018	2019	2020
United States	Quantity	769,643	942,579	996,137
Argentina	Quantity	---	42,892	103,677
Canada	Quantity	91,925	98,243	90,009
France	Quantity	72,260	79,365	89,828
Spain	Quantity	28,251	36,178	30,320
Belgium	Quantity	23,982	25,794	27,156
Uruguay	Quantity	---	---	6,624
Ukraine	Quantity	---	7,056	---
Mexico	Quantity	4,634	---	---
Germany	Quantity	2,469	---	---
All reporting countries	Quantity	993,164	1,232,106	1,343,751
United States	Value	96,794	119,195	99,708
Argentina	Value	---	6,690	16,077
Canada	Value	17,704	17,390	14,913
France	Value	37,520	45,092	42,255
Spain	Value	15,940	20,601	15,550
Belgium	Value	12,239	14,421	13,475
Uruguay	Value	---	---	1,056
Ukraine	Value	---	3,604	---
Mexico	Value	1,287	---	---
Germany	Value	1,203	---	---
All reporting countries	Value	182,688	226,992	203,033

Table continued on next page.

Table VII-7 Continued
UAN: Quantity and value of constructed exports from Trinidad and Tobago by reporting country and by period

Unit values in dollars per short ton gross weight; shares in percent

Reporting country	Measure	2018	2019	2020
United States	Unit value	126	126	100
Argentina	Unit value	---	156	155
Canada	Unit value	193	177	166
France	Unit value	519	568	470
Spain	Unit value	564	569	513
Belgium	Unit value	510	559	496
Uruguay	Unit value	---	---	159
Ukraine	Unit value	---	511	---
Mexico	Unit value	278	---	---
Germany	Unit value	487	---	---
All reporting countries	Unit value	184	184	151
United States	Share of quantity	77.5	76.5	74.1
Argentina	Share of quantity	---	3.5	7.7
Canada	Share of quantity	9.3	8.0	6.7
France	Share of quantity	7.3	6.4	6.7
Spain	Share of quantity	2.8	2.9	2.3
Belgium	Share of quantity	2.4	2.1	2.0
Uruguay	Share of quantity	---	---	0.5
Ukraine	Share of quantity	---	0.6	---
Mexico	Share of quantity	0.5	---	---
Germany	Share of quantity	0.2	---	---
All reporting countries	Share of quantity	100.0	100.0	100.0

Source: Official imports statistics of imports from Trinidad and Tobago (constructed export statistics for Trinidad and Tobago) under HS subheading 3102.80 as reported by various statistical reporting authorities in the Global Trade Atlas database, accessed July 9, 2021.

Note: Top export destinations shown in descending order of 2020 data. Data shown as "---" represents an item for which no information was reported, whether that be a true zero, null, or non-numeric response.

Subject countries combined

Table VII-8 presents summary data on combined UAN operations of the reporting subject producers in the subject countries. Combined subject producers' production capacity decreased irregularly by *** percent during 2018-20, increasing by *** percent from 2018 to 2019 before falling by *** percent from 2019 to 2020. It was *** percent higher in January-March 2021 compared to January-March 2020. Combined subject producers' production capacity is projected to increase by *** percent during 2020-21 and remain constant during 2022. Combined subject producers' UAN production increased by *** percent from 2018 to 2019, but then decreased by *** percent from 2019 to 2020, ending overall *** percent lower in 2020 than in 2018. Production was *** percent higher during January-March 2021 compared to January-March 2020 and is projected to slightly increase by *** percent during 2020-21, but then decrease by *** percent during 2021-22. Combined subject producers' capacity utilization decreased from *** percent in 2018 to *** percent in 2019, but then increased to *** percent in 2020. Capacity utilization was *** percent in January-March 2021 compared with *** percent in January-March 2020. Combined subject producers' capacity utilization is projected to decrease from *** percent in 2020 to *** percent in 2021 and to *** percent in 2022.

Combined subject producers' home market shipments (***) increased by *** percent during 2018-19 and by *** percent during 2019-20, ending *** percent higher in 2020 than in 2018. Combined subject producers' home market shipments were *** percent higher in January-March 2021 compared with January-March 2020. Home market shipments are projected to decrease by *** percent from 2020 to 2021 and remain constant in 2022.

Exports accounted for *** of combined subject producers' total shipments during the period for which data were collected. Combined subject producers' exports to the United States increased by *** percent during 2018-19, but then decreased by *** percent during 2019-20, ending *** percent lower in 2020 than in 2018. Combined subject producers' exports to the United States were *** percent lower in January-March 2021 than in January-March 2020. Exports to the United States are projected to increase by *** percent from 2020 to 2021, but then decrease by *** percent from 2021 to 2022. Combined subject producers' exports to all other markets decreased by *** percent during 2018-19 and by *** percent during 2019-20, ending *** percent lower in 2020 than in 2018. Exports to all other markets were *** percent higher in January-March 2021 than in

January-March 2020. Combined subject producers' exports to all other markets are projected to increase by *** percent during 2020-21 and by *** percent during 2021-22.

Table VII-8
UAN: Data on industry in subject countries, by period

Quantity in short tons gross weight

Item	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021	Projection 2021	Projection 2022
Capacity	***	***	***	***	***	***	***
Production	***	***	***	***	***	***	***
End-of-period inventories	***	***	***	***	***	***	***
Internal consumption	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Home market shipments	***	***	***	***	***	***	***
Exports to the United States	***	***	***	***	***	***	***
Exports to all other markets	***	***	***	***	***	***	***
Export shipments	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***

Table continued on next page.

Table VII-8 Continued
UAN: Data on industry in subject countries, by period

Shares and ratios in percent

Item	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021	Projection 2021	Projection 2022
Capacity utilization ratio	***	***	***	***	***	***	***
Inventory ratio to production	***	***	***	***	***	***	***
Inventory ratio to total shipments	***	***	***	***	***	***	***
Internal consumption share	***	***	***	***	***	***	***
Commercial home market shipments share	***	***	***	***	***	***	***
Home market shipments share	***	***	***	***	***	***	***
Exports to the United States share	***	***	***	***	***	***	***
Exports to all other markets share	***	***	***	***	***	***	***
Export shipments share	***	***	***	***	***	***	***
Total shipments share	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

U.S. inventories of imported merchandise

Table VII-9 presents data on U.S. importers' reported inventories of UAN. Inventories of UAN imports from combined subject countries increased irregularly by *** percent during 2018-20, increasing by *** percent from 2018 to 2019 before falling by *** percent from 2019 to 2020. U.S. importers' inventories of UAN from combined subject countries were *** percent higher in January-March 2021 than in January-March 2020. U.S. importers' inventories of UAN imports from Russia increased by *** percent from 2018-19, but then decreased by *** percent in 2020, ending *** percent lower in 2020 than in 2018. U.S. importer *** accounted for *** reported inventories of UAN imports from Trinidad and Tobago. *** inventories of UAN imports from Trinidad and Tobago increased by *** percent during 2018-19 and by *** percent during 2019-20, ending *** percent higher in 2020 than in 2018. U.S. importers' inventories of UAN imports from Russia were *** percent lower in January-March 2021 than in January-March 2020, while *** inventories of UAN imports from Trinidad and Tobago were *** percent higher in January-March 2021 than in January-March 2020. Inventories of UAN from nonsubject countries decreased irregularly by *** percent during 2018-20, increasing by *** percent from 2018 to 2019, but then decreasing by *** percent from 2019 to 2020. U.S. importers' inventories of UAN from nonsubject countries were *** percent lower in January-March 2021 compared to January-March 2020. U.S. importers *** accounted for the majority of inventories of UAN from combined subject countries during the period for which data were collected, while U.S. importer *** accounted for the majority of inventories of UAN from nonsubject countries. The ratio of U.S. importers' inventories of UAN imports from combined subject sources to U.S. shipments of imports decreased from *** percent in 2018 to *** percent in 2019, but then increased to *** percent in 2020. The ratio of U.S. importers' inventories of UAN imports from combined subject sources to U.S. shipments of imports was *** percent in January-March 2021 compared with *** percent in January-March 2020. The ratio of U.S. importers' inventories of UAN imports from Russia to U.S. shipments of imports decreased from *** percent in 2018 to *** percent in 2019, but then increased to *** percent in 2020 and was lower during January-March 2021 (*** percent) compared with January-March 2020 (*** percent). The ratio of U.S. importers' inventories of UAN imports from Trinidad and Tobago to U.S. shipments of imports increased from *** percent in 2018 to *** percent in 2019 and to *** percent in 2020 and was higher during January-March 2021 (*** percent) compared with January-March 2020 (*** percent).

Table VII-9
UAN: U.S. importers' end-of-period inventories of imports, by source and by period

Quantity in short tons gross weight; Ratio is inventories to U.S. imports, U.S. shipments, or total shipments in percent

Measure	Source	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
Inventories quantity	Russia	***	***	***	***	***
Ratio to imports	Russia	***	***	***	***	***
Ratio to U.S. shipments of imports	Russia	***	***	***	***	***
Ratio to total shipments of imports	Russia	***	***	***	***	***
Inventories quantity	Trinidad and Tobago	***	***	***	***	***
Ratio to imports	Trinidad and Tobago	***	***	***	***	***
Ratio to U.S. shipments of imports	Trinidad and Tobago	***	***	***	***	***
Ratio to total shipments of imports	Trinidad and Tobago	***	***	***	***	***
Inventories quantity	Subject	***	***	***	***	***
Ratio to imports	Subject	***	***	***	***	***
Ratio to U.S. shipments of imports	Subject	***	***	***	***	***
Ratio to total shipments of imports	Subject	***	***	***	***	***
Inventories quantity	Nonsubject	***	***	***	***	***
Ratio to imports	Nonsubject	***	***	***	***	***
Ratio to U.S. shipments of imports	Nonsubject	***	***	***	***	***
Ratio to total shipments of imports	Nonsubject	***	***	***	***	***
Inventories quantity	All	***	***	***	***	***
Ratio to imports	All	***	***	***	***	***
Ratio to U.S. shipments of imports	All	***	***	***	***	***
Ratio to total shipments of imports	All	***	***	***	***	***

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

U.S. importers' outstanding orders

The Commission requested importers to indicate whether they imported or arranged for the importation of UAN from Russia and Trinidad and Tobago after March 31, 2021. These data are presented in table VII-10. Responding importers of UAN reported that *** percent of total arranged imports (from April 2021 through March 2022) are from subject sources.

Table VII-10
UAN: Quantity of U.S. importers' arranged imports, by source and by period

Quantity in short tons gross weight

Source of arranged imports	Apr-Jun 2021	Jul-Sept 2021	Oct-Dec 2021	Jan-Mar 2022	Total
Russia	***	***	***	***	***
Trinidad and Tobago	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***

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

Note: Data shown as "---" represents an item for which no information was reported, whether that be a true zero, null, or non-numeric response.

Antidumping or countervailing duty orders in third-country markets

There are multiple third-countries with existing trade actions on UAN.[9] The European Union (EU) imposed antidumping duties on UAN from Russia, Trinidad and Tobago, and the United States in 2019.[10] U.S. imports are assessed a duty of €29.48 per ton, Trinidad and Tobago of €22.24 per ton, and Russia of €42.47 per ton.[11] Part of the countervailing duty calculation on Russian UAN incorporates findings of a distorted natural gas market in that

[9] Formerly active trade actions include EU antidumping duties on imports of UAN from Poland (1994–2004); Bulgaria (1994–2007); Lithuania (2000–2004); and Algeria, Belarus, Russia, and Ukraine (2000–2011). The duties on Polish and Lithuanian product became inactive once those countries joined the EU. Kommerskollegium, "Effects on Trade and Competition of Abolishing Anti-Dumping Measures: The European Union Experience," 2013, p. 19, https://unctad.org/system/files/non-official-document/ditc_ted_03042014Kommerskollegium2.pdf; Petitioner's postconference brief, p. 102.

[10] European Commission, "Commission Implementing Regulation (EU) 2019/1688 of 8 October 2019 Imposing a Definitive Anti-dumping Duty and Definitively Collecting the Provisional Duty Imposed on Imports of Mixtures of Urea and Ammonium Nitrate Originating in Russia, Trinidad and Tobago and the United States of America," October 9, 2019, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R1688&from=EN.

[11] Except for the Russian Firms Joint Stock Companies Azot and Nevinnomyssky Azot, which are assessed €27.77 per ton. The normal EU duty rate for subject UAN is 6.5 percent ad valorem.

country. Despite leaving the EU since their enactment, the United Kingdom appears to currently be enforcing these duties.[12] Ukraine has also imposed antidumping duties on Russian UAN since 2017 at a rate of 31.84 percent ad valorem.[13]

Information on nonsubject countries

UAN composes a less sizable role in most other non-subject markets than other fertilizers. The global use and production of UAN is more geographically concentrated than other fertilizers due to the infrastructure required to distribute it.[14] The EU follows the United States in terms of capacity and consumption, together accounting for the majority of both.[15] The UAN production capacity of the EU is capable of meeting about three quarters of its constituents' demand, with the remainder depending on imports.[16] U.S. exports to the EU collapsed following the imposition of antidumping duties on U.S. product in 2019, falling to negligible levels in 2020.[17] In contrast, Russian and Trinidadian exports to the EU slightly increased in 2020, rising by 4.2 and 4.9 percent, respectively.[18] [19]

Production in other third countries represents increasingly limited shares of the global total. Belarus has one facility that largely supports domestic consumption and exports to the EU, but is reportedly unable to have a substantial impact on U.S. imports.[20] Egypt used to supply tonnage to the EU, but the economics of their process has largely removed them from

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[12] HM Revenue & Customs, "Imports of Urea and Ammonium Nitrate Solutions from Russia, USA and Trinidad and Tobago (Anti-Dumping Duty 2361)," October 10, 2019, https://www.gov.uk/government/publications/imports-of-urea-and-ammonium-nitrate-solutions-from-russia-usa-and-trinidad-and-tobago-anti-dumping-duty-2361/imports-of-urea-and-ammonium-nitrate-solutions-from-russia-usa-and-trinidad-and-tobago-anti-dumping-duty-2361.

[13] The normal Ukrainian duty rate for subject UAN is 5 percent ad valorem. Interfax-Ukraine, "Ukraine Imposes Antidumping Duties on Urea, UAN from Russia," Kyiv Post, May 19, 2017, https://www.kyivpost.com/ukraine-politics/ukraine-imposes-antidumping-duties-urea-uan-russia.html.

[14] Conference transcript, p. 119 (Frost).

[15] Yamaguchi et al, "Nitrogen Solutions," Chemical Economics Handbook, October 15, 2019, pp. 13–15, https://ihsmarkit.com/products/nitrogen-chemical-economics-handbook.html; Conference transcript, p. 25 (Bilby).

[16] Yamaguchi et al, "Nitrogen Solutions," *Chemical Economics Handbook*, October 15, 2019, pp. 35, 43, and 50, https://ihsmarkit.com/products/nitrogen-chemical-economics-handbook.html.

[17] USITC DataWeb, HTS 3102.80.

[18] Global Trade Atlas database, accessed July 23, 2021.

[19] Goodman, Samuel M., "The Impact of EU Anti-dumping Duties on Urea Ammonium Nitrate Solution," USITC Working Paper ID-070, October 2020.

[20] Yamaguchi et al, "Nitrogen Solutions," *Chemical Economics Handbook*, October 15, 2019, p. 50, https://ihsmarkit.com/products/nitrogen-chemical-economics-handbook.html; Conference transcript, pp. 43 (Bilby) and 198 (McMullin); Petitioner's postconference brief, p. 78.

the export market in recent years.[21] The Canadian UAN industry primarily feeds internal consumption, with some cross-border trade between the U.S. and Trinidad and Tobago resulting in near-net neutral trade.[22] Argentina represents one of the larger growth markets for U.S. and subject country exports, which supplement modest domestic production.[23] U.S exports to Argentina increased 51 percent during the period 2018 to 2020, from 304,000 short tons in 2018 to 460,000 tons in 2020, while exports to Brazil also increased during the same period from 55,000 tons to 126,000 tons (129 percent).[24]

Global exports of UAN by country are detailed in the data of table VII-11. Outside of the subject countries between 2018 and 2020 (34 to 47 percent of total export volume in aggregate), Canada, the Netherlands, Lithuania, and Belgium collectively accounted for another 24 to 29 percent of total volume. During this period of EU dumping actions on the subject countries during 2018-20, the U.S. volume share of exports decreased by 10 percentage points (about 750,000 tons), Russian volume share of total exports during the subject period remained relatively level (160,000 ton overall decline), while Trinidad increased by 13 percentage points (350,000 tons).

[21] Conference transcript, p. 198 (McMullin).

[22] Yamaguchi et al, "Nitrogen Solutions," *Chemical Economics Handbook*, October 15, 2019, p. 28, https://ihsmarkit.com/products/nitrogen-chemical-economics-handbook.html; Global Trade Atlas database, accessed July 23, 2021.

[23] Prices for U.S. and Trinidadian UAN were comparable in the Argentinian market in 2020, at $0.31 and $0.36 per kilogram nitrogen, respectively, while Russia's was substantially higher at $0.53 per kilogram nitrogen. Global Trade Atlas database, accessed July 23, 2021. Yamaguchi et al, "Nitrogen Solutions," *Chemical Economics Handbook*, October 15, 2019, p. 31 https://ihsmarkit.com/products/nitrogen-chemical-economics-handbook.html; Conference transcript, pp. 25 (Bilby), 108–109 (Will), 119 (Frost), 128 (Will), 130–131 (O'Connell), and 199 (Knopov, 199).

[24] USITC DataWeb, HTS 3102.80.

Table VII-11
UAN: Global exports, by exporting country and by period

Quantity in short tons gross weight; value in 1,000 dollars

Exporting country	Measure	2018	2019	2020
United States	Quantity	1,611,524	1,071,598	860,314
Russia	Quantity	808,416	967,229	646,895
Trinidad and Tobago	Quantity	993,164	1,232,106	1,343,751
Subject exporting countries	Quantity	1,801,580	2,199,334	1,990,646
Canada	Quantity	518,687	472,880	449,415
Netherlands	Quantity	280,359	295,963	320,664
Lithuania	Quantity	317,320	298,499	297,447
Belgium	Quantity	143,187	452,128	121,302
Slovakia	Quantity	56,376	55,341	55,249
Germany	Quantity	52,104	32,471	45,853
Romania	Quantity	22,211	22,029	29,130
Croatia	Quantity	2,878	21,759	12,690
Poland	Quantity	5,626	5,747	6,883
All other exporting countries	Quantity	549,653	717,739	16,834
All reporting exporting countries	Quantity	5,361,506	5,645,487	4,206,427
United States	Value	202,824	134,282	97,284
Russia	Value	345,740	372,543	198,963
Trinidad and Tobago	Value	182,688	226,992	203,033
Subject exporting countries	Value	528,428	599,535	401,997
Canada	Value	103,292	101,578	85,044
Netherlands	Value	141,273	158,192	147,527
Lithuania	Value	156,823	155,591	130,478
Belgium	Value	74,250	76,866	63,823
Slovakia	Value	30,658	32,383	26,352
Germany	Value	30,089	19,021	21,204
Romania	Value	12,286	13,090	14,297
Croatia	Value	1,821	12,242	5,732
Poland	Value	2,676	3,504	3,356
All other exporting countries	Value	151,569	139,356	10,931
All reporting exporting countries	Value	1,435,989	1,445,641	1,008,025

Table continued on next page.

Table VII-11 Continued
UAN: Global exports, by exporting country and by period

Unit values in dollars per short ton gross weight; Shares in percent

Exporting country	Measure	2018	2019	2020
United States	Unit value	126	125	113
Russia	Unit value	428	385	308
Trinidad and Tobago	Unit value	184	184	151
Subject exporting countries	Unit value	293	273	202
Canada	Unit value	199	215	189
Netherlands	Unit value	504	535	460
Lithuania	Unit value	494	521	439
Belgium	Unit value	519	170	526
Slovakia	Unit value	544	585	477
Germany	Unit value	577	586	462
Romania	Unit value	553	594	491
Croatia	Unit value	633	563	452
Poland	Unit value	476	610	488
All other exporting countries	Unit value	276	194	649
All reporting exporting countries	Unit value	268	256	240
United States	Share of quantity	30.1	19.0	20.5
Russia	Share of quantity	15.1	17.1	15.4
Trinidad and Tobago	Share of quantity	18.5	21.8	31.9
Subject exporting countries	Share of quantity	33.6	39.0	47.3
Canada	Share of quantity	9.7	8.4	10.7
Netherlands	Share of quantity	5.2	5.2	7.6
Lithuania	Share of quantity	5.9	5.3	7.1
Belgium	Share of quantity	2.7	8.0	2.9
Slovakia	Share of quantity	1.1	1.0	1.3
Germany	Share of quantity	1.0	0.6	1.1
Romania	Share of quantity	0.4	0.4	0.7
Croatia	Share of quantity	0.1	0.4	0.3
Poland	Share of quantity	0.1	0.1	0.2
All other exporting countries	Share of quantity	10.3	12.7	0.4
All reporting exporting countries	Share of quantity	100.0	100.0	100.0

Source: Official exports statistics under HS subheading 3102.80 reported by various national statistical authorities in the Global Trade Atlas database, accessed July 12, 2021, and official global imports statistics from Trinidad and Tobago under HS subheading 3102.80 as reported by UN Comtrade in the Global Trade Atlas database, accessed July 9, 2021.

Note: United States is shown at the top followed by the countries under investigation, all remaining top exporting countries in descending order of 2020 data.

Global UAN imports by country as reported by Global Trade Atlas are detailed in table VII-12. Nonsubject country import volume slightly shifted from 3.4 million tons in 2018, to a low point of 3.2 million tons mid-2019, then back to the 3.3 million tons in 2020. The fluctuations in apparent nonsubject import market share in 2019 relative to 2018, may be influenced by multiple factors including, but not limited to a rise in U.S. imports from subject countries, pricing, the EU trade sanctions, weather conditions and inventory levels, and agricultural fundaments in general.[25] Import prices in the EU were substantially higher than that of other reported countries.

Subject U.S imports were reported to account for the largest volume share of global imports by country, ranging from 44 percent of the global total in 2018, to 49 percent in 2019, and 44-45 percent in 2020. UAN imports by Russia and Trinidad were negligible. On a regional basis, nonsubject Latin American import volume, led by Argentina, increased 4 percentage points, from 14 percent of total global imports in 2018, to 18 percent in 2020, indicative of U.S. export growth trends during the period of some 50 percent. The EU import share, led by France during the same period, however, declined from 19 percent to 17 percent, indicative of the EU trade actions. Australian and Canadian import volume in aggregate held a 12 percent level share during the period, while all other country imports declined 4 percentage points from 12 percent to 8 percent.

[25] Conference transcript, pp. 7-9 (Kessler); pp. 12, 15 (Rosenthal); pp. 20, 121, 126 (Will); p. 193 (Wessel); p. 192 (O'Neil), p. 201 (McMullen).

Table VII-12
UAN: Global imports, by importing country and by period

Quantity in short tons gross weight; Value in 1,000 dollars

Importing country	Measure	2018	2019	2020
United States	Quantity	2,641,271	3,126,212	2,632,629
Russia	Quantity	---	---	42
Trinidad and Tobago	Quantity	---	---	---
Subject importing countries	Quantity	---	---	42
Argentina	Quantity	612,774	632,057	752,500
France	Quantity	788,860	672,216	654,326
Australia	Quantity	373,366	350,900	436,834
Canada	Quantity	336,381	455,854	286,751
United Kingdom	Quantity	187,983	172,778	181,797
Belgium	Quantity	188,022	153,720	165,941
Brazil	Quantity	55,172	61,715	149,570
Mexico	Quantity	123,069	65,756	104,431
Uruguay	Quantity	44,049	55,308	69,090
All other importers	Quantity	697,310	597,622	479,255
All reporting importers	Quantity	6,048,257	6,344,138	5,913,166
United States	Value	406,133	470,261	320,040
Russia	Value	---	---	16
Trinidad and Tobago	Value	---	---	---
Subject importing countries	Value	---	---	16
Argentina	Value	119,499	107,480	118,375
France	Value	385,744	338,171	297,944
Australia	Value	60,263	52,908	59,673
Canada	Value	61,247	77,335	47,808
United Kingdom	Value	102,582	93,696	86,661
Belgium	Value	89,205	80,248	68,661
Brazil	Value	6,122	7,561	16,158
Mexico	Value	26,605	15,180	19,849
Uruguay	Value	9,035	10,500	11,550
All other importers	Value	343,610	309,795	212,137
All reporting importers	Value	1,610,045	1,563,134	1,258,872

Table continued on next page.

Table VII-12 Continued
UAN: Global imports, by importing country and by period

Unit values in dollars per short ton gross weight; Shares in percent

Importing country	Measure	2018	2019	2020
United States	Unit value	154	150	122
Russia	Unit value	---	---	381
Trinidad and Tobago	Unit value	---	---	---
Subject importing countries	Unit value	---	---	381
Argentina	Unit value	195	170	157
France	Unit value	489	503	455
Australia	Unit value	161	151	137
Canada	Unit value	182	170	167
United Kingdom	Unit value	546	542	477
Belgium	Unit value	474	522	414
Brazil	Unit value	111	123	108
Mexico	Unit value	216	231	190
Uruguay	Unit value	205	190	167
All other importers	Unit value	493	518	443
All reporting importers	Unit value	266	246	213
United States	Share of quantity	43.7	49.3	44.5
Russia	Share of quantity	---	---	0.0
Trinidad and Tobago	Share of quantity	---	---	---
Subject importing countries	Share of quantity	---	---	0.0
Argentina	Share of quantity	10.1	10.0	12.7
France	Share of quantity	13.0	10.6	11.1
Australia	Share of quantity	6.2	5.5	7.4
Canada	Share of quantity	5.6	7.2	4.8
United Kingdom	Share of quantity	3.1	2.7	3.1
Belgium	Share of quantity	3.1	2.4	2.8
Brazil	Share of quantity	0.9	1.0	2.5
Mexico	Share of quantity	2.0	1.0	1.8
Uruguay	Share of quantity	0.7	0.9	1.2
All other importers	Share of quantity	11.5	9.4	8.1
All reporting importers	Share of quantity	100.0	100.0	100.0

Source: Official imports statistics under HS subheading 3102.80 reported by various national statistical authorities in the Global Trade Atlas database, accessed July 20, 2021.

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. United States is shown at the top followed by the countries under investigation, all remaining top importing countries in descending order of 2020 data. Data shown as "---" represents an item for which no information was reported, whether that be a true zero, null, or non-numeric response.

U.S. UAN market demand, including imports, is reported to be the world's largest, accompanied by a domestic production capability of some 16 million tons of UAN annually, which potentially exceeds domestic demand.[26] [27] Petitioner CF Industries itself operates UAN plants in five states having an aggregate capacity of 8.4 million tons of UAN annually.[28]

The industry in Canada

Table VII-13 presents Canadian UAN export shipment data. Canada is the largest nonsubject source of exports globally, with the United States accounting for the majority of Canadian shipments during the 2018-20 period. Shipments to the United States fell by 71,000 tons (14 percent) during the 2018-20 period, accompanied by a $10 per ton decline in prices. Canadian export shipments based on Global Trade Atlas data (table VII-13) account for 17-20 percent of total U.S. global UAN imports (table VII-12). Nitrogen fertilizer producer affiliates of CF Industries, Nutrien, and Koch, also operate nitrogen fertilizer plants in Canada.[29]

Table VII-13
UAN: Quantity and value of exports from Canada, by destination market and by period

Quantity in short tons gross weight; Value in 1,000 dollars

Destination market	Measure	2018	2019	2020
United States	Quantity	518,536	472,699	447,788
Australia	Quantity	141	181	1,627
Mexico	Quantity	0	0	---
Germany	Quantity	10	---	---
All destination markets	Quantity	518,687	472,880	449,415
United States	Value	103,251	101,530	84,625
Australia	Value	39	48	419
Mexico	Value	0	0	---
Germany	Value	3	---	---
All destination markets	Value	103,292	101,578	85,044

Table continued on next page.

[26] Conference transcript, p. 18 (Will).
[27] Conference transcript, p. 213 (McLain).
[28] Conference transcript, pp. 25-26 (Bilby).
[29] CF Industries SEC Form 10-k, December 31, 2020, and Nutrien Fact Book 2020.

Table VII-13 Continued
UAN: Unit value and share of quantity from Canada, by destination market and by period

Unit values in dollars per short ton gross weight; Shares in percent

Destination market	Measure	2018	2019	2020
United States	Unit value	199	215	189
Australia	Unit value	276	268	258
Mexico	Unit value	271	267	---
Germany	Unit value	273	---	---
All destination markets	Unit value	199	215	189
United States	Share of quantity	100.0	100.0	99.6
Australia	Share of quantity	0.0	0.0	0.4
Mexico	Share of quantity	0.0	0.0	---
Germany	Share of quantity	0.0	---	---
All destination markets	Share of quantity	100.0	100.0	100.0

Source: Official exports statistics under HS subheading 3102.80 as reported by Statistics Canada in the Global Trade Atlas database, accessed July 22, 2021.

Note: Values shown as "0" represent values greater than zero, but less than "0.5". Shares shown as "0.0" represent values greater than zero, but less than "0.05" percent. United States is shown at the top, all remaining top export destinations shown in descending order of 2020 data. Data shown as "---" represents an item for which no information was reported, whether that be a true zero, null, or non-numeric response.

APPENDIX A

FEDERAL REGISTER NOTICES

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

Citation	Title	Link
86 FR 36158, July 8, 2021	*Urea Ammonium Nitrate Solutions from Russia and Trinidad and Tobago; Institution of Anti-Dumping and Countervailing Duty Investigations and Scheduling of Preliminary Phase Investigations*	https://www.govinfo.gov/content/pkg/FR-2021-07-08/pdf/2021-14486.pdf
86 FR 40008, July 26, 2021	*Urea Ammonium Nitrate Solutions From the Russian Federation and the Republic of Trinidad and Tobago: Initiation of Less-Than-Fair-Value Investigations*	https://www.govinfo.gov/content/pkg/FR-2021-07-26/pdf/2021-15889.pdf
86 FR 40004, July 26, 2021	*Urea Ammonium Nitrate Solutions From the Russian Federation and the Republic of Trinidad and Tobago: Initiation of Countervailing Duty Investigations*	https://www.govinfo.gov/content/pkg/FR-2021-07-26/pdf/2021-15890.pdf

APPENDIX B

LIST OF STAFF CONFERENCE WITNESSES

CALENDAR OF PUBLIC PRELIMINARY CONFERENCE

Those listed below appeared in the United States International Trade Commission's preliminary conference via videoconference:

Subject: Urea Ammonium Nitrate Solutions from Russia and Trinidad and Tobago

Inv. Nos.: 701-TA-668-669 and 731-TA-1565-1566 (Preliminary)

Date and Time: July 21, 2021 - 9:30 a.m.

OPENING REMARKS:

In Support of Imposition (**Jeffrey Kessler**, Wilmer Cutler Pickering Hale and Dorr LLP)
In Opposition to Imposition (**Paul C. Rosenthal**, Kelley Drye & Warren LLP)

In Support of the Imposition of Antidumping and Countervailing Duty Orders:

Wilmer Cutler Pickering Hale and Dorr LLP
Washington, DC
on behalf of

CF Industries Nitrogen, LLC ("CF Industries")

Tony Will, President and Chief Executive Officer, CF Industries

David Bilby, Director, Market Research, Planning, and Analysis, CF Industries

Frank O'Connell, Vice President of Product Management, UAN/AN, CF Industries

Bert Frost, Senior Vice President, Sales and Market Development, CF Industries

Richard Hoker, Corporate Controller, CF Industries

Andrew Szamosszegi, Principal, Capital Trade Inc.

Tom Rogers, Principal, Capital Trade Inc.

In Support of the Imposition of
Antidumping and Countervailing Duty Orders (continued):

Brian Westenbroek, Project Manager, Capital Trade Inc.

Jeffrey Kessler	)
David Ross	)
Patrick McLain	)- OF COUNSEL
Stephanie Hartmann	)
Natan Tubman	)

In Opposition to the Imposition of
Antidumping and Countervailing Duty Orders:

Steptoe & Johnson LLP
Washington, DC
on behalf of

Helm Fertilizer Corporation ("Helm")
Methanol Holdings (Trinidad) Limited ("MHTL")

Michael Peyton, President, Helm

Ravi Cardinez, Financial Controller, MHTL

Vishard Chandool, Technical and Commercial Assurance Manager, MHTL

Hanna Sukhu-Maharaj, Marketing and Logistics Manager, MHTL

Eric Emerson	)
Zachary Simmons	) – OF COUNSEL
Judy Wang	)

Kelley Drye & Warren LLP
Washington, DC
on behalf of

International Raw Materials Ltd. (“IRM”)

W.P. O’Neill, President, IRM

Brooke McMullin, Vice President, IRM

Brad Hudgens, Economist, Georgetown Economic Services LLC

Paul C. Rosenthal)
Elizabeth C. Johnson) – OF COUNSEL
Melissa M. Brewer)

In Opposition to the Imposition of
Antidumping and Countervailing Duty Orders (continued):

Hogan Lovells US LLP
Washington, DC
on behalf of

Gavilon Fertilizer, LLC

Brent Harlander, President, Gavilon Fertilizer, LLC

Jared R. Wessel)
) – OF COUNSEL
Michael G. Jacobson)

Mayer Brown LLP
Washington, DC
on behalf of

Acron
Acron USA Inc.

Viacheslav Knopov, President, Acron USA Inc.

Sydney Mintzer)
) – OF COUNSEL
Anjani Nadadur)

REBUTTAL/CLOSING REMARKS:

In Support of Imposition (**Patrick McLain**, Wilmer Cutler Pickering Hale and Dorr LLP)
In Opposition to Imposition (**Jared R. Wessel**, Hogan Lovells US LLP)

-END-

APPENDIX C

SUMMARY DATA

Table C-1
UAN: Summary data concerning the U.S. market, 2018-20, January to March 2020, and January to March 2021

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

	Reported data					Period changes			
	Calendar year			Jan-Mar		Comparison years			Jan-Mar
	2018	2019	2020	2020	2021	2018-20	2018-19	2019-20	2020-21
U.S. consumption quantity:									
Amount	13,949,860	14,796,451	15,119,684	3,551,073	3,367,497	▲8.4	▲6.1	▲2.2	▼(5.2)
Producers' share (fn1)	81.1	78.6	82.3	78.5	79.2	▲1.2	▼(2.4)	▲3.7	▲0.6
Importers' share (fn1):									
Russia	8.8	11.5	7.8	9.4	9.2	▼(1.0)	▲2.7	▼(3.7)	▼(0.2)
Trinidad and Tobago	5.5	6.4	6.6	8.6	5.7	▲1.1	▲0.9	▲0.2	▼(2.8)
Subject sources	14.3	17.9	14.4	17.9	14.9	▲0.1	▲3.6	▼(3.5)	▼(3.0)
Nonsubject sources	4.6	3.4	3.3	3.5	5.9	▼(1.4)	▼(1.2)	▼(0.2)	▲2.4
All import sources	18.9	21.4	17.7	21.5	20.8	▼(1.2)	▲2.4	▼(3.7)	▼(0.6)
U.S. consumption value:									
Amount	2,369,863	2,654,654	2,148,773	541,041	496,875	▼(9.3)	▲12.0	▼(19.1)	▼(8.2)
Producers' share (fn1)	80.1	79.2	81.9	79.7	75.9	▲1.8	▼(0.9)	▲2.7	▼(3.8)
Importers' share (fn1):									
Russia	9.0	11.0	7.6	8.4	10.0	▼(1.4)	▲2.0	▼(3.4)	▲1.6
Trinidad and Tobago	5.4	5.7	6.2	7.4	5.5	▲0.8	▲0.3	▲0.5	▼(1.9)
Subject sources	14.4	16.7	13.8	15.7	15.5	▼(0.5)	▲2.3	▼(2.9)	▼(0.3)
Nonsubject sources	5.5	4.1	4.3	4.5	8.6	▼(1.2)	▼(1.4)	▲0.2	▲4.1
All import sources	19.9	20.8	18.1	20.3	24.1	▼(1.8)	▲0.9	▼(2.7)	▲3.8
U.S. imports from:									
Russia:									
Quantity	1,227,254	1,706,932	1,186,296	332,280	309,943	▼(3.3)	▲39.1	▼(30.5)	▼(6.7)
Value	212,205	291,249	163,225	45,439	49,702	▼(23.1)	▲37.2	▼(44.0)	▲9.4
Unit value	$173	$171	$138	$137	$160	▼(20.4)	▼(1.3)	▼(19.4)	▲17.3
Ending inventory quantity	***	***	***	***	***	▼***	▲***	▼***	▼***
Trinidad and Tobago:									
Quantity	769,643	942,579	996,137	304,134	192,696	▲29.4	▲22.5	▲5.7	▼(36.6)
Value	128,533	152,310	134,105	39,769	27,097	▲4.3	▲18.5	▼(12.0)	▼(31.9)
Unit value	$167	$162	$135	$131	$141	▼(19.4)	▼(3.2)	▼(16.7)	▲7.5
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▲***	▲***
Subject sources:									
Quantity	1,996,896	2,649,511	2,182,433	636,414	502,640	▲9.3	▲32.7	▼(17.6)	▼(21.0)
Value	340,738	443,559	297,330	85,208	76,799	▼(12.7)	▲30.2	▼(33.0)	▼(9.9)
Unit value	$171	$167	$136	$134	$153	▼(20.2)	▼(1.9)	▼(18.6)	▲14.1
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▼***	▲***
Nonsubject sources:									
Quantity	644,375	510,366	492,267	125,424	198,613	▼(23.6)	▼(20.8)	▼(3.5)	▲58.4
Value	130,591	108,367	91,740	24,507	42,705	▼(29.8)	▼(17.0)	▼(15.3)	▲74.3
Unit value	$203	$212	$186	$195	$215	▼(8.0)	▲4.8	▼(12.2)	▲10.0
Ending inventory quantity	***	***	***	***	***	▼***	▲***	▼***	▼***
All import sources:									
Quantity	2,641,271	3,159,877	2,674,700	761,838	701,253	▲1.3	▲19.6	▼(15.4)	▼(8.0)
Value	471,329	551,926	389,069	109,715	119,504	▼(17.5)	▲17.1	▼(29.5)	▲8.9
Unit value	$178	$175	$145	$144	$170	▼(18.5)	▼(2.1)	▼(16.7)	▲18.3
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▼***	▼***
U.S. producers':									
Average capacity quantity	15,568,226	15,936,181	16,065,941	4,015,303	4,011,303	▲3.2	▲2.4	▲0.8	▼(0.1)
Production quantity	12,759,795	12,748,555	12,981,430	3,032,839	3,012,664	▲1.7	▼(0.1)	▲1.8	▼(0.7)
Capacity utilization (fn1)	82.0	80.0	80.8	75.5	75.1	(1.2)	(2.0)	0.8	(0.4)
U.S. shipments:									
Quantity	11,308,589	11,636,574	12,444,984	2,789,235	2,666,244	▲10.0	▲2.9	▲6.9	▼(4.4)
Value	1,898,534	2,102,728	1,759,704	431,326	377,371	▼(7.3)	▲10.8	▼(16.3)	▼(12.5)
Unit value	$168	$181	$141	$155	$142	▼(15.8)	▲7.6	▼(21.7)	▼(8.5)
Export shipments:									
Quantity	***	***	***	***	***	▼***	▼***	▼***	▲***
Value	***	***	***	***	***	▼***	▼***	▼***	▲***
Unit value	***	***	***	***	***	▼***	▼***	▼***	▲***
Ending inventory quantity	948,976	1,144,431	895,716	1,351,263	1,167,150	▼(5.6)	▲20.6	▼(21.7)	▼(13.6)
Inventories/total shipments (fn1)	***	***	***	***	***	▼***	▲***	▼***	▼***

Table continued on next page.

Table C-1 continued
UAN: Summary data concerning the U.S. market, 2018-20, January to March 2020, and January to March 2021

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

	Reported data					Period changes			
	Calendar year			Jan-Mar		Comparison years			Jan-Mar
	2018	2019	2020	2020	2021	2018-20	2018-19	2019-20	2020-21
U.S. producers'--Continued:									
Production workers	1,381	1,417	1,434	1,317	1,413	▲3.8	▲2.6	▲1.2	▲7.3
Hours worked (1,000s)	2,962	3,080	3,059	721	759	▲3.3	▲4.0	▼(0.7)	▲5.3
Wages paid ($1,000)	162,220	172,621	184,064	44,545	48,120	▲13.5	▲6.4	▲6.6	▲8.0
Hourly wages (dollars per hour)	$54.77	$56.05	$60.17	$61.78	$63.40	▲9.9	▲2.3	▲7.4	▲2.6
Productivity	4,308	4,139	4,244	4,206	3,969	▼(1.5)	▼(3.9)	▲2.5	▼(5.6)
Unit labor costs	$12.71	$13.54	$14.18	$14.69	$15.97	▲11.5	▲6.5	▲4.7	▲8.7
Net sales:									
Quantity	***	***	***	***	***	▲***	▼***	▲***	▼***
Value	***	***	***	***	***	▼***	▲***	▼***	▼***
Unit value	***	***	***	***	***	▼***	▲***	▼***	▼***
Cost of goods sold (COGS)	***	***	***	***	***	▼***	▲***	▼***	▲***
Gross profit or (loss) (fn2)	421,370	526,505	213,927	76,891	(9,938)	▼(49.2)	▲25.0	▼(59.4)	▼***
SG&A expenses	114,688	122,386	104,631	25,951	27,480	▼(8.8)	▲6.7	▼(14.5)	▲5.9
Operating income or (loss) (fn2)	306,682	404,119	109,296	50,940	(37,418)	▼(64.4)	▲31.8	▼(73.0)	▼***
Net income or (loss) (fn2)	144,208	233,725	(27,430)	16,610	(35,777)	▼***	▲62.1	▼***	▼***
Unit COGS	***	***	***	***	***	▼***	▲***	▼***	▲***
Unit SG&A expenses	***	***	***	***	***	▼***	▲***	▼***	▲***
Unit operating income or (loss) (fn2)	***	***	***	***	***	▼***	▲***	▼***	▼***
Unit net income or (loss) (fn2)	***	***	***	***	***	▼***	▲***	▼***	▼***
COGS/sales (fn1)	***	***	***	***	***	▲***	▼***	▲***	▲***
Operating income or (loss)/sales (fn1)	***	***	***	***	***	▼***	▲***	▼***	▼***
Net income or (loss)/sales (fn1)	***	***	***	***	***	▼***	▲***	▼***	▼***
Capital expenditures	202,063	206,270	152,234	33,994	36,187	▼(24.7)	▲2.1	▼(26.2)	▲6.5
Research and development expenses	***	***	***	***	***	▼***	▲***	▼***	***
Net assets	8,285,264	7,844,720	7,413,050	NA	NA	▼(10.5)	▼(5.3)	▼(5.5)	NA

Note.--Shares and ratios shown as "0.0" percent represent non-zero values less than "0.05" percent (if positive) and greater than "(0.05)" percent (if negative). Zeroes, null values, and undefined calculations are suppressed and shown as "---". Period changes preceded by a "▲" represent an increase, while period changes preceded by a "▼" represent a decrease. NA = not available

fn1.--Reported data are in percent and period changes are in percentage points.
fn2.--Percent changes only calculated when both comparison values represent profits; The directional change in profitability provided when one or both comparison values represent a loss.

Source: Compiled from data submitted in response to Commission questionnaires and official U.S. import statistics of the U.S. Department of Commerce Census Bureau using HTS statistical reporting number 3102.80.0000, accessed on July 9, 2021. Imports are based on the imports for consumption data series. Value data reflect landed

APPENDIX D

COMPANY NARRATIVES ON IMPACTS OF COVID-19 PANDEMIC AND EU ANTIDUMPING DUTIES

Table D-1: UAN: U.S. producers' narratives explaining impact of the COVID-19 pandemic.....D-3

Table D-2: U.S. producers' narratives explaining impact of EU duties on Russia and Trinidad and Tobago D-4

Table D-3: U.S. producers' narratives explaining impact of EU duties on the United States.....D-5

Table D-4: U.S. importers' narratives explaining impact of the COVID-19 pandemic.....D-6

Table D-5: U.S. importers' narratives explaining impact of EU duties on the United States D-7

Table D-1
UAN: UAN: U.S. producers' narratives explaining impact of the COVID-19 pandemic

Firm	Narrative explanation
***	***
***	***
***	***

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

Table D-2
U.S. producers' narratives explaining impact of EU duties on Russia and Trinidad and Tobago

Firm	Narrative explanation
***	***
***	***
***	***
***	***
***	***
***	***

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

Table D-3
U.S. producers' narratives explaining impact of EU duties on the United States

Firm	Narrative explanation
***	***
***	***
***	***
***	***
***	***
***	***

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

Table D-4
U.S. importers' narratives explaining impact of the COVID-19 pandemic

Firm	Narrative explanation
***	***
***	***
***	***
***	***

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

Table D-5
U.S. importers' narratives explaining impact of EU duties on the United States

Firm	Narrative explanation
***	***
***	***
***	***
***	***
***	***
***	***

Table continued on next page.

Table D-5 Continued
U.S. importers' narratives explaining impact of EU duties on the United States

Firm	Narrative explanation
***	***
***	***
***	***
***	***

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

APPENDIX E

U.S. PRODUCERS' AND U.S. IMPORTERS' U.S. SHIPMENTS BY NITROGEN CONCENTRATION

Table E-1: UAN: U.S. producers' and U.S. importers' U.S. shipments by nitrogen concentration and period E-3

Table E-1
UAN: U.S. producers' and U.S. importers' U.S. shipments by nitrogen concentration and period

Quantity in short tons gross weight and short tons nitrogen weight; Value in 1,000 dollars; Unit values in dollars per short ton gross weight and dollars per short ton nitrogen weight; Shares in percent and labeled as % within measure column

Nitrogen concentration	Source	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
32 percent	United States	Gross weight	***	***	***	***	***
30 percent	United States	Gross weight	***	***	***	***	***
28 percent	United States	Gross weight	***	***	***	***	***
Other percentages	United States	Gross weight	***	***	***	***	***
All concentrations	United States	Gross weight	***	***	***	***	***
32 percent	United States	N-weight	***	***	***	***	***
30 percent	United States	N-weight	***	***	***	***	***
28 percent	United States	N-weight	***	***	***	***	***
Other percentages	United States	N-weight	***	***	***	***	***
All concentrations	United States	N-weight	***	***	***	***	***
32 percent	United States	Value	***	***	***	***	***
30 percent	United States	Value	***	***	***	***	***
28 percent	United States	Value	***	***	***	***	***
Other percentages	United States	Value	***	***	***	***	***
All concentrations	United States	Value	***	***	***	***	***
32 percent	United States	UV gross weight	***	***	***	***	***
30 percent	United States	UV gross weight	***	***	***	***	***
28 percent	United States	UV gross weight	***	***	***	***	***
Other percentages	United States	UV gross weight	***	***	***	***	***
All concentrations	United States	UV gross weight	***	***	***	***	***
32 percent	United States	UV N-weight	***	***	***	***	***
30 percent	United States	UV N-weight	***	***	***	***	***
28 percent	United States	UV N-weight	***	***	***	***	***
Other percentages	United States	UV N-weight	***	***	***	***	***
All concentrations	United States	UV N-weight	***	***	***	***	***
32 percent	United States	% gross weight	***	***	***	***	***
30 percent	United States	% gross weight	***	***	***	***	***
28 percent	United States	% gross weight	***	***	***	***	***
Other percentages	United States	% gross weight	***	***	***	***	***
All concentrations	United States	% gross weight	***	***	***	***	***
32 percent	United States	% N-weight	***	***	***	***	***
30 percent	United States	% N-weight	***	***	***	***	***
28 percent	United States	% N-weight	***	***	***	***	***
Other percentages	United States	% N-weight	***	***	***	***	***
All concentrations	United States	% N-weight	***	***	***	***	***
32 percent	United States	% value	***	***	***	***	***
30 percent	United States	% value	***	***	***	***	***
28 percent	United States	% value	***	***	***	***	***
Other percentages	United States	% value	***	***	***	***	***
All concentrations	United States	% value	***	***	***	***	***
32 percent	United States	N-weight ratio	***	***	***	***	***
30 percent	United States	N-weight ratio	***	***	***	***	***
28 percent	United States	N-weight ratio	***	***	***	***	***
Other percentages	United States	N-weight ratio	***	***	***	***	***
All concentrations	United States	N-weight ratio	***	***	***	***	***

Table continued.

Table E-1 continued
UAN: U.S. producers' and U.S. importers' U.S. shipments by nitrogen concentration and period

Quantity in short tons gross weight and short tons nitrogen weight; Value in 1,000 dollars; Unit values in dollars per short ton gross weight and dollars per short ton nitrogen weight; Shares in percent and labeled as % within measure column

Nitrogen concentration	Source	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
32 percent	Russia	Gross weight	***	***	***	***	***
30 percent	Russia	Gross weight	***	***	***	***	***
28 percent	Russia	Gross weight	***	***	***	***	***
Other percentages	Russia	Gross weight	***	***	***	***	***
All concentrations	Russia	Gross weight	***	***	***	***	***
32 percent	Russia	N-weight	***	***	***	***	***
30 percent	Russia	N-weight	***	***	***	***	***
28 percent	Russia	N-weight	***	***	***	***	***
Other percentages	Russia	N-weight	***	***	***	***	***
All concentrations	Russia	N-weight	***	***	***	***	***
32 percent	Russia	Value	***	***	***	***	***
30 percent	Russia	Value	***	***	***	***	***
28 percent	Russia	Value	***	***	***	***	***
Other percentages	Russia	Value	***	***	***	***	***
All concentrations	Russia	Value	***	***	***	***	***
32 percent	Russia	UV gross weight	***	***	***	***	***
30 percent	Russia	UV gross weight	***	***	***	***	***
28 percent	Russia	UV gross weight	***	***	***	***	***
Other percentages	Russia	UV gross weight	***	***	***	***	***
All concentrations	Russia	UV gross weight	***	***	***	***	***
32 percent	Russia	UV N-weight	***	***	***	***	***
30 percent	Russia	UV N-weight	***	***	***	***	***
28 percent	Russia	UV N-weight	***	***	***	***	***
Other percentages	Russia	UV N-weight	***	***	***	***	***
All concentrations	Russia	UV N-weight	***	***	***	***	***
32 percent	Russia	% gross weight	***	***	***	***	***
30 percent	Russia	% gross weight	***	***	***	***	***
28 percent	Russia	% gross weight	***	***	***	***	***
Other percentages	Russia	% gross weight	***	***	***	***	***
All concentrations	Russia	% gross weight	***	***	***	***	***
32 percent	Russia	% N-weight	***	***	***	***	***
30 percent	Russia	% N-weight	***	***	***	***	***
28 percent	Russia	% N-weight	***	***	***	***	***
Other percentages	Russia	% N-weight	***	***	***	***	***
All concentrations	Russia	% N-weight	***	***	***	***	***
32 percent	Russia	% value	***	***	***	***	***
30 percent	Russia	% value	***	***	***	***	***
28 percent	Russia	% value	***	***	***	***	***
Other percentages	Russia	% value	***	***	***	***	***
All concentrations	Russia	% value	***	***	***	***	***
32 percent	Russia	N-weight ratio	***	***	***	***	***
30 percent	Russia	N-weight ratio	***	***	***	***	***
28 percent	Russia	N-weight ratio	***	***	***	***	***
Other percentages	Russia	N-weight ratio	***	***	***	***	***
All concentrations	Russia	N-weight ratio	***	***	***	***	***

Table continued.

Table E-1 continued
UAN: U.S. producers' and U.S. importers' U.S. shipments by nitrogen concentration and period

Quantity in short tons gross weight and short tons nitrogen weight; Value in 1,000 dollars; Unit values in dollars per short ton gross weight and dollars per short ton nitrogen weight; Shares in percent and labeled as % within measure column

Nitrogen concentration	Source	Measure	2018	2019	2020	Jan-Mar	Jan-Mar
32 percent	Trinidad and Tobago	Gross weight	***	***	***	***	***
30 percent	Trinidad and Tobago	Gross weight	***	***	***	***	***
28 percent	Trinidad and Tobago	Gross weight	***	***	***	***	***
Other percentages	Trinidad and Tobago	Gross weight	***	***	***	***	***
All concentrations	Trinidad and Tobago	Gross weight	***	***	***	***	***
32 percent	Trinidad and Tobago	N-weight	***	***	***	***	***
30 percent	Trinidad and Tobago	N-weight	***	***	***	***	***
28 percent	Trinidad and Tobago	N-weight	***	***	***	***	***
Other percentages	Trinidad and Tobago	N-weight	***	***	***	***	***
All concentrations	Trinidad and Tobago	N-weight	***	***	***	***	***
32 percent	Trinidad and Tobago	Value	***	***	***	***	***
30 percent	Trinidad and Tobago	Value	***	***	***	***	***
28 percent	Trinidad and Tobago	Value	***	***	***	***	***
Other percentages	Trinidad and Tobago	Value	***	***	***	***	***
All concentrations	Trinidad and Tobago	Value	***	***	***	***	***
32 percent	Trinidad and Tobago	UV gross weight	***	***	***	***	***
30 percent	Trinidad and Tobago	UV gross weight	***	***	***	***	***
28 percent	Trinidad and Tobago	UV gross weight	***	***	***	***	***
Other percentages	Trinidad and Tobago	UV gross weight	***	***	***	***	***
All concentrations	Trinidad and Tobago	UV gross weight	***	***	***	***	***
32 percent	Trinidad and Tobago	UV N-weight	***	***	***	***	***
30 percent	Trinidad and Tobago	UV N-weight	***	***	***	***	***
28 percent	Trinidad and Tobago	UV N-weight	***	***	***	***	***
Other percentages	Trinidad and Tobago	UV N-weight	***	***	***	***	***
All concentrations	Trinidad and Tobago	UV N-weight	***	***	***	***	***
32 percent	Trinidad and Tobago	% gross weight	***	***	***	***	***
30 percent	Trinidad and Tobago	% gross weight	***	***	***	***	***
28 percent	Trinidad and Tobago	% gross weight	***	***	***	***	***
Other percentages	Trinidad and Tobago	% gross weight	***	***	***	***	***
All concentrations	Trinidad and Tobago	% gross weight	***	***	***	***	***
32 percent	Trinidad and Tobago	% N-weight	***	***	***	***	***
30 percent	Trinidad and Tobago	% N-weight	***	***	***	***	***
28 percent	Trinidad and Tobago	% N-weight	***	***	***	***	***
Other percentages	Trinidad and Tobago	% N-weight	***	***	***	***	***
All concentrations	Trinidad and Tobago	% N-weight	***	***	***	***	***
32 percent	Trinidad and Tobago	% value	***	***	***	***	***
30 percent	Trinidad and Tobago	% value	***	***	***	***	***
28 percent	Trinidad and Tobago	% value	***	***	***	***	***
Other percentages	Trinidad and Tobago	% value	***	***	***	***	***
All concentrations	Trinidad and Tobago	% value	***	***	***	***	***
32 percent	Trinidad and Tobago	N-weight ratio	***	***	***	***	***
30 percent	Trinidad and Tobago	N-weight ratio	***	***	***	***	***
28 percent	Trinidad and Tobago	N-weight ratio	***	***	***	***	***
Other percentages	Trinidad and Tobago	N-weight ratio	***	***	***	***	***
All concentrations	Trinidad and Tobago	N-weight ratio	***	***	***	***	***

Table continued.

Table E-1 continued
UAN: U.S. producers' and U.S. importers' U.S. shipments by nitrogen concentration and period

Quantity in short tons gross weight and short tons nitrogen weight; Value in 1,000 dollars; Unit values in dollars per short ton gross weight and dollars per short ton nitrogen weight; Shares in percent and labeled as % within measure column

Nitrogen concentration	Source	Measure	2018	2019	2020	Jan-Mar	Jan-Mar
32 percent	Subject	Gross weight	***	***	***	***	***
30 percent	Subject	Gross weight	***	***	***	***	***
28 percent	Subject	Gross weight	***	***	***	***	***
Other percentages	Subject	Gross weight	***	***	***	***	***
All concentrations	Subject	Gross weight	***	***	***	***	***
32 percent	Subject	N-weight	***	***	***	***	***
30 percent	Subject	N-weight	***	***	***	***	***
28 percent	Subject	N-weight	***	***	***	***	***
Other percentages	Subject	N-weight	***	***	***	***	***
All concentrations	Subject	N-weight	***	***	***	***	***
32 percent	Subject	Value	***	***	***	***	***
30 percent	Subject	Value	***	***	***	***	***
28 percent	Subject	Value	***	***	***	***	***
Other percentages	Subject	Value	***	***	***	***	***
All concentrations	Subject	Value	***	***	***	***	***
32 percent	Subject	UV gross	***	***	***	***	***
30 percent	Subject	UV gross	***	***	***	***	***
28 percent	Subject	UV gross	***	***	***	***	***
Other percentages	Subject	UV gross	***	***	***	***	***
All concentrations	Subject	UV gross	***	***	***	***	***
32 percent	Subject	UV N-weight	***	***	***	***	***
30 percent	Subject	UV N-weight	***	***	***	***	***
28 percent	Subject	UV N-weight	***	***	***	***	***
Other percentages	Subject	UV N-weight	***	***	***	***	***
All concentrations	Subject	UV N-weight	***	***	***	***	***
32 percent	Subject	% gross	***	***	***	***	***
30 percent	Subject	% gross	***	***	***	***	***
28 percent	Subject	% gross	***	***	***	***	***
Other percentages	Subject	% gross	***	***	***	***	***
All concentrations	Subject	% gross	***	***	***	***	***
32 percent	Subject	% N-weight	***	***	***	***	***
30 percent	Subject	% N-weight	***	***	***	***	***
28 percent	Subject	% N-weight	***	***	***	***	***
Other percentages	Subject	% N-weight	***	***	***	***	***
All concentrations	Subject	% N-weight	***	***	***	***	***
32 percent	Subject	% value	***	***	***	***	***
30 percent	Subject	% value	***	***	***	***	***
28 percent	Subject	% value	***	***	***	***	***
Other percentages	Subject	% value	***	***	***	***	***
All concentrations	Subject	% value	***	***	***	***	***
32 percent	Subject	N-weight ratio	***	***	***	***	***
30 percent	Subject	N-weight ratio	***	***	***	***	***
28 percent	Subject	N-weight ratio	***	***	***	***	***
Other percentages	Subject	N-weight ratio	***	***	***	***	***
All concentrations	Subject	N-weight ratio	***	***	***	***	***

Table continued.

Table E-1 continued
UAN: U.S. producers' and U.S. importers' U.S. shipments by nitrogen concentration and period

Quantity in short tons gross weight and short tons nitrogen weight; Value in 1,000 dollars; Unit values in dollars per short ton gross weight and dollars per short ton nitrogen weight; Shares in percent and labeled as % within measure column

Nitrogen concentration	Source	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
32 percent	Nonsubject	Gross weight	***	***	***	***	***
30 percent	Nonsubject	Gross weight	***	***	***	***	***
28 percent	Nonsubject	Gross weight	***	***	***	***	***
Other percentages	Nonsubject	Gross weight	***	***	***	***	***
All concentrations	Nonsubject	Gross weight	***	***	***	***	***
32 percent	Nonsubject	N-weight	***	***	***	***	***
30 percent	Nonsubject	N-weight	***	***	***	***	***
28 percent	Nonsubject	N-weight	***	***	***	***	***
Other percentages	Nonsubject	N-weight	***	***	***	***	***
All concentrations	Nonsubject	N-weight	***	***	***	***	***
32 percent	Nonsubject	Value	***	***	***	***	***
30 percent	Nonsubject	Value	***	***	***	***	***
28 percent	Nonsubject	Value	***	***	***	***	***
Other percentages	Nonsubject	Value	***	***	***	***	***
All concentrations	Nonsubject	Value	***	***	***	***	***
32 percent	Nonsubject	UV gross weight	***	***	***	***	***
30 percent	Nonsubject	UV gross weight	***	***	***	***	***
28 percent	Nonsubject	UV gross weight	***	***	***	***	***
Other percentages	Nonsubject	UV gross weight	***	***	***	***	***
All concentrations	Nonsubject	UV gross weight	***	***	***	***	***
32 percent	Nonsubject	UV N-weight	***	***	***	***	***
30 percent	Nonsubject	UV N-weight	***	***	***	***	***
28 percent	Nonsubject	UV N-weight	***	***	***	***	***
Other percentages	Nonsubject	UV N-weight	***	***	***	***	***
All concentrations	Nonsubject	UV N-weight	***	***	***	***	***
32 percent	Nonsubject	% gross weight	***	***	***	***	***
30 percent	Nonsubject	% gross weight	***	***	***	***	***
28 percent	Nonsubject	% gross weight	***	***	***	***	***
Other percentages	Nonsubject	% gross weight	***	***	***	***	***
All concentrations	Nonsubject	% gross weight	***	***	***	***	***
32 percent	Nonsubject	% N-weight	***	***	***	***	***
30 percent	Nonsubject	% N-weight	***	***	***	***	***
28 percent	Nonsubject	% N-weight	***	***	***	***	***
Other percentages	Nonsubject	% N-weight	***	***	***	***	***
All concentrations	Nonsubject	% N-weight	***	***	***	***	***
32 percent	Nonsubject	% value	***	***	***	***	***
30 percent	Nonsubject	% value	***	***	***	***	***
28 percent	Nonsubject	% value	***	***	***	***	***
Other percentages	Nonsubject	% value	***	***	***	***	***
All concentrations	Nonsubject	% value	***	***	***	***	***
32 percent	Nonsubject	N-weight ratio	***	***	***	***	***
30 percent	Nonsubject	N-weight ratio	***	***	***	***	***
28 percent	Nonsubject	N-weight ratio	***	***	***	***	***
Other percentages	Nonsubject	N-weight ratio	***	***	***	***	***
All concentrations	Nonsubject	N-weight ratio	***	***	***	***	***

Table continued.

Table E-1 continued
UAN: U.S. producers' and U.S. importers' U.S. shipments by nitrogen concentration and period

Quantity in short tons gross weight and short tons nitrogen weight; Value in 1,000 dollars; Unit values in dollars per short ton gross weight and dollars per short ton nitrogen weight; Shares in percent and labeled as % within measure column

Nitrogen concentration	Source	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
32 percent	All import sources	Gross weight	***	***	***	***	***
30 percent	All import sources	Gross weight	***	***	***	***	***
28 percent	All import sources	Gross weight	***	***	***	***	***
Other percentages	All import sources	Gross weight	***	***	***	***	***
All concentrations	All import sources	Gross weight	***	***	***	***	***
32 percent	All import sources	N-weight	***	***	***	***	***
30 percent	All import sources	N-weight	***	***	***	***	***
28 percent	All import sources	N-weight	***	***	***	***	***
Other percentages	All import sources	N-weight	***	***	***	***	***
All concentrations	All import sources	N-weight	***	***	***	***	***
32 percent	All import sources	Value	***	***	***	***	***
30 percent	All import sources	Value	***	***	***	***	***
28 percent	All import sources	Value	***	***	***	***	***
Other percentages	All import sources	Value	***	***	***	***	***
All concentrations	All import sources	Value	***	***	***	***	***
32 percent	All import sources	UV gross weight	***	***	***	***	***
30 percent	All import sources	UV gross weight	***	***	***	***	***
28 percent	All import sources	UV gross weight	***	***	***	***	***
Other percentages	All import sources	UV gross weight	***	***	***	***	***
All concentrations	All import sources	UV gross weight	***	***	***	***	***
32 percent	All import sources	UV N-weight	***	***	***	***	***
30 percent	All import sources	UV N-weight	***	***	***	***	***
28 percent	All import sources	UV N-weight	***	***	***	***	***
Other percentages	All import sources	UV N-weight	***	***	***	***	***
All concentrations	All import sources	UV N-weight	***	***	***	***	***
32 percent	All import sources	% gross weight	***	***	***	***	***
30 percent	All import sources	% gross weight	***	***	***	***	***
28 percent	All import sources	% gross weight	***	***	***	***	***
Other percentages	All import sources	% gross weight	***	***	***	***	***
All concentrations	All import sources	% gross weight	***	***	***	***	***
32 percent	All import sources	% N-weight	***	***	***	***	***
30 percent	All import sources	% N-weight	***	***	***	***	***
28 percent	All import sources	% N-weight	***	***	***	***	***
Other percentages	All import sources	% N-weight	***	***	***	***	***
All concentrations	All import sources	% N-weight	***	***	***	***	***
32 percent	All import sources	% value	***	***	***	***	***
30 percent	All import sources	% value	***	***	***	***	***
28 percent	All import sources	% value	***	***	***	***	***
Other percentages	All import sources	% value	***	***	***	***	***
All concentrations	All import sources	% value	***	***	***	***	***
32 percent	All import sources	N-weight ratio	***	***	***	***	***
30 percent	All import sources	N-weight ratio	***	***	***	***	***
28 percent	All import sources	N-weight ratio	***	***	***	***	***
Other percentages	All import sources	N-weight ratio	***	***	***	***	***
All concentrations	All import sources	N-weight ratio	***	***	***	***	***

Table continued.

Table E-1 continued
UAN: U.S. producers' and U.S. importers' U.S. shipments by nitrogen concentration and period

Quantity in short tons gross weight and short tons nitrogen weight; Value in 1,000 dollars; Unit values in dollars per short ton gross weight and dollars per short ton nitrogen weight; Shares in percent and labeled as % within measure column

Nitrogen concentration	Source	Measure	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
32 percent	All sources	Gross weight	***	***	***	***	***
30 percent	All sources	Gross weight	***	***	***	***	***
28 percent	All sources	Gross weight	***	***	***	***	***
Other percentages	All sources	Gross weight	***	***	***	***	***
All concentrations	All sources	Gross weight	***	***	***	***	***
32 percent	All sources	N-weight	***	***	***	***	***
30 percent	All sources	N-weight	***	***	***	***	***
28 percent	All sources	N-weight	***	***	***	***	***
Other percentages	All sources	N-weight	***	***	***	***	***
All concentrations	All sources	N-weight	***	***	***	***	***
32 percent	All sources	Value	***	***	***	***	***
30 percent	All sources	Value	***	***	***	***	***
28 percent	All sources	Value	***	***	***	***	***
Other percentages	All sources	Value	***	***	***	***	***
All concentrations	All sources	Value	***	***	***	***	***
32 percent	All sources	UV gross weight	***	***	***	***	***
30 percent	All sources	UV gross weight	***	***	***	***	***
28 percent	All sources	UV gross weight	***	***	***	***	***
Other percentages	All sources	UV gross weight	***	***	***	***	***
All concentrations	All sources	UV gross weight	***	***	***	***	***
32 percent	All sources	UV N-weight	***	***	***	***	***
30 percent	All sources	UV N-weight	***	***	***	***	***
28 percent	All sources	UV N-weight	***	***	***	***	***
Other percentages	All sources	UV N-weight	***	***	***	***	***
All concentrations	All sources	UV N-weight	***	***	***	***	***
32 percent	All sources	% gross weight	***	***	***	***	***
30 percent	All sources	% gross weight	***	***	***	***	***
28 percent	All sources	% gross weight	***	***	***	***	***
Other percentages	All sources	% gross weight	***	***	***	***	***
All concentrations	All sources	% gross weight	***	***	***	***	***
32 percent	All sources	% N-weight	***	***	***	***	***
30 percent	All sources	% N-weight	***	***	***	***	***
28 percent	All sources	% N-weight	***	***	***	***	***
Other percentages	All sources	% N-weight	***	***	***	***	***
All concentrations	All sources	% N-weight	***	***	***	***	***
32 percent	All sources	% value	***	***	***	***	***
30 percent	All sources	% value	***	***	***	***	***
28 percent	All sources	% value	***	***	***	***	***
Other percentages	All sources	% value	***	***	***	***	***
All concentrations	All sources	% value	***	***	***	***	***
32 percent	All sources	N-weight ratio	***	***	***	***	***
30 percent	All sources	N-weight ratio	***	***	***	***	***
28 percent	All sources	N-weight ratio	***	***	***	***	***
Other percentages	All sources	N-weight ratio	***	***	***	***	***
All concentrations	All sources	N-weight ratio	***	***	***	***	***

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

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

APPENDIX F

U.S. PRODUCERS' AND U.S IMPORTERS' STORAGE LOCATIONS

Table F-1: UAN: Narratives describing U.S. producers' storage locations..... F-3
Table F-2: UAN: Narratives describing U.S. importers' storage locations F-4

Table F-1
UAN: Narratives describing U.S. producers' storage locations

Firm	Narrative explanation
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***

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

Table F-2
UAN: Narratives describing U.S. importers' storage locations

Firm	Narrative explanation
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***

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

APPENDIX G

APPENDIX FOR PART II

Table G-1: Principal crops: United States size of area planted in acres by crop type, 2018-2021..... G-3
Table G-2: Corn: Prices by month, January 2018 through May 2021..... G-3

Table G-1
Principal crops: United States size of area planted in acres by crop type, 2018-2021

Size of area planted in million acres

Crop	2018	2019	2020	2021
Corn (all states)	89.1	89.7	90.8	92.7
Soybeans	89.2	76.1	83.1	87.6
Wheat	47.8	45.2	44.3	46.7
Cotton	14.1	13.7	12.1	11.7
Other	79.1	78.4	79.8	78.5
All principal crops	319.3	303.1	310.1	317.2

Source: National Agricultural Statistics Service (NASS), Agricultural Statistics Board, United States Department of Agriculture (USDA), Acreage, June 28, 2019, June 30, 2020, and June 30, 2021.

Table G-2
Corn: Prices by month, January 2018 through May 2021

Unit value in dollars per bushel

Period	Unit value
2018 M01	3.29
2018 M02	3.38
2018 M03	3.51
2018 M04	3.58
2018 M05	3.68
2018 M06	3.58
2018 M07	3.47
2018 M08	3.36
2018 M09	3.40
2018 M10	3.42
2018 M11	3.41
2018 M12	3.54
2019 M01	3.56
2019 M02	3.60
2019 M03	3.61
2019 M04	3.53
2019 M05	3.63
2019 M06	3.98
2019 M07	4.16
2019 M08	3.93
2019 M09	3.80
2019 M10	3.85
2019 M11	3.68
2019 M12	3.71

Table continued on next page.

Table G-2 Continued
Corn: Prices by month, January 2018 through June 2021

Unit value in dollars per bushel

Period	Unit value
2020 M01	3.79
2020 M02	3.78
2020 M03	3.68
2020 M04	3.29
2020 M05	3.20
2020 M06	3.16
2020 M07	3.21
2020 M08	3.12
2020 M09	3.40
2020 M10	3.61
2020 M11	3.79
2020 M12	3.97
2021 M01	4.24
2021 M02	4.75
2021 M03	4.89
2021 M04	5.31
2021 M05	5.91
2021 M06	6.00

Source: National Agricultural Statistics Service (NASS), Quick Stats, Corn, Grain - Price Received, Measured in dollars per bushel, United States Department of Agriculture (USDA), accessed August 3, 2021.

APPENDIX H

APPENDIX FOR PART V

Table H-1: Natural gas: Prices by month, January 2018 through June 2021.....H-3
Table H-2: UAN-32: Average monthly f.ob. prices, January 2018 through June 2021.....H-4

Table H-1
Natural gas: Prices by month, January 2018 through June 2021

Unit value in dollars per MMBtu

Period	Unit value
2018 M01	3.87
2018 M02	2.67
2018 M03	2.69
2018 M04	2.80
2018 M05	2.80
2018 M06	2.97
2018 M07	2.83
2018 M08	2.96
2018 M09	3.00
2018 M10	3.28
2018 M11	4.09
2018 M12	4.04
2019 M01	3.11
2019 M02	2.69
2019 M03	2.95
2019 M04	2.65
2019 M05	2.64
2019 M06	2.40
2019 M07	2.37
2019 M08	2.22
2019 M09	2.56
2019 M10	2.33
2019 M11	2.65
2019 M12	2.22
2020 M01	2.02
2020 M02	1.91
2020 M03	1.79
2020 M04	1.74
2020 M05	1.75
2020 M06	1.63
2020 M07	1.77
2020 M08	2.30
2020 M09	1.92
2020 M10	2.39
2020 M11	2.61
2020 M12	2.59

Table continued on next page.

Table H-1 Continued
Natural gas: Prices by month, January 2018 through June 2021

Unit value in dollars per MMBtu

Period	Unit value
2021 M01	2.71
2021 M02	5.35
2021 M03	2.62
2021 M04	2.66
2021 M05	2.91
2021 M06	3.26

Source: Monthly Henry hub natural gas spot prices as reported in Federal Reserve Economic Data at https://fred.stlouisfed.org, accessed on July 12, 2021.

Table H-2
UAN-32: Average monthly f.ob. prices, January 2018 through June 2021

Prices in dollars per short ton

Period	U.S. Gulf Spot Barge Prices (NOLA)	Midwest Cornbelt Retail Prices
2018 M01	***	***
2018 M02	***	***
2018 M03	***	***
2018 M04	***	***
2018 M05	***	***
2018 M06	***	***
2018 M07	***	***
2018 M08	***	***
2018 M09	***	***
2018 M10	***	***
2018 M11	***	***
2018 M12	***	***
2019 M01	***	***
2019 M02	***	***
2019 M03	***	***
2019 M04	***	***
2019 M05	***	***
2019 M06	***	***
2019 M07	***	***
2019 M08	***	***
2019 M09	***	***
2019 M10	***	***
2019 M11	***	***
2019 M12	***	***

Table continued on next page.

Table H-2 Continued
UAN-32: Average monthly f.ob. prices, January 2018 through June 2021

Prices in dollars per short ton

Period	U.S. Gulf Spot Barge Prices (NOLA)	Midwest Cornbelt Retail Prices
2020 M01	***	***
2020 M02	***	***
2020 M03	***	***
2020 M04	***	***
2020 M05	***	***
2020 M06	***	***
2020 M07	***	***
2020 M08	***	***
2020 M09	***	***
2020 M10	***	***
2020 M11	***	***
2020 M12	***	***
2021 M01	***	***
2021 M02	***	***
2021 M03	***	***
2021 M04	***	***
2021 M05	***	***
2021 M06	***	***

Source: Green Markets Price Scan, accessed July 19, 2021.

APPENDIX J

APPENDIX FOR PART VI

Table J-1
UAN: Firm-by-firm total net sales quantity, by period

Net sales quantity

Quantity in short tons gross weight

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
CF Industries	***	***	***	***	***
CVR Partners	***	***	***	***	***
Dyno Nobel	***	***	***	***	***
Iowa	***	***	***	***	***
Koch	***	***	***	***	***
LSB Industries	***	***	***	***	***
PCS	***	***	***	***	***
Trademark Nitrogen	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table J-1 Continued
UAN: Firm-by-firm total net sales value, by period

Net sales value

Value in 1,000 dollars

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
CF Industries	***	***	***	***	***
CVR Partners	***	***	***	***	***
Dyno Nobel	***	***	***	***	***
Iowa	***	***	***	***	***
Koch	***	***	***	***	***
LSB Industries	***	***	***	***	***
PCS	***	***	***	***	***
Trademark Nitrogen	***	***	***	***	***
All firms	***	***	***	***	***

Table continued on next page.

Table J-1 Continued
UAN: Firm-by-firm cost of goods sold, by period

COGS

Value in 1,000 dollars

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
CF Industries	***	***	***	***	***
CVR Partners	***	***	***	***	***
Dyno Nobel	***	***	***	***	***
Iowa	***	***	***	***	***
Koch	***	***	***	***	***
LSB Industries	***	***	***	***	***
PCS	***	***	***	***	***
Trademark Nitrogen	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table J-1 Continued
UAN: Firm-by-firm gross profit or (loss), by period

Gross profit or (loss)

Value in 1,000 dollars

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
CF Industries	***	***	***	***	***
CVR Partners	***	***	***	***	***
Dyno Nobel	***	***	***	***	***
Iowa	***	***	***	***	***
Koch	***	***	***	***	***
LSB Industries	***	***	***	***	***
PCS	***	***	***	***	***
Trademark Nitrogen	***	***	***	***	***
All firms	421,370	526,505	213,927	76,891	(9,938)

Table continued on next page.

Table J-1 Continued
UAN: Firm-by-firm selling, general and administrative (SG&A) expenses, by period

SG&A expenses

Value in 1,000 dollars

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
CF Industries	***	***	***	***	***
CVR Partners	***	***	***	***	***
Dyno Nobel	***	***	***	***	***
Iowa	***	***	***	***	***
Koch	***	***	***	***	***
LSB Industries	***	***	***	***	***
PCS	***	***	***	***	***
Trademark Nitrogen	***	***	***	***	***
All firms	114,688	122,386	104,631	25,951	27,480

Table continued.

Table J-1 Continued
UAN: Firm-by-firm operating income or (loss), by period

Operating income or (loss)

Value in 1,000 dollars

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
CF Industries	***	***	***	***	***
CVR Partners	***	***	***	***	***
Dyno Nobel	***	***	***	***	***
Iowa	***	***	***	***	***
Koch	***	***	***	***	***
LSB Industries	***	***	***	***	***
PCS	***	***	***	***	***
Trademark Nitrogen	***	***	***	***	***
All firms	306,682	404,119	109,296	50,940	(37,418)

Table continued on next page.

Table J-1 Continued
UAN: Firm-by-firm net income or (loss), by period

Net income or (loss)

Value in 1,000 dollars

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
CF Industries	***	***	***	***	***
CVR Partners	***	***	***	***	***
Dyno Nobel	***	***	***	***	***
Iowa	***	***	***	***	***
Koch	***	***	***	***	***
LSB Industries	***	***	***	***	***
PCS	***	***	***	***	***
Trademark Nitrogen	***	***	***	***	***
All firms	144,208	233,725	(27,430)	16,610	(35,777)

Table continued.

Table J-1 Continued
UAN: Firm-by-firm ratio of cost of goods sold to net sales value, by period

COGS to net sales ratio

Ratio in percent

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
CF Industries	***	***	***	***	***
CVR Partners	***	***	***	***	***
Dyno Nobel	***	***	***	***	***
Iowa	***	***	***	***	***
Koch	***	***	***	***	***
LSB Industries	***	***	***	***	***
PCS	***	***	***	***	***
Trademark Nitrogen	***	***	***	***	***
All firms	***	***	***	***	***

Table continued on next page.

Table J-1 Continued
UAN: Firm-by-firm ratio of gross profit or (loss) to net sales value, by period

Gross profit or (loss) to net sales ratio

Ratio in percent

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
CF Industries	***	***	***	***	***
CVR Partners	***	***	***	***	***
Dyno Nobel	***	***	***	***	***
Iowa	***	***	***	***	***
Koch	***	***	***	***	***
LSB Industries	***	***	***	***	***
PCS	***	***	***	***	***
Trademark Nitrogen	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table J**-1 Continued**
UAN: Firm-by-firm ratio of SG&A expenses to net sales value, by period

SG&A expenses to net sales ratio

Ratio in percent

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
CF Industries	***	***	***	***	***
CVR Partners	***	***	***	***	***
Dyno Nobel	***	***	***	***	***
Iowa	***	***	***	***	***
Koch	***	***	***	***	***
LSB Industries	***	***	***	***	***
PCS	***	***	***	***	***
Trademark Nitrogen	***	***	***	***	***
All firms	***	***	***	***	***

Table continued on next page.

Table J-1 Continued
UAN: Firm-by-firm ratio of operating income or (loss) to net sales value, by period

Operating income or (loss) to net sales ratio

Ratio in percent

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
CF Industries	***	***	***	***	***
CVR Partners	***	***	***	***	***
Dyno Nobel	***	***	***	***	***
Iowa	***	***	***	***	***
Koch	***	***	***	***	***
LSB Industries	***	***	***	***	***
PCS	***	***	***	***	***
Trademark Nitrogen	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table J-1 Continued
UAN: Firm-by-firm ratio of net income or (loss) to net sales value, by period

Net income or (loss) to net sales ratio

Ratio in percent

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
CF Industries	***	***	***	***	***
CVR Partners	***	***	***	***	***
Dyno Nobel	***	***	***	***	***
Iowa	***	***	***	***	***
Koch	***	***	***	***	***
LSB Industries	***	***	***	***	***
PCS	***	***	***	***	***
Trademark Nitrogen	***	***	***	***	***
All firms	***	***	***	***	***

Table continued on next page.

Table J-1 Continued
UAN: Firm-by-firm unit net sales value, by period

Unit net sales value

Unit value in dollars per short ton gross weight

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
CF Industries	***	***	***	***	***
CVR Partners	***	***	***	***	***
Dyno Nobel	***	***	***	***	***
Iowa	***	***	***	***	***
Koch	***	***	***	***	***
LSB Industries	***	***	***	***	***
PCS	***	***	***	***	***
Trademark Nitrogen	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table J-1 Continued
UAN: Firm-by-firm unit natural gas cost, by period

Unit natural gas cost

Unit value in dollars per short ton gross weight

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
CF Industries	***	***	***	***	***
CVR Partners	***	***	***	***	***
Dyno Nobel	***	***	***	***	***
Iowa	***	***	***	***	***
Koch	***	***	***	***	***
LSB Industries	***	***	***	***	***
PCS	***	***	***	***	***
Trademark Nitrogen	***	***	***	***	***
All firms	***	***	***	***	***

Table continued on next page.

Table J-1 Continued
UAN: Firm-by-firm unit other raw material cost, by period

Unit other raw material cost

Unit value in dollars per short ton gross weight

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
CF Industries	***	***	***	***	***
CVR Partners	***	***	***	***	***
Dyno Nobel	***	***	***	***	***
Iowa	***	***	***	***	***
Koch	***	***	***	***	***
LSB Industries	***	***	***	***	***
PCS	***	***	***	***	***
Trademark Nitrogen	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table J-1 Continued
UAN: Firm-by-firm unit total raw materials cost, by period

Unit total raw material cost

Unit value in dollars per short ton gross weight

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
CF Industries	***	***	***	***	***
CVR Partners	***	***	***	***	***
Dyno Nobel	***	***	***	***	***
Iowa	***	***	***	***	***
Koch	***	***	***	***	***
LSB Industries	***	***	***	***	***
PCS	***	***	***	***	***
Trademark Nitrogen	***	***	***	***	***
All firms	***	***	***	***	***

Table continued on next page.

Table J-1 Continued
UAN: Firm-by-firm unit direct labor cost, by period

Unit direct labor cost

Unit value in dollars per short ton gross weight

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
CF Industries	***	***	***	***	***
CVR Partners	***	***	***	***	***
Dyno Nobel	***	***	***	***	***
Iowa	***	***	***	***	***
Koch	***	***	***	***	***
LSB Industries	***	***	***	***	***
PCS	***	***	***	***	***
Trademark Nitrogen	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table J-1 Continued
UAN: Firm-by-firm unit other factory costs, by period

Unit other factory costs

Unit value in dollars per short ton gross weight

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
CF Industries	***	***	***	***	***
CVR Partners	***	***	***	***	***
Dyno Nobel	***	***	***	***	***
Iowa	***	***	***	***	***
Koch	***	***	***	***	***
LSB Industries	***	***	***	***	***
PCS	***	***	***	***	***
Trademark Nitrogen	***	***	***	***	***
All firms	***	***	***	***	***

Table continued next page.

Table J-1 Continued
UAN: Firm-by-firm unit COGS, by period

Unit COGS

Unit value in dollars per short ton gross weight

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
CF Industries	***	***	***	***	***
CVR Partners	***	***	***	***	***
Dyno Nobel	***	***	***	***	***
Iowa	***	***	***	***	***
Koch	***	***	***	***	***
LSB Industries	***	***	***	***	***
PCS	***	***	***	***	***
Trademark Nitrogen	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table J-1 Continued
UAN: Firm-by-firm unit gross profit or (loss), by period

Unit gross profit or (loss)

Unit value in dollars per short ton gross weight

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
CF Industries	***	***	***	***	***
CVR Partners	***	***	***	***	***
Dyno Nobel	***	***	***	***	***
Iowa	***	***	***	***	***
Koch	***	***	***	***	***
LSB Industries	***	***	***	***	***
PCS	***	***	***	***	***
Trademark Nitrogen	***	***	***	***	***
All firms	***	***	***	***	***

Table continued on next page.

Table J-1 Continued
UAN: Firm-by-firm unit SG&A expenses, by period

Unit SG&A expenses

Unit value in dollars per short ton gross weight

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
CF Industries	***	***	***	***	***
CVR Partners	***	***	***	***	***
Dyno Nobel	***	***	***	***	***
Iowa	***	***	***	***	***
Koch	***	***	***	***	***
LSB Industries	***	***	***	***	***
PCS	***	***	***	***	***
Trademark Nitrogen	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table J-1 Continued
UAN: Firm-by-firm unit operating income or (loss), by period

Unit operating income or (loss)

Unit value in dollars per short ton gross weight

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
CF Industries	***	***	***	***	***
CVR Partners	***	***	***	***	***
Dyno Nobel	***	***	***	***	***
Iowa	***	***	***	***	***
Koch	***	***	***	***	***
LSB Industries	***	***	***	***	***
PCS	***	***	***	***	***
Trademark Nitrogen	***	***	***	***	***
All firms	***	***	***	***	***

Table continued on next page.

Table J-1 Continued
UAN: Firm-by-firm unit net income or (loss), by period

Unit net income or (loss)

Unit value in dollars per short ton gross weight

Firm	2018	2019	2020	Jan-Mar 2020	Jan-Mar 2021
CF Industries	***	***	***	***	***
CVR Partners	***	***	***	***	***
Dyno Nobel	***	***	***	***	***
Iowa	***	***	***	***	***
Koch	***	***	***	***	***
LSB Industries	***	***	***	***	***
PCS	***	***	***	***	***
Trademark Nitrogen	***	***	***	***	***
All firms	***	***	***	***	***

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