Sugar from Mexico

Investigation Nos. 701-TA-513 and 731-TA-1249 (Final)

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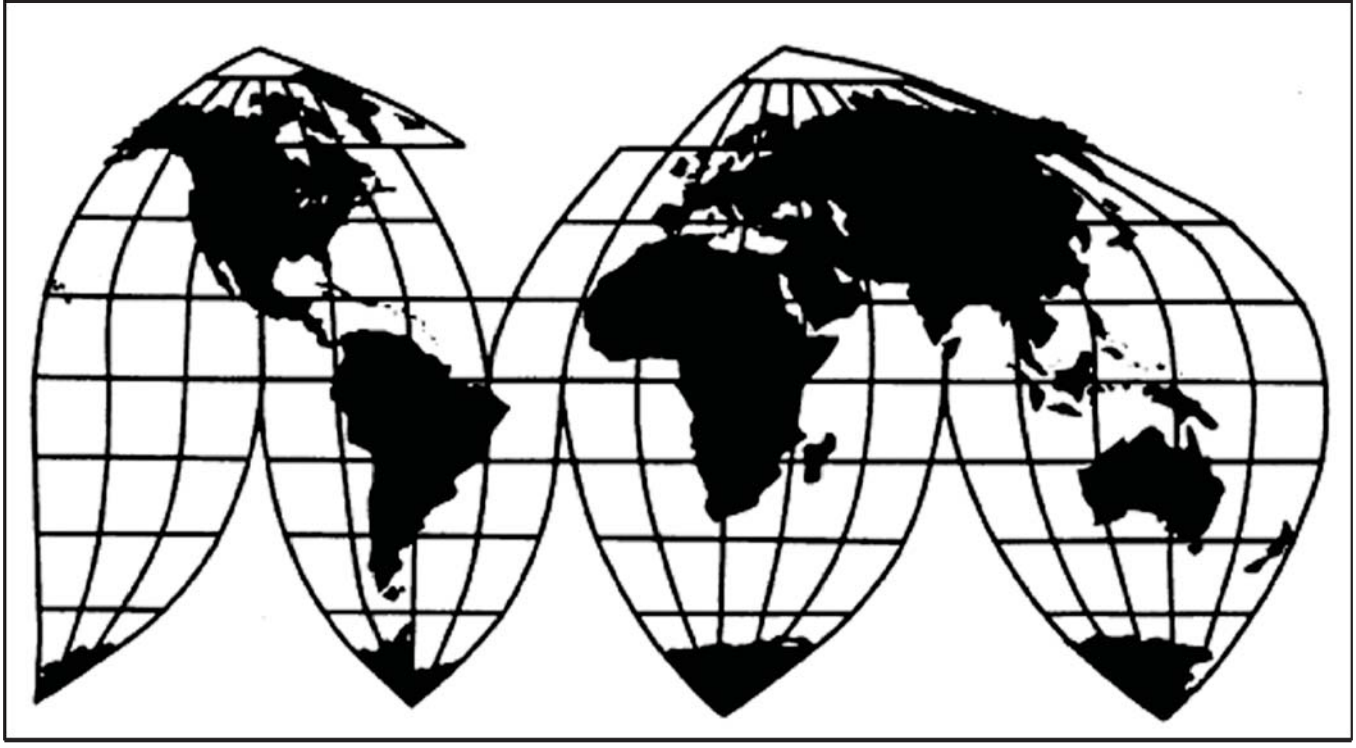
U.S. International Trade Commission



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U.S. International Trade Commission

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UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 701-TA-513 and 731-TA-1249 (Final)

Sugar from Mexico

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 an industry in the United States is materially injured by reason of imports of sugar from Mexico, provided for in statistical subheadings 1701.12.1000, 1701.12.5000, 1701.13.1000, 1701.13.5000, 1701.14.1000, 1701.14.5000, 1701.91.1000, 1701.91.3000, 1701.99.1010, 1701.99.1025, 1701.99.1050, 1701.99.5010, 1701.99.5025, 1701.99.5050, 1702.90.4000 and 1703.10.3000 of the Harmonized Tariff Schedule of the United States, that have been found by the Department of Commerce ("Commerce") to be sold in the United States at less than fair value ("LTFV"), and to be subsidized by the government of Mexico.[2]

BACKGROUND

The Commission, pursuant to sections 705(b) and 735(b) of the Act (19 U.S.C. § 1671d(b) and 19 U.S.C. § 1673d(b)), instituted these investigations effective March 28, 2014, following receipt of a petition filed with the Commission and Commerce by the American Sugar Coalition and its members: American Sugar Cane League, Thibodaux, LA; American Sugarbeet Growers Association, Washington, DC; American Sugar Refining, Inc., West Palm Beach, FL; Florida Sugar Cane League, Washington, DC; Hawaiian Commercial and Sugar Company, Puunene, HI; Rio Grande Valley Sugar Growers, Inc., Santa Rosa, TX; Sugar Cane Growers Cooperative of Florida, Belle Glade, FL; and United States Beet Sugar Association, Washington, DC. The final phase of the investigations was scheduled by the Commission following notification of preliminary determinations by Commerce that imports of sugar from Mexico were subsidized within the meaning of section 703(b) of the Act (19 U.S.C. § 1671b(b)) and dumped within the meaning of 733(b) of the Act (19 U.S.C. § 1673b(b)). Notice of the scheduling of the final phase of the Commission's investigations and of a public hearing to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* on December 18, 2014 (79 FR 75591). On December 19, 2014, the Department of Commerce suspended the antidumping and countervailing duty investigations on sugar from Mexico (79 FR 78039, 78044, December 29, 2014). Subsequently, Commerce received timely requests to continue the antidumping and countervailing duty investigations on

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

[2] All six Commissioners voted in the affirmative.

sugar from Mexico and resumed its investigations on May 4, 2015 (80 FR 25278). The Commission, therefore, revised its schedule to conform with Commerce's new schedule (80 FR 28009, May 15, 2015). The hearing was held in Washington, DC, on September 16, 2015, and all persons who requested the opportunity were permitted to appear in person or by counsel.

Views of the Commission

Based on the record in the final phase of these investigations, we find that an industry in the United States is materially injured by reason of imports of sugar from Mexico found by the U.S. Department of Commerce ("Commerce") to be sold in the United States at less than fair value and to be subsidized by the government of Mexico.[1]

I. Background

The petitions in these investigations were filed on March 28, 2014 by the American Sugar Coalition and its members, which include sugarcane farmers, millers, and refiners, and sugar beet growers and processors.[2] Following the preliminary affirmative determinations by the Commission[3] and Commerce, Commerce suspended the antidumping duty and countervailing duty investigations on sugar from Mexico, effective December 19, 2014, pursuant to suspension agreements. The agreement to suspend the countervailing duty investigation, between Commerce and the government of Mexico, restricts the volume of direct or indirect exports of subject merchandise from Mexico to the United States. The agreement to suspend the antidumping duty investigation, between Commerce and producers/exporters of sugar in Mexico, sets minimum reference prices for subject imports.[4]

Subsequently, on January 8, 2015, domestic producers Imperial Sugar Company ("Imperial" or "Imperial Sugar") and AmCane Sugar LLC ("AmCane") filed separate petitions with the Commission requesting reviews of the suspension agreements pursuant to sections 704(h) and 734(h) of the Tariff Act of 1930.[5] As a result of these reviews, on March 19, 2015, the Commission determined that the agreements eliminate completely the injurious effect of subject imports.[6] Consequently, the suspension agreements have remained in effect.

On January 16, 2015, Imperial and AmCane also submitted timely requests with Commerce to continue the antidumping and countervailing duty investigations on sugar from

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[1] *See also* Additional Views of Chairman Meredith M. Broadbent.

[2] Confidential Report ("CR")/Public Report ("PR") at I-1. The members of the American Sugar Coalition are American Sugar Cane League, Thibodaux, LA; American Sugarbeet Growers Association, Washington, DC; American Sugar Refining, Inc. ("ASR"), West Palm Beach, FL; Florida Sugar Cane League, Washington, DC; Hawaiian Commercial and Sugar Company, Puunene, HI; Rio Grande Valley Sugar Growers, Inc., Santa Rosa, TX; Sugar Cane Growers Cooperative of Florida, Belle Glade, FL; and United States Beet Sugar Association, Washington, DC. *Id.*

[3] *Sugar from Mexico*, Inv. Nos. 701-TA-513 and 731-TA-1249 (Preliminary), USITC Pub. 4467 (May 2014) ("*Preliminary Determinations*").

[4] Sugar from Mexico: Suspension of the Antidumping Investigation, 79 Fed. Reg. 78039 (Dec. 29, 2014); Sugar from Mexico: Suspension of the Countervailing Duty Investigation, 79 Fed. Reg. 78044 (Dec. 29, 2014). See also CR at I-1 – I-2; PR at I-1.

[5] 19 U.S.C. §§ 1671c(h), 1673c(h).

[6] *Sugar from Mexico*, Inv. Nos. 704-TA-1 and 734-TA-1 (Review), USITC Publication 4523 (April 2015).

Mexico. Commerce resumed the investigations on May 4, 2015, at which point it established new statutory deadlines.[7]

Petitioners' representatives appeared at the hearing in the final phase of these investigations accompanied by counsel and submitted prehearing and posthearing briefs. Representatives of Imperial, which supports the imposition of duties, also appeared at the hearing accompanied by counsel and submitted prehearing and posthearing briefs. One respondent group participated actively in the final phase of these investigations. Representatives and counsel for the Sweetener Users Association, consisting of purchasers of subject merchandise, and Barry Callebaut USA LLC, an importer of subject merchandise (collectively, the "Sweetener Users Respondents"), appeared at the hearing and submitted prehearing and posthearing briefs.

Except as noted, U.S. industry data are based on questionnaire responses from 25 firms that accounted for all known U.S. production of raw and refined sugar during the period of investigation, which encompasses crop years ("CY") 2011/12 through CY 2013/14. Each crop year runs from October 1 through September 30; consequently, the period for which data were collected does not include the period when the suspension agreements became effective. U.S. import data are based on official Commerce import data.[8] Except as noted, Mexican industry data are based on questionnaire responses from 17 firms, whose exports to the United States accounted for approximately 98.1 percent of U.S. imports of sugar from Mexico over the period of investigation.[9]

II. Domestic Like Product

A. In General

In determining whether an industry in the United States is materially injured or threatened with material injury by reason of imports of subject merchandise, the Commission first defines the "domestic like product" and the "industry."[10] 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."[11] 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."[12]

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[7] Sugar from Mexico: Continuation of Antidumping and Countervailing Duty Investigations, 80 Fed. Reg. 25278 (Dep't of Commerce May 4, 2015).

[8] CR at I-7; PR at I-5. The Commission received usable questionnaire responses from 14 companies, representing 76.2 percent of total imports of sugar from Mexico and *** percent of total imports of sugar from all other sources between October 2011 and September 2014. CR/PR at IV-1.

[9] CR at VII-8; PR at VII-6.

[10] 19 U.S.C. § 1677(4)(A).

[11] 19 U.S.C. § 1677(4)(A).

[12] 19 U.S.C. § 1677(10).

The decision regarding the appropriate domestic like product in an investigation is a factual determination, and the Commission has applied the statutory standard of "like" or "most similar in characteristics and uses" on a case-by-case basis.[13] No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.[14] The Commission looks for clear dividing lines among possible like products and disregards minor variations.[15] Although the Commission must accept Commerce's determination as to the scope of the imported merchandise that is subsidized or sold at less than fair value,[16] the Commission determines what domestic product is like the imported articles Commerce has identified.[17]

B. Product Description

Commerce defined the scope of the imported merchandise under investigation as follows:[18]

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[13] See, e.g., Cleo Inc. v. United States, 501 F.3d 1291, 1299 (Fed. Cir. 2007); NEC Corp. v. Department of Commerce, 36 F. Supp. 2d 380, 383 (Ct. Int'l Trade 1998); Nippon Steel Corp. v. United States, 19 CIT 450, 455 (1995); Torrington Co. v. United States, 747 F. Supp. 744, 749 n.3 (Ct. Int'l Trade 1990), aff'd, 938 F.2d 1278 (Fed. Cir. 1991) ("every like product determination 'must be made on the particular record at issue' and the 'unique facts of each case'"). The Commission generally considers a number of factors, including the following: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) customer and producer perceptions of the products; (5) common manufacturing facilities, production processes, and production employees; and, where appropriate, (6) price. See Nippon, 19 CIT at 455 n.4; Timken Co. v. United States, 913 F. Supp. 580, 584 (Ct. Int'l Trade 1996).

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

[15] *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.").

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

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

[18] Sugar from Mexico: Final Affirmative Countervailing Duty Determination, 80 Fed. Reg. 57337 (Dep't of Commerce Sept. 23, 2015) (footnote omitted); see also Sugar from Mexico: Final Determination of Sales of Less Than Fair Value, 80 Fed. Reg. 57341 (Dep't of Commerce Sept. 23, 2015).

The product covered by this investigation is raw and refined sugar of all polarimeter readings derived from sugar cane or sugar beets. The chemical sucrose gives sugar its essential character. Sucrose is a nonreducing disaccharide composed of glucose and fructose linked by a glycosidic bond via their anomeric carbons. The molecular formula for sucrose is $C_{12}H_{22}O_{11}$; the International Union of Pure and Applied Chemistry (IUPAC) International Chemical Identifier (InChl) for sucrose is $_1S/C_{12}H_{22}O_{11}$/c13-l-4-6(16)8(18)9(19)11(21-4)23-12(3-15)10(20)7(17)5(2-14)22-12/h4-11,13-20H,1-3H2/t4-,5-,6-,7-,8+,9-,10+,11-,12+/m1/s1; the InChl Key for sucrose is CZMRCDWAGMRECNUGDNZRGBSA-N; the U.S. National Institutes of Health PubChem Compound Identifier (CID) for sucrose is 5988; and the Chemical Abstracts Service (CAS) Number of sucrose is 57-50-1.

Sugar described in the previous paragraph includes products of all polarimeter readings described in various forms, such as raw sugar, estandar or standard sugar, high polarity or semi-refined sugar, special white sugar, refined sugar, brown sugar, edible molasses, desugaring molasses, organic raw sugar, and organic refined sugar. Other sugar products, such as powdered sugar, colored sugar, flavored sugar, and liquids and syrups that contain 95 percent or more sugar by dry weight are also within the scope of this investigation.

The scope of the investigation does not include (1) sugar imported under the Refined Sugar Re-Export Programs of the U.S. Department of Agriculture; (2) sugar products produced in Mexico that contain 95 percent or more sugar by dry weight that originated outside of Mexico; (3) inedible molasses (other than inedible desugaring molasses noted above); (4) beverages; (5) candy; (6) certain specialty sugars; and (7) processed food products that contain sugar (e.g., cereals). Specialty sugars excluded from the scope of this investigation are limited to the following: Caramelized slab sugar candy, pearl sugar, rock candy, degrees for cooking and baking, fondant, golden syrup, and sugar decorations.

Merchandise covered by this investigation is typically imported under the following headings of the HTSUS: 1701.12.1000, 1701.12.5000, 1701.13.1000, 1701.13.5000, 1701.14.1000, 1701.14.5000, 1701.91.1000, 1701.91.3000, 1701.99.1010, 1701.99.1025, 1701.99.1050, 1701.99.5010, 1701.99.5025, 1701.99.5050, 1702.90.4000, and 1703.10.3000. The tariff

> classification is provided for convenience and customs purposes; however, the written description of the scope of this investigation is dispositive.

The products covered by these investigations include sugar from Mexico, which is chemically classified as sucrose, a naturally occurring carbohydrate.[19] Among the covered products are "raw" sugar (sugar with a sucrose content by weight in a dry state that corresponds to a polarimeter reading of less than 99.5 degrees) and "estandar," or standard sugar, which is sometimes referred to as "high polarity" or "semi refined" sugar (sugar with a sucrose content by weight in a dry state that corresponds to a polarimeter reading of 99.2 to 99.6 degrees).[20] Raw cane sugar is used exclusively as a raw material input in the production of refined sugar,[21] and is not commercially produced in Mexico.[22] Estandar can be used either as a raw material input in the production of refined sugar or as an input in the production of certain food and beverage products.[23] Subject producers reported the majority of their export shipments to the United States during the period of investigation were of sugar with a polarity of greater than 99.4 degrees intended for further refinement, which would include estandar.[24]

Also included in the scope of the investigations are "refined" sugar with a sucrose content by weight in a dry state that corresponds to a polarimeter reading of at least 99.9 degrees; brown sugar; liquid sugar (sugar dissolved in water); organic raw sugar; and organic refined sugar.[25] These sugar products are used as a caloric sweetening agent in food and beverages, including bakery products, cereals, confections, sauces, cured meats, and dairy and ice cream applications.[26] Inedible molasses, certain "specialty" sugars (e.g., rock candy, fondant, and sugar decorations), and processed food products that contain sugar (e.g., beverages, candy, and cereals) are not within the scope of these investigations.[27]

C. Domestic Like Product Analysis

In the preliminary phase of these investigations, the Commission defined a single domestic like product consisting of all sugar within the scope of the investigations. In its determinations, it analyzed whether the Commission should define separate like products corresponding to raw and refined sugar, whether the Commission should define separate like products corresponding to refined cane sugar and refined beet sugar, and whether the

[19] CR at I-14 – I-15; PR at I-10 – I-11. The only subject merchandise not chemically classified as sucrose are fructose-sugar blends. CR at I-14; PR at I-10.

[20] CR at I-14 – I-15; PR at I-10 – I-11.

[21] CR at I-15; PR at I-11.

[22] CR at VII-5; PR at VII-4.

[23] *See, e.g.,* Hearing Transcript ("Tr.") at 39, 105 (Buker); *see also* CR/PR Tables III-9 – III-18, VII-5.

[24] CR/PR at Table VII-5.

[25] CR at I-14; PR at I-10.

[26] CR at I-16; PR at I-11.

[27] CR at I-14; PR at I-10.

Commission should define the domestic like product to include high fructose corn syrup ("HFCS").[28]

The Commission found that the record evidence pertaining to its semi-finished product analysis supported the inclusion of raw and refined cane sugar within the same domestic like product definition. Specifically, it concluded that raw sugar is dedicated to refined sugar production, with no separate market for raw sugar; both raw and refined sugar consist of sucrose, with physical differences determined by the degree of processing; and the value added through raw cane sugar refining appears moderate, although the process is complex and capital-intensive.[29]

The Commission next determined that refined cane sugar and refined beet sugar should not be defined as separate like products. It found that refined cane sugar and refined beet sugar are similar with respect to physical characteristics and uses, interchangeability, channels of distribution, producer and customer perceptions, and price. In addition, it concluded that, although refined cane sugar and refined beet sugar are produced in separate facilities with distinct employees, the processes used to produce them are similar.[30]

Finally, the Commission concluded that the record in the preliminary phase of the investigations indicated that there are more differences than similarities between sugar and HFCS, demonstrating that a clear dividing line exists between the two products. The Commission found that, although sugar and HFCS share general chemical characteristics and uses, certain key physical differences between sugar and HFCS cause each product to be favored for specific applications, thereby limiting their practical interchangeability. It observed that they are produced in separate manufacturing facilities using different employees and production processes. The Commission also noted that, although there was a movement to substitute HFCS for sugar by the domestic soft drink industry in the 1980s, most other end users of sweeteners have not switched to HFCS from sugar, despite the historically lower price of HFCS than sugar, reflecting that customers and producers perceive sugar and HFCS to be different products. Accordingly, because the Commission found a clear dividing line separating sugar from HFCS, it did not include HFCS in the domestic like product.[31]

The record in the final phase of these investigations does not contain any new information concerning the domestic like product factors that would call into question our analysis in the preliminary phase, and there is no argument that the Commission should adopt a definition of the domestic like product different from that in the preliminary determinations.[32]

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[28] *Preliminary Determinations*, USITC Pub. 4467 at 8-14.

[29] *Preliminary Determinations*, USITC Pub. 4467 at 8-10.

[30] *Preliminary Determinations*, USITC Pub. 4467 at 10-11.

[31] *Preliminary Determinations*, USITC Pub. 4467 at 12-14.

[32] In its comments on the draft questionnaires, the Mexican Sugar Chamber argued that the Commission should define refined sugar and raw sugar/estandar as separate products and that the Commission should include HFCS in the like product definition. Mexican Sugar Chamber's Comments on Draft Questionnaires at 1-2. However, the Mexican Sugar Chamber did not otherwise actively participate in the investigations and did not submit briefs pursuing this or any other like product argument. In the final phase of these investigations, the Commission collected additional information regarding HFCS, which is consistent with our findings in the preliminary phase of the investigations that (Continued...)

Therefore, for the same reasons set forth in the preliminary determinations, we find one domestic like product that is coextensive with the scope definition.

III. Domestic Industry

The domestic industry is defined as the domestic "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."[33] 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.

A. Sufficient Production-Related Activities

In deciding whether a firm qualifies as a domestic producer of the domestic like product, the Commission generally analyzes the overall nature of a firm's U.S. production-related activities, although production-related activity at minimum levels could be insufficient to constitute domestic production.[34]

In the preliminary determinations, the Commission considered whether certain domestic producers known as "melt houses," which produce liquid sugar by adding water to subject imported estandar and refined sugar, should be excluded from the domestic industry because they do not engage in sufficient production-related activities to be considered domestic producers. Two firms, CSC Sugar ("CSC") and Archer Daniels Midland Company ("ADM"), which were the only responding domestic entities that primarily produce liquid sugar and invert syrup, denied that their operations represent "melt houses," and argued that they engage in sufficient production-related activities to be considered domestic producers.[35]

The Commission determined that CSC but not ADM engaged in sufficient activity to be considered a domestic producer.[36] The Commission found that CSC was a refiner, capable of processing raw sugar unfit for human consumption into refined liquid sugar and invert sugar. The Commission noted that the U.S. Department of Agriculture ("USDA") certified CSC as a

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(…Continued)
clear dividing lines exist between the sugar within the scope and HFCS. CR at I-41 – I-46; PR at I-28 – I-32. The Sweetener Users Respondents do not contest this definition.

[33] 19 U.S.C. § 1677(4)(A).

[34] The Commission generally considers six factors: (1) source and extent of the firm's capital investment; (2) technical expertise involved in U.S. production activities; (3) value added to the product in the United States; (4) employment levels; (5) quantity and type of parts sourced in the United States; and (6) any other costs and activities in the United States directly leading to production of the like product. No single factor is determinative and the Commission may consider any other factors it deems relevant in light of the specific facts of any investigation. *Diamond Sawblades and Parts Thereof from China and Korea*, Inv. Nos. 731-TA-1092-93 (Final), USITC Pub. 3862 at 8-11 (July 2006).

[35] *Preliminary Determinations*, USITC Pub. 4467 at 14-15.

[36] *Preliminary Determinations,* USITC Pub. 4467 at 15-17.

domestic refiner. It also found that CSC's refining operations required significant capital investment and a significant level of technical expertise, and employed a substantial number of workers. The Commission further found that, although it sourced most of its inputs from imports, CSC added value to the finished product. Accordingly, the Commission concluded that CSC engaged in sufficient production-related activities to be included in the domestic industry.[37]

The Commission found that, although ADM described its operations as "sweetener stations," they resembled "melt houses" because ADM processes refined sugar already fit for consumption into liquid sugar and invert syrup by melting the sugar and adding water. The Commission acknowledged that ADM's capital investment had been substantial and that it employed an appreciable number of workers, but also found that its sweetener stations did not appear to require a significant level of technical expertise and that it added only minor value to sugar that had already been refined. As a result, the Commission concluded that ADM did not engage in sufficient production-related activities to be included in the domestic industry.[38]

There is no new information on the record of the final phase of these investigations that would affect the analysis that the Commission undertook in the preliminary phase to include CSC, but not ADM, in the domestic industry.[39] There is also no new argument on the issue.[40] We therefore continue to find that CSC, but not ADM, engages in sufficient activity to be considered a domestic producer.

B. Grower/Processor Issues

In cases involving processed agricultural products, section 771(4)(E) of the Tariff Act authorizes the Commission to include growers of a raw agricultural input within the domestic industry producing the processed agricultural product if the following apply:

(a) the processed agricultural product is produced from the raw product through a single continuous line of production,[41] and

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[37] *Preliminary Determinations*, USITC Pub. 4467 at 15-16.

[38] *Preliminary Determinations*, USITC Pub. 4467 at 16-17.

[39] CR at III-8 – III-9; PR at III-6. The Commission did not receive any additional usable questionnaire responses in the final phase of these investigations from firms that are primarily engaged in producing liquid sugar. CR/PR at III-1, n.2; CR at III-8; PR at III-6.

[40] Petitioners argue that, although they do not agree with the Commission's decision in the preliminary determinations to include CSC in the domestic industry, they do not contest that decision. Petitioners' Prehearing Br. at 12-13. They further argue that the Commission should continue to conclude that melt houses such as ADM do not engage in the production of sugar. Petitioners' Prehearing Br. at 13. Sweetener Users Respondents make no argument regarding this issue.

[41] The statute provides that the processed product shall be considered to be processed from the raw product in a single, continuous line of production if:

(a) the raw agricultural product is substantially or completely devoted to the production of the processed agricultural product; and

(b) the processed agricultural product is produced substantially or completely from the raw product. 19 U.S.C. § 1677(4)(E)(ii).

(b) there is a substantial coincidence of economic interest between the growers and producers of the processed product based upon the relevant economic factors.[42]

In the preliminary phase of these investigations, the Commission concluded that the requirements of the grower/processor provision were satisfied. First, it found that there was a continuous line of production from sugarcane growers to millers and refiners, and from beet growers to processors, because sugarcane and sugar beets are substantially devoted to raw and refined sugar production, with no other commercially significant uses, and raw and refined sugar are produced entirely from sugar beets and sugarcane.[43]

Second, it concluded that there was a coincidence of economic interest between growers, on the one hand, and sugar millers, processors, and refiners, on the other, because a substantial proportion of sugar is milled, processed, and refined through cooperative ("co-op") arrangements. It observed that all or virtually all beet growers belong to co-ops and a substantial proportion of cane farmers also belong to co-ops that produce raw sugar. Because co-ops return all revenues from the sale of raw or refined sugar, minus costs, to growers, the Commission concluded that there was a significant coincidence of economic interest between growers and cane millers, cane refiners, or beet processors belonging to the same co-op. Accordingly, it defined the domestic industry to include sugarcane and beet growers as well as cane millers, cane refiners, and beet processors.[44]

Because there is no new information or argument with respect to this issue, we continue to include sugarcane and sugar beet growers in the domestic industry pursuant to the statutory grower/processor provision.

C. Related Parties

We must determine whether any producer of the domestic like product should be excluded from the domestic industry pursuant to section 771(4)(B) of the Tariff Act. This provision allows the Commission, if appropriate circumstances exist, to exclude from the domestic industry producers that are related to an exporter or importer of subject merchandise or which are themselves importers.[45] Exclusion of such a producer is within the Commission's discretion based upon the facts presented in each investigation.[46]

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[42] In addressing coincidence of economic interest under the second prong of the test, the Commission may, in its discretion, consider price, added market value, or other economic interrelationships. Further:

(a) if price is taken into account, the Commission shall consider the degree of correlation between the price of the raw agricultural product and the price of the processed agricultural product; and

(b) if added market value is taken into account, the Commission shall consider whether the value of the raw agricultural product constitutes a significant percentage of the value of the processed agricultural product. 19 U.S.C. § 1677(4)(E)(iii).

[43] *Preliminary Determinations*, USITC Pub. 4467 at 17-18.

[44] Preliminary Determinations, USITC Pub. at 18-19.

[45] *See Torrington Co. v. United States*, 790 F. Supp. 1161, 1168 (Ct. Int'l Trade 1992), *aff'd without opinion*, 991 F.2d 809 (Fed. Cir. 1993); *Sandvik AB v. United States*, 721 F. Supp. 1322, 1331-32 (Ct. Int'l (Continued...)

Petitioners argue that the Commission should not exclude any producers which are also importers of subject merchandise from the domestic industry because the vast majority of these producers' imports are of raw sugar or estandar that is refined in the United States for sale as a final refined product.[47]

In the final phase of these investigations, the record shows that five domestic producers qualify as related parties because they imported subject merchandise during the period of investigation: ***.[48] We find that appropriate circumstances do not exist to exclude any related party from the domestic industry for the following reasons.

First, the record indicates that the related parties imported subject merchandise primarily for processing into refined sugar in their domestic production facilities, and not for resale, with the exception of ***.[49] These producers' domestic refineries are highly capital-intensive and added value to subject imports used as an input in the domestic production of refined sugar. Consequently, although some of these refiners had high ratios of subject imports to production, they all are devoting significant resources to U.S. production of the domestic like product.[50]

Furthermore, the record shows that domestic cane refiners as a whole must import raw or semi-refined cane sugar as an input for their domestic production of refined sugar because

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(…Continued)
Trade 1989), *aff'd mem*., 904 F.2d 46 (Fed. Cir. 1990); *Empire Plow Co. v. United States*, 675 F. Supp. 1348, 1352 (Ct. Int'l Trade 1987).

[46] 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. *Changzou Trina Solar Energy Co. v. USITC*, Slip. Op. 15-84 at 23 (Ct. Int'l. Trade Aug. 7, 2015); *see also Torrington Co.*, 790 F. Supp. at 1168.

[47] Petitioners' Prehearing Br. at 13 & Exhibit 3. The Sweetener Users Respondents did not brief this issue.

[48] CR/PR at Tables III-10, 12-15. *** each purchased relatively small quantities of subject merchandise during the period of investigation, not exceeding *** short tons per year. *Id.* at Tables III-9, 11, 16-18. Because of the small quantities involved, the record indicates that none of these producers controlled large volumes of subject merchandise by virtue of their purchases. We accordingly find that none of these producers qualify as related parties.

[49] CR/PR at Tables III-10, 12-15. ***. CR/PR at Table III-10.

[50] The ratio of subject imports to U.S. production during the period of investigation ranged from *** to *** percent for ***, *** to *** percent for ***, *** to *** percent for ***, *** to *** percent for ***, and *** to *** percent for ***. CR/PR at Tables III-10, 12-15.

there is an insufficient volume of domestic raw sugar with which to operate their refineries.[51] Consequently, the fact that these related parties imported inputs from Mexico does not significantly detract from their primary interest in domestic production.[52] Additionally, the financial performance of these related parties did not differ markedly from that of other domestic producers.[53] [54]

For the foregoing reasons, we find that appropriate circumstances do not exist to exclude any related party from the domestic industry. In sum, we define the domestic industry as all producers of sugar within the scope of the investigations, including cane farmers and beet growers, but not including ***.

IV. Material Injury by Reason of Subject Imports[55]

Based on the record in the final phase of this investigation, we find that an industry in the United States is materially injured by reason of imports of sugar from Mexico that Commerce has found to be sold in the United States at less than fair value and subsidized.

A. Legal Standards

In the final phase of antidumping and countervailing duty investigations, the Commission determines whether an industry in the United States is materially injured or threatened with material injury by reason of the imports under investigation.[56] 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.[57] The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant."[58] In assessing whether the domestic industry is materially injured by reason of subject imports, we

[51] CR at III-22 – III-23; PR at III-12.

[52] *** the petitions, while *** and *** the petitions. CR/PR Table III-3.

[53] *See* CR/PR at Table E-2.

[54] Vice Chairman Pinkert does not rely on a firm's financial performance in these investigations as a factor in determining whether there are appropriate circumstances to exclude it from the domestic industry.

[55] Negligibility under 19 U.S.C. § 1677(25) is not an issue in these investigations. Based on official USDA statistics, subject imports accounted for 74.4 percent of all imports of sugar during the twelve-month period of April 2013 through March 2014. CR at IV-9; PR at IV-8.

[56] 19 U.S.C. §§ 1671d(b), 1673d(b). The Trade Preferences Extension Act of 2015, Pub. L. 114-27, amended the provisions of the Tariff Act pertaining to Commission determinations of material injury and threat of material injury by reason of subject imports in certain respects. We have applied these amendments here to the extent pertinent and practicable.

[57] 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).

[58] 19 U.S.C. § 1677(7)(A).

consider all relevant economic factors that bear on the state of the industry in the United States.[59] 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."[60]

Although the statute requires the Commission to determine whether the domestic industry is "materially injured or threatened with material injury by reason of" unfairly traded imports,[61] 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.[62] 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.[63]

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

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[59] 19 U.S.C. § 1677(7)(C)(iii).

[60] 19 U.S.C. § 1677(7)(C)(iii).

[61] 19 U.S.C. §§ 1671d(a), 1673d(a).

[62] *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).

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

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

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the injury caused by other factors from injury caused by unfairly traded imports.[65] 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.[66] It is clear that the existence of injury caused by other factors does not compel a negative determination.[67]

Assessment of whether material injury to the domestic industry is "by reason of" subject imports "does not require the Commission to address the causation issue in any particular way" as long as "the injury to the domestic industry can reasonably be attributed to the subject imports" and the Commission "ensure{s} that it is not attributing injury from other sources to the subject imports."[68] [69] Indeed, the Federal Circuit has examined and affirmed various Commission methodologies and has disavowed "rigid adherence to a specific formula."[70]

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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.

[65] 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.").

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

[67] *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.").

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

[69] Vice Chairman Pinkert does not join this paragraph or the following three paragraphs. He points out that the Federal Circuit, in *Bratsk*, 444 F.3d 1369, and *Mittal Steel*, held that the Commission is *required*, in certain circumstances when considering present material injury, to undertake a particular (Continued...)

The Federal Circuit's decisions in *Gerald Metals, Bratsk*, and *Mittal Steel* all involved cases where the relevant "other factor" was the presence in the market of significant volumes of price-competitive nonsubject imports. The Commission interpreted the Federal Circuit's guidance in *Bratsk* as requiring it to apply a particular additional methodology following its finding of material injury in cases involving commodity products and a significant market presence of price-competitive nonsubject imports.[71] The additional "replacement/benefit" test looked at whether nonsubject imports might have replaced subject imports without any benefit to the U.S. industry. The Commission applied that specific additional test in subsequent cases, including the *Carbon and Certain Alloy Steel Wire Rod from Trinidad and Tobago* determination that underlies the *Mittal Steel* litigation.

Mittal Steel clarifies that the Commission's interpretation of *Bratsk* was too rigid and makes clear that the Federal Circuit does not require the Commission to apply an additional test nor any one specific methodology; instead, the court requires the Commission to have "evidence in the record" to "show that the harm occurred 'by reason of' the LTFV imports," and requires that the Commission not attribute injury from nonsubject imports or other factors to subject imports.[72] Accordingly, we do not consider ourselves required to apply the replacement/benefit test that was included in Commission opinions subsequent to *Bratsk*.

The progression of *Gerald Metals, Bratsk*, and *Mittal Steel* clarifies that, in cases involving commodity products where price-competitive nonsubject imports are a significant

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kind of analysis of non-subject imports, albeit without reliance upon presumptions or rigid formulas. *Mittal Steel* explains as follows:

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

542 F.3d at 878.

[70] *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.").

[71] *Mittal Steel*, 542 F.3d at 875-79.

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

factor in the U.S. market, the Court will require the Commission to give full consideration, with adequate explanation, to non-attribution issues when it performs its causation analysis.[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 material injury by reason of subject imports.

1. The U.S. Government Sugar Program

The U.S. government regulates the U.S. sugar market using a variety of policy tools collectively known as the U.S. Sugar Program pursuant to the Agriculture Act of 2014 (the "2014 Farm Bill"), which essentially extended most elements of the Food, Conservation, and Energy Act of 2008 (the "2008 Farm Bill") through the 2018 crop year.[76] These tools control the supply of sugar in the U.S. market from domestic and nonsubject import sources, but not from Mexico. Under the North American Free Trade Agreement ("NAFTA"), imports of sugar from Mexico have enjoyed unlimited access to the U.S. market since January 1, 2008.[77]

The USDA regulates the quantity of sugar supplied by domestic producers to the U.S. market by assigning marketing allotments to sugar beet processors and to sugarcane millers on a firm-specific basis.[78] At the beginning of each crop year, the USDA establishes the overall

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[73] To that end, after the Federal Circuit issued its decision in *Bratsk*, the Commission began to present published information or send out information requests in the final phase of investigations to producers in nonsubject countries that accounted for substantial shares of U.S. imports of subject merchandise (if, in fact, there were large nonsubject import suppliers). In order to provide a more complete record for the Commission's causation analysis, these requests typically seek information on capacity, production, and shipments of the product under investigation in the major source countries that export to the United States. The Commission plans to continue utilizing published or requested information in the final phase of investigations in which there are substantial levels of nonsubject imports.

[74] We provide in our respective discussions of volume, price effects, and impact 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 at I-27 – I-36; PR at I-19 – I-25. Elements of the U.S. Sugar Program have evolved over time through successive farm bills. CR at I-27 – I-36; PR at I-19 – I-25. For example, the 2008 Farm Bill continued most elements of the U.S. Sugar Program established under the Farm Security and Rural Investment Act of 2002, with some modifications. CR at I-33; PR at I-23.

[77] CR at I-20; PR at I-14.

[78] CR at I-30 – I-31, I-33; PR at I-21, I-23.

allotment quantity for U.S. sugar beet processors and sugarcane millers at 85 percent of projected U.S. human consumption of sugar that year, and then apportions 54.35 percent of this allotment to sugar beet processors and 45.65 percent to sugarcane millers.[79] Allotments granted to individual sugar beet processors are based on their past sugar production, while allotments to individual sugarcane millers are based on their past processing levels and current ability to market, among other things.[80] Sugarcane millers and sugar beet processors that produce sugar beyond their allotments must either store the excess or sell in avenues other than the U.S. market for human consumption.[81]

The USDA also provides loans to sugarcane millers and sugar beet processors through the Commodity Credit Corporation ("CCC"), and sugarcane millers and beet processors are entitled to receive loans for every pound of their production.[82] As of 2013, sugarcane millers received loans at the rate of 18.75 cents per pound of raw cane sugar, and sugar beet processors received loans at 128.5 percent of the raw cane sugar rate, or 24.09 cents per pound; these are known as the sugar loan rates.[83] Sugarcane millers and sugar beet processors may forfeit the sugar pledged as collateral for these loans to the CCC in lieu of repaying the loans,[84] and will generally do so, when market prices fall below the applicable sugar loan rates, plus interest and costs.[85] The CCC may not sell forfeited sugar into the U.S. market for human consumption, but must dispose of it through re-export program credit swaps and sales of sugar to ethanol production or for other non-food uses.[86]

During the period of investigation, the USDA removed domestically produced sugar from the U.S. market for human consumption for the first time since 2004.[87] Specifically, in CY 2012/13, the USDA effectively removed 1.0 million short tons raw value ("STRV") of domestically produced sugar from the market at a net cost of $258.7 million.[88] It did so

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[79] CR at I-30 – I-31, I-33; PR at I-21, I-23.

[80] CR at I-30 – I-31; PR at I-21.

[81] CR at I-31; PR at I-21. The USDA may reassign unused marketing allotments to imports of raw cane sugar. CR at I-34; PR at I-23.

[82] CR at I-28 – I-29; PR at I-20.

[83] CR at I-33; PR at I-23.

[84] CR at I-28; PR at I-20.

[85] CR at I-28; PR at I-20.

[86] CR at I-33; PR at I-23. The Secretary of Agriculture is required to operate the U.S. Sugar Program at no net cost to the U.S. government by avoiding, to the maximum extent possible, any forfeiture of sugar to the CCC. CR at I-30; PR at I-21. To accomplish this goal, the USDA uses marketing allotments and the regulation of nonsubject imports, as discussed below, as well as two other programs. Under the "payment-in-kind" ("PIK") program, the USDA allows processors and growers to bid on raw cane sugar or refined beet sugar held by the CCC in exchange for reducing their own production or planting/harvesting of a specified acreage, as the case may be. CR at I-30; PR at I-21. Under the Feedstock Flexibility Program ("FFP"), the USDA must sell surplus sugar stocks, including forfeited sugar, to ethanol producers, and may also purchase refined sugar from domestic producers for sale to ethanol producers. CR at I-33; PR at I-23; USDA, *Sugar and Sweeteners Outlook*, November 2013, at 7, EDIS Document No. 533432.

[87] CR at I-34; PR at I-23.

[88] CR at I-35; PR at I-24; CR/PR at Table I-6.

through a combination of re-export program credit swaps and sales of forfeited and purchased sugar to ethanol producers under the FFP.[89]

The USDA, with the Office of the U.S. Trade Representative ("USTR"), regulates imports of sugar from sources other than Mexico using tariff rate quotas ("TRQs").[90] In-quota imports are subject to minimal "tier I" tariffs and imports in excess of the applicable quotas are subject to much higher "tier II" tariffs, which are normally prohibitive.[91] Under the World Trade Organization ("WTO") Agreement, Schedule XX of the GATT Marrakesh Protocol, the United States agreed to import not less than 1,231,484 STRV of raw sugar and 24,251 STRV of refined sugar annually.[92] At the beginning of each crop year, on October 1, the USDA sets the raw sugar TRQ at the minimum level permitted under the WTO Agreement, and USTR apportions the TRQ on a country-specific basis.[93] During the period of investigation, the majority of the TRQ covering refined sugar subject to these investigations was allocated to Canada, with the balance filled on a first-come, first-served basis.[94] The USDA may increase the TRQs to alleviate short supply conditions in the U.S. market but not before April 1, or midway through the crop year, except in the event of emergencies, such as hurricanes and refinery explosions that reduce domestic sugar supplies.[95]

2. Demand Considerations

Apparent U.S. consumption of sugar was *** STRV in CY 2011/12; it increased to *** STRV in CY 2012/13 and remained at that level in CY 2013/14. Apparent U.S. consumption was *** percent higher in CY 2013/14 than in CY 2011/12.[96] [97]

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[89] CR/PR at Table I-6.

[90] CR at I-20 – I-21; PR at I-14.

[91] CR at I-23 – I-26; PR at I-17 – I-19.

[92] CR at I-21 & n.42; PR at I-14 – I-15 & n.42.

[93] CR at I-21, I-34; PR at I-15, I-23; CR/PR at Table I-4 & n.1.

[94] CR at I-25; PR at I-18.

[95] CR at I-34 & n.64; PR at I-23 & n.64.

[96] CR/PR at Tables IV-5 & C-1. For purposes of calculating apparent U.S. consumption, the quantities of sugar forfeited to the CCC have been removed. CR/PR at Table IV-5, n.1.

[97] Petitioners contend that the data in the Staff Report overstate U.S. shipments and therefore apparent U.S. consumption, thereby mistakenly indicating that there was a significant increase in consumption during the period of investigation, particularly from CY 2011/12 to CY 2012/13. They argue that other data on the record, including USDA data, indicate a much smaller increase in consumption of less than *** short tons over the period of investigation, which would be consistent with other information indicating that demand increases are mainly tied to population growth. Petitioners' Posthearing Br. at Parts II-20 – II-23; III-37 – III-38; Petitioners' Prehearing Br. at 15. Sweetener Users Respondents also indicated that they perceive that demand increased by less than the Commission's apparent U.S. consumption data indicate, arguing that, while an increase in demand may have been partially responsible for the increase in apparent U.S. consumption, the majority of the increase was attributable to excess domestic supply related to increased U.S. production. Sweetener Users Respondents' Posthearing Br., Responses to Commission Questions at 3-4. In our apparent U.S. consumption data, the quantity for U.S. producers' U.S. shipments represents that quantity of refined (Continued...)

Most responding domestic producers and importers, as well as a plurality of purchasers, reported that U.S. demand for sugar increased since October 2011.[98] They generally characterized the increase as small and ascribed it to population growth and consumer substitution away from products using HFCS.[99] USDA data indicate that U.S. shipments of sugar for use in food and beverages increased from 11.1 million STRV in CY 2011/12 to 11.5 million STRV in CY 2012/13 and 11.8 million STRV in CY 2013/14.[100]

The record also indicates that U.S. sugar demand is somewhat inelastic with respect to price, meaning that overall demand for sugar is likely to experience small changes in response to changes in sugar prices.[101] The inelasticity of U.S. sugar demand with respect to price is a function of the somewhat limited range of substitute products and the small cost share of sugar in most downstream products.[102]

3. Supply Considerations

During the period of investigation, the domestic industry's U.S. shipments as a share of apparent U.S. consumption increased from *** percent in CY 2011/12 to *** percent in CY 2012/13 before decreasing to *** percent in CY 2013/14.[103] The domestic industry is divided between producers of beet sugar, which accounted for 56.7 percent of domestic refined sugar production during CY 2013/14, and producers of cane sugar, which accounted for 43.3 percent of domestic refined sugar production during CY 2013/14.[104] The beet sugar segment of the domestic industry consists of 3,913 beet farms, as of the 2012 Census of Agriculture, and seven sugar beet processors operating in 23 locations.[105] The cane sugar segment of the domestic industry consists of 666 sugarcane farms, as of the 2012 Census, 13 sugarcane millers, and seven sugarcane refineries.[106] Many domestic cane refiners are dependent on imports of raw

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sugar produced from domestically grown crops. CR/PR at Table IV-5, n.1. As a result, the data in the Commission report avoid double counting imported raw sugar that has been processed and subsequently shipped from a U.S. refiner. We observe that, if we were to use total U.S. shipments, excluding CCC forfeitures, as opposed to only U.S. shipments from domestic inputs, the total apparent U.S. consumption quantities would be *** short tons in CY 2011/12, *** short tons in CY 2012/13, and *** short tons in CY 2013/14, for an overall increase of approximately *** short tons over the period of investigation. Calculated from CR/PR Tables III-7, III-19, and IV-5.

[98] CR at II-23; PR at II-13 – II-14.

[99] CR at II-23; PR at II-13 – II-14.

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

[101] CR at II-48 – II-49; PR at II-28.

[102] CR at II-16 – II-18, II-25 – II-29, II-48 – II-49; PR at II-9, II-15 – II-16, II-28.

[103] CR/PR at Tables IV-5 & C-1. Domestic industry market share was calculated using only the industry's U.S. shipments of refined sugar made from U.S. inputs. CR/PR at Table IV-5 n.1.

[104] CR/PR at Table III-4.

[105] CR/PR at III-2 & Table III-3.

[106] CR/PR at Table III-3; CR at III-3; PR at III-2.

sugar for their operations because they do not have sufficient access to domestically produced raw sugar.[107]

Subject imports as a share of apparent U.S. consumption increased from *** percent in CY 2011/12 to *** percent in CY 2012/13 before decreasing to *** percent in CY 2013/14, a level *** percentage points higher than in CY 2011/12.[108]

Nonsubject imports as a share of apparent U.S. consumption decreased from *** percent in CY 2011/12 to *** percent in CY 2012/13 before increasing to *** percent in CY 2013/14, a level *** percentage points lower than in CY 2011/12.[109] During the period of investigation, nonsubject imports from TRQ countries filled 88.3 percent of their quotas in CY 2011/12, 53.9 percent in CY 2012/13, and 80.8 percent in CY 2013/14.[110]

In CY 2012/13, sugar production increased in the United States and Mexico due to favorable weather conditions in both countries.[111] Between CY 2011/12 and CY 2012/13, domestic refined sugar production increased from *** STRV to *** STRV, or by *** percent.[112] Responding Mexican producers reported that their production of estandar and refined sugar increased from 5.6 million STRV to 7.7 million STRV, or by 37.5 percent, over the same period.[113]

Additionally, in 2007 the U.S. and Mexican governments established the U.S.-Mexico Consultative Committee ("CCA"), Sweeteners Working Group ("SWG"), which is comprised of governmental officials from both countries who work to improve data quality and the timely publication of market information.[114] At a CCA meeting held in August 2013, the USDA purportedly asked the government of Mexico to divert sugar exports from the United States to third-country markets to alleviate oversupply conditions in the U.S. market, and the government of Mexico agreed to do so; however, there was no formal agreement imposing quantitative restrictions on sugar from Mexico at that time.[115] During the preliminary phase of these investigations, it was reported that the government of Mexico directed government-

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[107] CR at II-2 n.3; PR at II-1 n.3. *See also* Hearing Tr. at 38 (Buker); 44 (O'Malley).

[108] CR/PR at Tables IV-5 & C-1.

[109] CR/PR at Tables IV-5 & C-1.

[110] *See* Posthearing Statement of the International Sugar Trade Coalition ("ISTC"), EDIS No. 565906 at 2 (citing USDA Monthly Sugar Import Data *available at* http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID+1891)) ("ISTC Posthearing Statement").

[111] Conference Tr. at 34 (Berg), 224 (Cortina). Higher yields resulting from the increased usage of genetically modified organism ("GMO") beets may have contributed to increased domestic industry production during the period of investigation. CR at III-3; PR at III-2.

[112] CR/PR at Table III-5 & C-1. Sugar beet and sugarcane production also increased over the period. CR/PR at Tables III-1 & III-2.

[113] CR/PR at Table VII-4. Data from USDA and from the Mexican National Committee for the Sustainable Development of Sugar Cane ("CONADESUCA") similarly show an increase in Mexican production over the period. CR/PR at Tables VII & VII-2.

[114] CR at VII-14 n.14; PR at VII-10 n.14. *See also* Petitioners' Posthearing Br. at Exh. 9 (Letter from Thomas J. Vilsack, Secretary, USDA dated May 23, 2014).

[115] CR at VII-14 n.14; PR at VII-10 n.14; *see also* Petitioners' Posthearing Br. at Exh. 9.

owned mills to divert 700,000 STRV of sugar, and privately owned mills to divert 400,000 STRV of sugar, from the United States to third-country markets.[116] The extent to which any such actions affected the volume of subject imports in the U.S. market is unclear, however; as described below, the volume of subject imports increased significantly during the period of investigation.

4. Substitutability and Other Conditions

The record of the final phase of the investigations indicates that there is generally a moderate-to-high degree of substitutability between domestically produced sugar and subject imported sugar. Domestic and Mexican refined sugar are highly substitutable for each other, as are different sugars used in refining (e.g., raw sugar and estandar). Domestic refiners use domestically produced raw sugar and subject imports of raw sugar and estandar interchangeably in the production of refined sugar.[117] Domestically produced refined sugar also can be used interchangeably with subject imports of refined sugar in industrial use, retail sales, and the production of downstream food and beverage products.[118] There were mixed responses, however, on the substitutability of domestically produced refined sugar and estandar for use in the production of downstream food and beverage products, but in some cases they can be used interchangeably.[119] Most U.S. producers and importers reported that the domestic like product and subject imports are always or frequently interchangeable, and most purchasers reported that U.S.-produced sugar and sugar from Mexico are frequently or sometimes interchangeable.[120] Taking these factors into account, we conclude that the subject imports and the domestic like product have a moderate-to-high degree of substitutability.[121]

We find that price is an important factor in purchasing decisions in the U.S. sugar market, although non-price factors are important as well. Responding domestic producers, importers, and purchasers were divided on the question of whether differences other than price are ever significant to purchasers in choosing between sugar produced in Mexico and the United States. In response to this question, most responding producers responded sometimes or never, while most responding importers and purchasers responded always or frequently.[122]

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[116] *See* Sweetener Users Respondents' Prehearing Brief at 9-10 (citing Conference Tr. at 161-62 (Rello), 164 (Cortina)). A former USDA employee who participated in meetings of the SWG disputes that any such coordination occurred, asserting that it would have been a violation of SWG's charter. *See* Petitioners' Posthearing Br. at Exh. 10 (Declaration of Daniel Colaccio).

[117] CR at II-39 n.51, II-40; PR at II-23 n.51, II-23.

[118] All refined sugar, whether domestic or imported, corresponds to a polarimeter reading of at least 99.9 degrees, and would therefore be substitutable in most applications. CR at I-14; PR at I-10.

[119] CR at II-39; PR at II-23. Six purchasers that produce food or beverage products reported that they can use estandar and refined sugar interchangeably in some applications, while fifteen reported that they cannot. CR at II-39; PR at II-23. Differences that limit interchangeability were reported to include the color, flavor, and purity of estandar. CR II-39 – II-40, II-44; PR at II-23.

[120] CR/PR at Table II-9.

[121] CR at II-29; PR at II-17.

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

Nevertheless, price was the factor that purchasers most frequently identified as very important, with 30 out of 31 responding purchasers reporting it as such.[123] Other non-price factors frequently cited as very important included availability, delivery time, product consistency, quality that meets industry standards, and reliability of supply.[124] Although these non-price factors are important, the commodity nature of sugar[125] and the moderate-to-high degree of substitutability between subject imports and the domestic like product indicates that price is an important factor in competition between domestic and Mexican sugar.

A large majority of the cost of production for both sugarcane milling and sugar beet processing is the cost of raw materials. For millers, raw materials (*i.e.*, sugarcane) fell from *** percent of total cost of goods sold ("COGS") in CY 2011/12 to *** percent of COGS in CY 2013/14. For processers and refiners, raw materials (*i.e.*, sugar beets and raw cane sugar, respectively) fell from *** percent of total COGS to *** percent from CY 2011/12 to CY 2013/14.[126]

Another condition of competition relevant to our analysis is the prevalence of short- and long-term contracts in the U.S. sugar market. In CY 2013/14, responding domestic millers reported making *** percent of their U.S. commercial shipments pursuant to long-term contracts (i.e., more than twelve months and typically for periods of up to two years) with *** percent pursuant to annual contracts and *** percent pursuant to six to twelve month contracts.[127] In CY 2013/14, U.S. refiners and processors reported making *** percent of their U.S. commercial shipments pursuant to long-term contracts, *** percent pursuant to annual contracts, *** percent pursuant to six- to twelve-month contracts, *** percent pursuant to contracts of less than six months in duration, and *** percent in the spot market.[128] That same crop year, responding importers reported making *** percent of their U.S. commercial shipments pursuant to long-term contracts, *** percent pursuant to annual contracts, *** percent pursuant to six- to twelve-month contracts, *** percent pursuant to contracts of less than six months in duration, and *** percent in the spot market.[129]

Another relevant condition of competition is the use of reference data in setting pricing. The USDA publishes sugar prices as well as forecasts of sugar supply and demand in the monthly World Agricultural Supply and Demand Estimates ("WASDE").[130] Twenty-four purchasers indicated that they and/or their sugar suppliers relied on WASDE at least to some extent in setting prices, while five purchasers stated that they do not use it.[131] In addition, raw sugar prices are reported by the Intercontinental Exchange ("ICE"), specifically the "#16"

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

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

[125] Both petitioners and respondents agree that sugar is a commodity type product. Petitioners' Prehearing Br. at 14-15; Hearing Tr. at 195 (Brooks), 197 (Earley).

[126] CR at V-I; PR at V-1.

[127] CR at V-9; PR at V-6 – V-7; CR/PR at Table V-2.

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

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

[130] CR at V-6; PR at V-4.

[131] CR at V-6 – V-7; PR at V-4.

referring to U.S. futures prices of raw sugar.[132] Eight producers and four importers reported that at least some of their contracts were linked to the #16 price, two producers reported hedging their sales with the #16 contracts, and three producers and one importer reported that they did not use futures prices for price-setting or hedging purposes.[133] Another reference price is the Midwest sugar beet price.[134] Twenty-six purchasers indicated that when negotiating the price of sugar they use either the #16 price, the Midwest sugar beet price, or both, while four purchasers reported that they did not use either price reference.[135]

C. Volume of Subject Imports

Section 771(7)(C)(i) of the Tariff Act provides that the "Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States, is significant."[136]

We find that the absolute volume and increase in volume of subject imports are significant over the period of investigation. Subject import volume increased from 1.1 million STRV in CY 2011/12 to 2.1 million STRV in CY 2012/13 before declining to 2.0 million STRV in CY 2013/14, a level 89.9 percent higher than in CY 2011/12.[137]

Subject imports also increased relative to apparent U.S. consumption during the period of investigation. As a share of apparent U.S. consumption, subject imports increased from *** percent in CY 2011/12 to *** percent in CY 2012/13 before decreasing to *** percent in CY 2013/14.[138]

Sweetener Users Respondents argue that the increase in subject imports is not significant because the increase in the level of total imports was less than the increase in volume of domestic production and apparent U.S. consumption, and the level of total imports remained relatively flat as subject imports replaced imports from nonsubject TRQ countries.[139] However, the statute requires us to assess "the volume of imports of the subject merchandise," rather than the volume of total imports.[140]

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[132] CR at V-8; PR at V-6. Raw sugar is traded on the ICE in London, New York, and Singapore. *Id.* The "#11" price refers to world prices for raw sugar. *Id.*

[133] CR at V-8; PR at V-6. For those that used the #16 prices, most described setting their prices by beginning with a #16 price and then incorporating costs and margins. *Id.*

[134] CR at V-8; PR at V-6.

[135] CR at V-8 – V-9; PR at V-6.

[136] 19 U.S.C. § 1677(7)(C)(i).

[137] CR/PR at Tables IV-2, C-1. We note that this significant increase in the volume of subject imports occurred notwithstanding any collaborative efforts within the CCA.

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

[139] Sweetener Users Respondents' Final Comments at 4-7; Sweetener Users Respondents' Posthearing Br. at 4-6; Sweetener Users Respondents' Prehearing Br. at 15-20.

[140] 19 U.S.C. § 1677(7)(B)(i)(I).

Moreover, contrary to Sweetener Users Respondents' arguments,[141] we find that imports from TRQ countries departed the U.S. market due to displacement by subject imports. Specifically, in CY 2012/13, as the volume of the only unregulated source of sugar, *i.e.*, subject imports, increased sharply, USDA undertook regulatory actions to limit TRQ imports and request that certain TRQ quota holders voluntarily reduce their imports.[142] These actions accounted for 90 percent of the drop in TRQ imports from CY 2011/12 to CY 2012/13.[143]

We conclude that the volume of subject imports and the increase in that volume are significant both in absolute terms and relative to apparent consumption. We recognize that the increase in subject import volume and market share during the period of investigation was accompanied by a decline in nonsubject import volume and market share as well as an increase in the domestic industry's U.S. shipments and market share.[144] Nevertheless, as we discuss below, the significant increase in subject import volume adversely and significantly affected prices of the domestic like product.

D. Price Effects of the Subject Imports

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

> (I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and

[141] Sweetener Users Respondents' Prehearing Br. at 23-24; Posthearing Br., Responses to Commission Questions at 23-25, 31-33.

[142] ISTC Posthearing Statement at 5-6. Specifically, USDA took three regulatory actions to limit TRQ imports: 1) it left the 2012-13 quota for raw TRQ at the bound minimum level of 1,117,195 MT, whereas it had increased the 2011-12 year quota by 381,018 MT above the bound minimum level; 2) it did not reallocate TRQ shortfall, which it had done in the prior year to allow 73,466 MT to enter the U.S. market; and 3) it set the 2012-13 refined TRQ 117,546 MT lower than the 2011-12 TRQ. *Id.* at 5. In addition, following meetings with Michael Scuse, Under Secretary of Agriculture, USDA, quota holders reduced their raw TRQ exports by 182,001 MT. *Id.* at 6. Through these actions, USDA succeeded in reducing TRQ imports by at least 754,011 MT in the 2012-13 quota year. *Id.*

[143] ISTC Posthearing Statement at 6. Sweetener Users Respondents also argue that some countries chose not to export their full TRQ volume of sugar because the margin between U.S. and world prices narrowed, making it less economical for those countries to export sugar to the United States. Sweetener Users Respondents' Prehearing Br. at 23-24; Posthearing Br., Responses to Commission Questions at 23-25, 31-33. However, we note that the gap between U.S. and world prices narrowed when subject imports surged into the U.S. market and subsequently widened in 2014. CR/PR at Figure V-2.

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

> (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.[145]

As addressed in section IV.B.4 above, the record indicates that there is a moderate-to-high degree of substitutability between domestically produced sugar and subject imports and that price is an important consideration in purchasing decisions.

In the final phase of these investigations, the Commission requested pricing data for six products. Four of these products (2, 3, 5, and 6) were divided into subproducts based on polarity or branding to improve comparability.[146] The Commission requested U.S. producers and importers to provide monthly data for total quantity and f.o.b. value of the products shipped to unrelated U.S. customers.[147] The Commission also requested importers to provide

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[145] 19 U.S.C. § 1677(7)(C)(ii).

[146] CR at V-21; PR at V-13 – V-14. The products on which the Commission requested pricing data are:

Product 1 – Sugar, less than 99.6 polarity, sold to sugar refiners;

Product 2A – Sugar, 99.9 polarity and above, sold to industrial producers of food, beverages or other sugar-containing products (e.g., General Mills, Mars, Coca Cola, Kraft);

Product 2B – Sugar, 99.6-99.89 polarity, sold to industrial producers of food, beverages or other sugar-containing products (e.g., General Mills, Mars, Coca Cola, Kraft);

Product 2C – Sugar, 99.4-99.56 polarity, sold to industrial producers of food, beverages or other sugar-containing products (e.g., General Mills, Mars, Coca Cola, Kraft);

Product 3A – Branded refined sugar sold in packages of 50 lbs. or less sold to grocery chains (e.g., Safeway, Harris Teeter, Walmart, Costco);

Product 3B – Private label refined sugar sold in packages of 50 lbs. or less sold to grocery chains (e.g., Safeway, Harris Teeter, Walmart, Costco);

Product 4 – Refined sugar sold in packages of 50 Kgs. (110.23 lbs.) or less to institutional and/or food service providers (e.g., Sysco, restaurant chains, bakeries, schools, hospitals, prisons);

Product 5A – Sugar, 99.9 polarity and above, sold in packages of 50 kgs. (110.23 lbs) or less to distributors (i.e., companies such as Batory Foods that buy sugar to resell to the industrial trade for use as an ingredient);

Product 5B – Sugar, 99.6-99.89 polarity, sold in packages of 50 kgs. (110.23 lbs) or less to distributors (i.e., companies such as Batory Foods that buy sugar to resell to the industrial trade for use as an ingredient);

Product 5C – Sugar, 99.4-99.59 polarity, sold in packages of 50 kgs. (110.23 lbs) or less to distributors (i.e., companies such as Batory Foods that buy sugar to resell to the industrial trade for use as an ingredient);

Product 6A – Sugar, 99.9 polarity and above, sold in bulk to distributors (i.e., companies such as Batory Foods);

Product 6B – Sugar, 99.6-99.89 polarity, sold in bulk to distributors (i.e., companies such as Batory Foods); and

Product 6C – Sugar, 99.4-99.59 polarity, sold in bulk to distributors (i.e., companies such as Batory Foods).

CR at V-21 – V-22; PR at V-13 – V-14.

[147] CR at V-21; PR at V-13.

their import purchase cost data for product 1 (sugar with less than 99.6 polarity), if they directly imported product 1 for their own use to make refined sugar.[148] Twenty-two U.S. producers and ten importers provided usable pricing data for sales of the requested pricing products, although not all firms reported pricing for all products for all quarters.[149] Pricing data for product 1 reported by these firms accounted for approximately *** percent of U.S. producers' U.S. shipments of raw sugar in CY 2013/14, and pricing data for products 2 through 6 reported by these firms accounted for approximately *** percent of U.S. producers' U.S. shipments of refined sugar in that crop year.[150] Pricing data, including the purchase cost data, submitted by U.S. importers of Mexican sugar accounted for *** percent of U.S. imports from Mexico in CY 2012/13.[151]

Comparing products at the more specific subproduct level,[152] importers' prices for subject imports shipped to unrelated U.S. customers undersold the domestic like product in *** of *** monthly comparisons, or in *** percent of such comparisons, with an average margin of *** percent. Total subject import volume for the quarters of underselling was *** hundred weight ("cwt").[153] In the remaining *** monthly comparisons, subject imports were priced higher than the domestic product with an average margin of *** percent.[154] Total subject import volume for the quarters of overselling was *** cwt.[155] [156]

For the monthly direct import purchase cost data, importers that imported product 1 for internal use were asked to report the landed duty-paid costs and quantities of that product.[157] The Commission also collected information to help assess the comparability of these data; in particular, direct importers were asked to report any additional costs incurred in importing sugar for further refining. *** of the importers that provided data on direct import costs for product 1 indicated that they do not incur additional transaction costs when importing sugar

[148] CR at V-24; PR at V-15. Four importers (***) submitted import purchase cost data. *Id.*

[149] CR at V-22 – V-23; PR at V-15.

[150] CR at V-23; PR at V-14.

[151] CR at V-23; PR at V-14 – V-15.

[152] CR/PR at Table V-25. As described above, the pricing data for products 2, 3, 5, and 6 were reported on the basis of subproducts based on polarity or branding, which provides more precise comparisons than the aggregate data for each of the pricing products. Accordingly, in these investigations, we consider the subproduct data to be more reliable than the aggregated data for purposes of our underselling analysis.

[153] CR/PR at Table V-25.

[154] CR/PR at Table V-25.

[155] CR/PR at Table V-25.

[156] Chairman Broadbent does not exclude data provided by ***. CR at V-22 n.20; PR at V-14, n.20. The Commission did not ask firms to provide data ***. When data from *** is included, there were *** instances of underselling accounting for *** cwt of subject imports and *** instances of overselling accounting for *** cwt. Derived from Commission pricing data, including data for ***. Although pricing data *** indicate fewer instances of underselling, the difference does not affect Chairman Broadbent's overall finding that there has been significant underselling by subject imports.

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

from Mexico directly.[158] The direct importers were also asked whether they were able to reduce transaction costs by importing sugar from Mexico directly instead of purchasing from a U.S. importer or producer. *** importers that provided data on direct import costs for product 1 reported that they were not able to reduce transaction costs by importing directly.[159]

We initially observe that the reported volume of direct imports of product 1 far exceeds that for all other subject import pricing products combined, making these data an important consideration in our pricing analysis.[160] During CY 2012/13 and the beginning of CY 2013/14, when the significant and sustained increase in volume of direct imports of product 1 occurred, the reported costs of direct imports were considerably lower – often more than twenty percent lower – than the prices domestic producers charged for that product.[161] Differences of this magnitude are likely too large to be explained by any differential in the costs associated with being a direct importer, particularly when *** of the importers that provided direct import data reported any additional costs and *** reported minimal reductions in transaction costs by importing directly (reductions that might not even be related to direct importation, as discussed above). Moreover, a substantial portion of the increase in the total volume of subject imports during the period of investigation, and in particular in CY 2012/13, was comprised of imports of this type of product, *i.e.*, sugar for further refining, which displaced TRQ imports. Consequently, in light of its significance in the overall market, coupled with the fact that it represents the largest volume of subject imports for which we have cost or price data, we consider the direct import cost data within our analysis of subject import underselling.[162]

Based on the evidence discussed above, we find that there has been significant underselling by subject imports.[163]

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[158] CR at V-61; PR at V-17 – V-18.

[159] CR at V-61; PR at V-17 – V-18. *** reported that the quality of Mexican sugar allows for lower energy usage as well as higher production yields, but estimates the savings to be only *** percent of the purchase price. *Id.* We note that this response indicates perceived advantages of Mexican sugar compared to other sugar, but does not appear to indicate any cost difference between purchasing and directly importing Mexican sugar.

[160] At *** cwt, the volume of direct import cost data for pricing product 1 was more than three times the volume of all the other pricing products combined, the total volume of which was *** cwt. Calculated from CR/PR Tables V-6 & V-25.

[161] CR/PR Tables V-5 & V-6.

[162] We have collected data on direct import costs when direct imports are an important factor in the U.S. market, although the weight we accord to them will vary depending on the facts of a particular investigation and the quality of the data. *See, e.g., Boltless Steel Shelving Units Prepackaged for Sale from China*, Inv. Nos. 701-TA-523 and 731-TA-1259 (Final), USITC Pub. 4565 at 18-19 (Oct. 2015); *id.* at 27-29 (separate views by Chairman Broadbent and Commissioner Johanson); *Grain-Oriented Electrical Steel from Germany, Japan, and Poland*, Inv. Nos. 731-TA-1233, 1234, and 1236 (Final), USITC Pub. 4491 at 26-27 & n.150 (Sept. 2014); *id.* at 38-40 (dissenting views of Commissioner Schmidtlein).

[163] The average unit value ("AUV") data are consistent with this conclusion. The AUVs of subject imports were lower than the AUVs of domestic shipments of refined sugar throughout the period of investigation and lower than AUVs of domestic shipments of raw sugar in CY 2011/12 and CY 2012/13. The AUV of subject imports declined from $801 per STRV in CY 2011/12 to $504 per STRV in CY 2012/13 and to $469 per STRV in CY 2013/14. The AUV of U.S. shipments of refined sugar from fully domestic (Continued...)

We further find that subject imports depressed domestic prices to a significant degree during the period of investigation. For each of the pricing products, the price of the domestically produced products was significantly lower in October 2014 than in September 2011, with the greatest and most sustained declines typically occurring in CY 2012/13 and the beginning of CY 2013/14, when the overall volume of subject imports increased dramatically.[164] Notably, prices for subject imports often declined at a greater rate than prices for the domestic like product,[165] and subject import prices were often lower than the prices for imports from all other sources.[166] In addition, the average unit value of net sales reported by growers, millers, and processors and refiners similarly declined during the period of investigation.[167] In sum, the record indicates that the significant and increasing volume of subject imports in 2013 that were sold at low and declining prices forced the domestic industry to cut prices and drove a significant portion of nonsubject imports out of the U.S. market.

We also observe that a majority of producers, responding importers, and purchasers reported that the availability of subject imports in the United States had a material impact on the price of sugar in the U.S. market during the period of investigation.[168] In addition, while subject imports surged into the U.S. market, the gap between world prices and U.S. prices narrowed in late 2012 and 2013 but then widened in 2014 as the volume of subject imports decreased.[169] This evidence further supports our finding that subject imports were a cause of price declines in the U.S. market.[170] [171]

(…Continued)
inputs declined from $*** per STRV in CY 2011/12 to $*** per STRV in CY 2012/13 and to $*** per STRV in CY 2013/14. The AUV of U.S. shipments of refined sugar from subject import inputs declined from $*** per STRV in CY 2011/12 to $*** per STRV in CY 2012/13 and to $*** per STRV in CY 2013/14. The AUV of U.S. shipments of raw sugar declined from $*** per STRV in CY 2011/12 to $*** per STRV in CY 2012/13 and to $*** per STRV in CY 2013/14. CR/PR at Table C-1.

[164] CR/PR at Tables V-5, V-8, V-9, V-12, V-13, V-14, V-16, V-18, V-21.

[165] CR/PR at Table V-23. Prices for subject imports fell further than those for the domestic like product in product 1, product 2B, product 3A, product 4, product 5C, product 6A, and product 6B. *Id.*

[166] CR/PR at Tables V-9, V-14.

[167] As detailed above, AUVs for subject imports and U.S. shipments of refined and raw sugar declined throughout the period of investigation, with the subject import AUV declining at a greater rate. Subject imports' AUV declined by 41.4 percent during the period of investigation. The AUV for U.S. shipments of refined sugar from domestic origin inputs declined by *** percent, and the AUV of U.S. shipments of refined sugar from subject import inputs declined *** percent during that time. The AUV of U.S. shipments of raw sugar declined *** percent during the period of investigation. CR/PR at Table C-1.

[168] CR at V-15; PR at V-8 – V-9. Eighteen producers, five importers, and 18 purchasers indicated that subject imports had a material impact on domestic prices, while one producer, four importers, and nine purchasers indicated that it had not. *Id.*

[169] CR at V-18; PR at V-12; CR/PR at Figures V-3 & Table C-1.

[170] Respondents argue that the declines in U.S. prices did not correlate with the increase in subject imports in 2013. Sweetener Users Respondents' Posthearing Br. at 8 & Responses to Commission Questions at 44-45. They in part rely on USDA data for prices for raw and refined sugar. We observe that our data is specific to product type, end use, and/or certain polarity ranges, whereas USDA data are (Continued...)

Sweetener Users Respondents argue that the price declines that occurred in the U.S. market were the result of factors other than subject imports. First, they contend that price declines were caused by oversupply by the domestic industry as a result of the bumper crop it experienced in CY 2012/13.[172] We observe, however, that domestic shipments of refined and raw sugar are constrained by USDA allocations that, as described above, limit the quantity of sugar that can enter the U.S. market for human consumption to only 85 percent of projected U.S. human consumption of sugar for any particular year. Accordingly, under the U.S. Sugar Program, the domestic industry effectively cannot oversupply the U.S. market, irrespective of crop and production increases, and domestic producers have no incentive to substantially cut prices to increase their market share above marketing allocations.[173] In addition, in the event that there is increased domestic supply, the USDA has the ability not to increase imports from TRQ countries. By contrast, during the period of investigation, only the supply of subject imports to the U.S. market was unconstrained.

Sweetener Users Respondents also argue that the domestic industry drove down prices in the U.S. market, relying on a statement in a USDA report that indicated that price declines

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(…Continued)
only divided into "raw" and "refined" categories. We therefore give principal weight to our own data, especially given the prevalence of estandar in subject imports. We note, however, that the USDA data are consistent with our pricing data in showing that U.S. prices remained at low levels during the period of increasing subject imports. CR/PR at Figure V-2.

Similarly, although world prices may have declined before the surge of subject imports into the U.S. market, our data show that price declines accelerated as subject imports increased. As described above, the fact that the gap between U.S. and world prices narrowed when subject imports surged into the U.S. market and subsequently widened in 2014 tends to corroborate our finding that low-priced subject imports materially contributed to domestic price declines. Even if declines in world prices may have contributed to domestic price declines, this does not detract from our determinations that subject imports caused price declines during the period of investigation. CR/PR at Figure V-2. Finally, with respect to respondents' assertions that U.S. prices were merely returning to historic 2008 levels, we decline to depart from our established practice of focusing on the period of investigation for which we have information about pertinent conditions of competition. Moreover, for the reasons stated above, we give principal weight to our own data rather than historical USDA data.

[171] In the final phase of these investigations, the Commission contacted *** purchasers in an effort to confirm lost sales and lost revenue allegations. CR at V-70; PR at V-20; CR/PR at Tables V-27 & V-28. Although most purchasers surveyed did not respond, ***, and one purchaser reported that U.S. producers had reduced their prices in order to compete with the prices of subject imports. CR at V-70; PR at V-20.

[172] Sweetener Users Respondents' Posthearing Br. at 7.

[173] We recognize that cane refiners do not receive allocations and, as such, their production is not limited in the same manner as millers and processors. *See* Petitioners' Posthearing Br. at II-11, III-25; Imperial's Posthearing Br., Responses to Commission Questions at 9. Cane refiners' production from domestic sources is, however, constrained by the allocations to cane millers as well as by that fact that millers have not met their allocations in recent years. Petitioners' Posthearing Br. at Part II-4, II-11 – II-12; III-25 – III-26; Hearing Tr. at 38 (Buker), 91 (Colacicco). As a result, cane refiners did not oversupply the U.S. market with refined sugar from domestically produced raw cane sugar.

began with domestic beet sugar prices, the fact that some market participants identified members of the domestic industry as price leaders, and statements by members of the domestic industry that they compete "intensely" with each other. We find these points unpersuasive. With respect to the USDA's statement that price declines began with beet sugar prices, we find that, when that statement is read in the context of the report in which it appears as well as with other statements by the USDA on the record in these investigations, it does not establish that the USDA believed that the domestic industry was the sole cause of price declines in the U.S. market throughout the period of investigation.[174] Moreover, even if declines in beet sugar prices may have contributed to price declines in the U.S. market, it does not negate the causal nexus between subject imports and price declines detailed above.

Similarly, when viewed in the context of other record evidence, the fact that some market participants identified members of the domestic industry as price leaders and the fact that certain members of the domestic industry characterized competition among domestic firms as "intense" does not establish that only domestic producers caused the decline in U.S. prices to the exclusion of subject imports.[175] As Sweetener Users Respondents note, ASR and its marketing arm Domino Sugar were most frequently identified as price leaders by market participants.[176] Record evidence, however, details the effect subject imports had on the price ASR paid for raw sugar and shows that subject import competition drove down prices at which Domino was able to sell refined sugar.[177] Accordingly, the fact that members of the domestic industry were identified as price leaders does not detract from our conclusion that subject imports caused U.S. prices to decline. Likewise, the existence of intra-industry competition does not detract from our analysis in this commodity market. As discussed above, a majority of

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[174] In its April 15, 2013 *Sugar and Sweeteners Outlook* report, the USDA stated "declines that started with U.S. beet sugar prices were soon matched by declines in . . . unit import values." Imperial's Posthearing Br. at Exh. 12. The accompanying chart indicates that U.S. beet sugar prices were well above import prices even after the referenced decline; as import prices fell sharply, the U.S. beet price similarly declined sharply until the two converged, and after dipping below the import price briefly, the U.S. price rose again. *Id. See also id.* at Exh. 13 (USDA July 17, 2013 *Sugar and Sweetener Outlook*) (stating "[t]he prospect of strong sugar inflows from Mexico has kept the U.S. raw sugar price . . . barely above the depressed world raw price . . . and well below domestic price sugar support levels administered by the USDA."). Notably, the USDA submitted a statement in these proceedings stating that "unlimited duty-free access of sugar from Mexico reduced USDA's ability to affect sugar supplies on the domestic market" and that "the countervailing duty suspension agreement will decrease the likelihood of sudden and unexpected sugar inflows from Mexico that could otherwise complicate USDA's management of the sugar program and depress U.S. sugar prices." Letter dated Sept. 17, 2015 to Chairman Broadbent from Michael Scuse, Under Secretary, Farm and Foreign Agricultural Services, USDA at 1, 3.

[175] Sweetener Users Respondents' Prehearing Br. at 32; Sweetener Users Respondents' Posthearing Br. at 12.

[176] Sweetener Users Respondents' Prehearing Br. at 32 (citing Prehearing CR at V-12 – V-13).

[177] Petitioners' Posthearing Br. at Exhs. 2, 6. Mark Olson, Vice President of Commodities Purchasing for ASR described *** and explained that this had a direct impact on the prices paid for domestic raw sugar. *Id.* at Exh. 2 & App. A (***). *See also id.* at Exh. 6 (contemporaneous emails and call reports evidencing the downward pressure subject imports exerted on Domino's prices for refined sugar).

responding producers, importers, and purchasers agreed that the availability of subject imports in the United States had a material impact on the price of sugar in the U.S. market during the period of investigation.[178]

Finally, Sweetener Users Respondents argue that subject imports did not cause price declines because the *** importing refiners that accounted for a significant portion of the increase in subject imports in CY 2012/13 did not obtain a cost or price advantage by importing subject imports relative to the rest of the domestic industry.[179] Even if this were the case, it does not establish that subject imports were not a cause of price declines in the U.S. market. Indeed, a review of the pricing data for product 1 (including the direct import cost data) contradicts Sweetener Users Respondents' contention that imports of sugar for further refining had no effect on U.S. prices.[180]

In sum, based on the foregoing, we find that there was significant underselling by subject imports and that subject imports depressed domestic prices to a significant degree during the period of investigation.

E. Impact of the Subject Imports[181]

Section 771(7)(C)(iii) of the Tariff Act provides that in examining the impact of subject imports, the Commission "shall evaluate all relevant economic factors which have a bearing on the state of the industry."[182] These factors include output, sales, inventories, capacity

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[178] CR at V-15; PR at V-8 – V-9.

[179] Sweetener Users Respondents' Posthearing Br. at 10 & Responses to Commission Questions at 56-60. Sweetener Users Respondents also argue that it is significant that these *** refiners reported that they increased subject imports for reasons other than price. *Id.* We observe, however, that all of these refiners indicated that they were harmed by subject imports and that subject imports had material adverse effects on U.S. prices. *See* Petitioners' Posthearing Br. at Exh. 3.

[180] CR/PR at Tables V-5 & V-6. Prices for domestic shipments of product 1 were $*** per cwt in October 2011; prices increased to $*** per cwt in April 2012 before declining somewhat to $*** per cwt in September 2012. CR/PR Table V-5. In October 2012, direct imports of product 1 increased more than five times the quantity in the prior month at a price that was $*** lower per cwt. CR/PR at Table V-6. That same month, the price of domestic shipments of product 1 fell by more than $*** per cwt. CR/PR at Table V-5. The prices of domestic shipments of product 1 continued to fall at an increasing rate throughout 2013, which coincided with substantial and sustained increases in the quantity of direct imports of product 1. CR/PR at Tables V-5 & V-6. The domestic producer price declined to $*** per cwt in February 2014, but the price started to increase once the petitions were filed in March 2014. CR/PR at Table V-5.

[181] The statute instructs the Commission to consider the "magnitude of the dumping margin" in an antidumping proceeding as part of its consideration of the impact of imports. 19 U.S.C. § 1677(7)(C)(iii)(V). In its final determination of sales at less value, Commerce assigned dumping margins on sugar from Mexico ranging from 40.48 to 42.14 percent. *Sugar from Mexico: Final Determination of Sales of Less Than Fair Value*, 80 Fed. Reg. 57341 (Dep't of Commerce Sept. 23, 2015).

[182] 19 U.S.C. § 1677(7)(C)(iii); *see also* SAA at 851 and 885 ("In material injury determinations, the Commission considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they also may (Continued...)

utilization, market share, employment, wages, productivity, gross profits, net profits, operating profits, cash flow, return on investment, return on capital, ability to raise capital, ability to service debts, research and development, and factors affecting domestic prices. No single factor is dispositive and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[183]

During the period of investigation, as apparent consumption increased, the domestic industry's production and shipments by quantity increased.[184] Notwithstanding these increases, however, certain key measures of industry performance declined during that period. In particular, regardless of the measure of income used, all segments of the domestic industry experienced significant declines in financial performance due to sharp price declines.

1. U.S. Growers

Responses to Commission questionnaires showed that the production of responding domestic growers increased from 12.4 million STRV in CY 2011/12 to 14.1 million STRV in CY 2012/13 and then decreased to 13.5 million STRV in CY 2013/14.[185] USDA data show that acres of sugar beets harvested decreased by 4.9 percent during the period of investigation, while acres of sugar cane harvested increased by 3.9 percent during that same period. [186]

Total net sales by quantity increased from 12.5 million STRV in CY 2011/2012 to 14.0 million STRV in CY 2012/13, but then declined to 13.3 million STRV in CY103/14.[187] However, total net sales revenues and incomes declined from $813.3 million in CY 2011/12 to $790.1 million in CY 2012/13, and then to $576.2 million in CY 2013/14.[188] The ratio of total farming expenses to net sales increased from 73.6 percent in CY 2011/12 to 77.1 percent in CY 2012/13 and to 103.6 percent in CY 2013/14.[189] Patronage payments to growers by millers and processors declined overall during the period of investigation.[190] Gross profits, operating

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(…Continued)
demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports.").

[183] 19 U.S.C. § 1677(7)(C)(iii). This provision was recently amended by the Trade Preferences Extension Act of 2015, Pub. L. 114-27.

[184] CR/PR Table C-1. Increased production by the domestic industry was due to some extent to favorable growing seasons during the period of investigation.

[185] CR/PR Table III-2.

[186] CR at III-4; PR at III-3.

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

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

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

[190] Patronage payments are revenues to growers in the form of distributions from related millers or processors. CR/PR at VI-5 n.5. Patronage payments from stand-alone millers decreased from $*** in CY 2011/12 to $*** in CY 2012/13 and $*** in CY 2013/14. CR/PR at Table VI-2. Patronage payments by processors and refiners initially increased from $*** in CY 2011/12 to $*** in CY 2012/13 before decreasing to $*** in CY 2013/14. CR/PR Table VI-3.

income, and net income each declined over the period of investigation, resulting in losses in CY 2013/14.[191]

Total capital expenditures for all growers fluctuated over the period of investigation, declining from $255.1 million in CY 2011/12 to $109.4 million in CY 2012/2013 and then increasing to $238.9 million in CY 2013/14.[192] Research and development expenses for all growers decreased from $1.7 million in CY 2011/2012 to $1.1 million in CY 2012/13 and $1.1 million in CY 2013/14.[193]

2. U.S. Millers

U.S. millers' production fluctuated during the period of investigation, increasing from *** STRV in CY 2011/12 to *** STRV in CY 2012/13, and then decreasing to *** STRV in CY 2013/14.[194] Their capacity increased *** percent overall during the period of investigation, while their capacity utilization ratio decreased *** percentage points overall during this time.[195] Total shipments by quantity increased from *** STRV in CY 2011/12 to *** STRV in CY 2012/13 and then decreased to *** STRV in CY 2013/14.[196] However, total shipments by value declined markedly from $*** in CY 2011/12 to $*** in CY 2012/13 and $*** in CY 2013/14.[197] End of period inventories fluctuated but increased overall, increasing from *** STRV in CY 2011/12 to *** STRV in CY 2012/13 and then decreasing to *** STRV in CY 2013/14.[198] The number of production related workers ("PRWs"), hours worked, and wages paid all decreased during the period of investigation, while productivity increased.[199]

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[191] CR/PR at Table VI-1. U.S. growers' gross profits declined from $214.5 million in CY 2011/12 to $181.1 million in CY 2012/13 and then to negative $20.8 million in CY 2013/14. *Id.* Operating income declined from $194.3 million in CY 2011/12 to $160.0 million in CY 2012/13 and then to negative $44.4 million in CY 2013/14. *Id.* Net income declined from $200.3 million in CY 2011/12 to $158.5 million in CY 2012/13 and then to negative $43.4 million in CY 2013/14. *Id.*

[192] CR/PR at Table VI-7. This is attributable to fluctuations in the total capital expenditures of sugar cane growers, which declined from $224.7 million in CY 2011/12 to $73.3 million in CY 2012/13 and then increased to $215.2 million in 2013/14. *Id.*

[193] CR/PR at Table VI-7. This is largely because total research and development expenses for sugar cane growers declined by around half and then remained flat over the period of investigation, declining from $1.1 million in CY 2011/12 to $519,000 in CY 2012/13 and then increasing to $543,000 in CY 2013/14. *Id*.

[194] CR/PR Table III-5.

[195] CR/PR Tables III-5 & C-1. Capacity was *** short tons in CY 2011/12 and CY 2012/13 then increased to *** short tons in CY 2013/14. *Id.* Capacity utilization increased from *** percent in CY 2011/12 to *** percent in CY 2012/13 and then decreased to *** percent in CY 2013/14. *Id.*

[196] CR/PR at Table III-6.

[197] CR/PR at Table III-6.

[198] CR/PR Table III-8.

[199] CR/PR at Tables III-20 & C-1. The number of PRWs decreased from *** in CY 2011/12 to *** in CY 2012/13 and *** in CY 2013/14. Total hours worked decreased from *** in CY 2011/12 to *** in CY 2012/13 and *** in CY 2013/14. Wages paid declined from $*** in CY 2011/12 to $*** in CY 2012/13 (Continued...)

Total net sales by quantity fluctuated but increased overall, increasing from *** STRV in CY 2011/2012 to *** STRV in CY 2012/13 and then declining to *** STRV in CY 2013/14.[200] Total net sales by value, however, declined steadily during the period of investigation from $*** in CY 2011/12 to $*** in CY 2012/13 and $*** in CY 2013/14.[201] U.S. millers' ratio of COGS to net sales increased from *** percent in CY 2011/12 to *** percent in CY 2012/13 and *** percent in CY 2013/14.[202] Gross profits, operating income, and net income all declined over the period of investigation, resulting in losses in the latter two categories in CY 2013/14.[203]

Total capital expenditures remained relatively flat, increasing from $*** in CY 2011/12 to $*** in CY 2012/13 and then decreasing to $*** in CY 2013/14.[204] Research and development expenditures increased from $*** in CY 2011/12 to $*** in CY 2012/13 and $*** in CY 2013/14.[205]

3. U.S. Processors and Refiners

U.S. processors' and refiners' production fluctuated but increased overall during the period of investigation, increasing from ***STRV in CY 2011/12 to *** STRV in CY 2012/13 and then decreasing to *** STRV in CY 2013/14.[206] Capacity increased *** percent overall during the period of investigation, while capacity utilization fluctuated within a fairly narrow range during this time period.[207] Total U.S. shipments by quantity increased over the period of investigation, from *** STRV in CY 2011/12 to *** STRV in CY 2012/13 and *** STRV in CY 2013/14.[208] U.S. shipments by value, however, decreased substantially during the period of investigation, from $*** in CY 2011/12 to $*** in CY 2012/13 to $*** in CY 2013/14.[209] End of period inventories fluctuated over the period of investigation, increasing from *** STRV in CY 2011/12 to *** STRV in CY 2012/13 and then decreasing to *** STRV in CY 2013/14.[210] The

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(…Continued)
and $*** in CY 2013/14. U.S. millers' productivity as measured in short tons per 1,000 hours increased from *** in CY 2011/12 to *** in CY 2012/13 and then decreased to *** in CY 2013/14. *Id.*

[200] CR/PR Table VI-2.

[201] CR/PR Table VI-2.

[202] CR/PR Table VI-2.

[203] CR/PR Table VI-2. U.S. millers' gross profits declined from $*** in CY 2011/12 to $*** in CY 2012/13 and $*** in CY 2013/14. *Id.* Their operating income declined from $*** in CY 2011/12 to $*** in CY 2012/13 and then to a loss of $*** in CY 2013/14. *Id.* Their net income declined from $*** in CY 2011/12 to $*** in CY 2012/13 and then to a loss of $*** in CY 2013/14. *Id.*

[204] CR/PR at Table VI-8.

[205] CR/PR at Table VI-8.

[206] CR/PR at Table III-5.

[207] CR/PR at Tables III-5 & C-1. U.S. processors'/refiners' capacity was *** short tons in CY 2011/12 and CY 2012/13 then increased to *** short tons in CY 2013/14. Capacity utilization increased from *** percent in CY 2011/12 to *** percent in CY 2012/13 and then decreased to *** percent in CY 2013/14. *Id.*

[208] CR/PR at Table III-7.

[209] CR/PR at Table III-7.

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

number of PRWs, hours worked, and productivity increased during the period of investigation, while wages paid decreased.[211]

Total net sales by quantity fluctuated. They increased from *** STRV in CY 2011/12 to *** STRV in CY 2012/13, but then decreased to *** STRV in CY 2013/14.[212] Total net sales by value, however, decreased steadily from $*** in CY 2011/12 to $*** in CY 2012/13 and $*** in CY 2013/14.[213] Processors and refiners' COGS to net sales ratio increased from *** percent in CY 2011/12 to *** percent in CY 2012/13, but then decreased to *** percent in CY 2013/14.[214] Processors and refiners' gross profit, operating income, and net income all declined over the period of investigation, and they reported operating losses in CY 2012/13 and CY 2013/14.[215]

Total capital expenditures fluctuated over the period of investigation, increasing from $*** in CY 2011/12 to $*** in CY 2012/13 and then decreasing to $*** in CY 2013/14.[216] Total research and development expenditures increased over the period of investigation, from $*** in CY 2011/12 to $*** in CY 2012/13 and $*** in CY 2013/14.[217]

4. Discussion of Impact of Subject Imports

We find that subject imports had a significant impact on the domestic industry during the period of investigation. As discussed previously, the significant and increasing volume of subject imports depressed domestic prices for both raw and refined sugar. Consequently, while the quantity of the domestic industry's total U.S. shipments and sales increased or fluctuated during the period of investigation, the value of those shipments and net sales decreased markedly. This in turn directly led to declines in financial performance. Declining prices also required the U.S. government to spend $258.7 million to remove one million STRV of domestically produced sugar from the U.S. market, in an effort to stabilize prices.[218]

We acknowledge that during the period of investigation the domestic industry increased production and gained market share. However, the statute requires us to consider a variety of

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[211] CR/PR at Tables III-20 & C-1. For U.S. processors/refiners, the number of PRWs increased from *** in CY 2011/12 to *** in CY 2012/13 and *** in CY 2013/14. Total hours worked increased from *** in CY 2011/12 to *** in CY 2012/13 and *** in CY 2013/14. Wages paid increased from $*** in CY 2011/12 to $*** in CY 2012/13 and $*** in CY 2013/14. Productivity as measured in short tons per 1,000 hours decreased from*** in CY 2011/12 to *** in CY 2012/13 and *** in CY 2013/14. *Id.*

[212] CR/PR at Table VI-3.

[213] CR/PR at Table VI-3.

[214] CR/PR at Table VI-3

[215] CR/PR at Table VI-3. U.S. processors/refiners' gross profits declined from $*** in CY 2011/12 to $*** in CY 2012/13 and $*** in CY 2013/14. *Id.* Their operating income declined from $*** in CY 2011/12 to a loss of $*** in CY 2012/13 and then to a loss of $*** in CY 2013/14. *Id.* Their net income increased from $*** in CY 2011/12 to $*** in CY 2012/13, but then decreased dramatically to $*** in CY 2013/14. *Id.*

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

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

[218] The special rules for agricultural products, 19 U.S.C. § 1677(7)(D)(ii), provide, in relevant part, that "in assessing material injury by reason of subject imports, the Commission must consider any increased burden of government income or price support programs."

factors in our analysis. We find the sharp declines in the domestic industry's prices, revenues, and nearly all measures of financial performance (which are directly affected by declining sugar prices) provide significant indication of the impact of subject imports. We also acknowledge that, for certain segments of the domestic industry, gross profits and net income did not decline into losses during the period of investigation. However, no matter what measure of income is used, the industry's financial performance declined substantially over the period of investigation.[219] In sum, the totality of the record evidence indicates that, because of the significant price effects of the subject imports, the domestic industry obtained significantly lower prices and therefore lower revenues and profitability than it would have otherwise.

We have 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 subject imports. Notwithstanding the fact that nonsubject imports increased by quantity from CY 2012/13 to CY 2013/14, the volume and market share of nonsubject imports declined sharply over the full period of investigation. The volume of nonsubject imports declined by 44.3 percent.[220] Nonsubject imports' market share declined from *** percent in CY 2011/12 to *** percent in CY 2012/13 before increasing slightly to *** percent in CY 2013/14, representing an overall decrease of *** percentage points.[221] We have previously found that the increasing volume of low-priced subject imports during CY 2012/13 caused a reduction in the quantity of TRQ imports from nonsubject countries that year. Consequently, nonsubject imports could not have been a cause of the significant price declines the domestic industry experienced during that period.[222]

We have also considered other factors, including declining world prices, favorable conditions that resulted in a bumper domestic crop in CY 2012/13, declining domestic beet sugar prices, and competition among domestic producers, as well as the fact that *** domestic refiners accounted for a significant portion of the increase in subject imports during the period of investigation. Although these factors may have contributed to some extent to market conditions during the period of investigation, for the reasons stated in section IV.D., these considerations cannot explain the declines in the prices of the domestic like product that occurred during the period of investigation. Instead, there is a causal link between subject imports and price declines and the consequent declines in the domestic industry's revenues and financial performance. Accordingly, we conclude that, notwithstanding these other factors, subject imports were not an incidental, tangential, or trivial cause of injury to the domestic industry.

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[219] We also note that, pursuant to 19 U.S.C. § 1677(7)(J), we are precluded from determining that there is not material injury to the domestic industry merely because it is profitable.

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

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

[222] Vice Chairman Pinkert finds that sugar is a commodity product for purposes of a *Bratsk/Mittal Steel* analysis and that price-competitive nonsubject imports were a significant factor in the U.S. market for sugar during the period of investigation. He finds, however, that nonsubject imports would not have replaced the subject imports without benefit to the domestic industry had the subject imports exited the market during the period, as prices of the nonsubject imports were generally higher than those of subject imports. *See* Petitioners' Posthearing Brief at Exhibit 2; CR/PR Tables V-7-V-21.

V. Conclusion

For the reasons stated above, we determine that an industry in the United States is materially injured by reason of subject imports of sugar from Mexico that are sold in the United States at less than fair value and subsidized by the government of Mexico.

Additional Views of Chairman Meredith M. Broadbent

After due consideration of the factors delineated in Section 771(7)(C) of the Tariff Act, I concur with my colleagues that the record gathered in these investigations supports a finding that an industry in the United States is materially injured by reason of low-priced imports of sugar from Mexico. However, the level of government intervention defining the conditions of competition in this industry makes this an unusual case for the Commission, which prompts me to make some general comments on my finding.

As established by the record of these investigations, the U.S. Sugar Program ensures that domestic prices for sugar remain at levels that are higher than world prices.[1] Although the Commission frequently sees cases in which U.S. prices are higher than prices in other world markets, it is unusual for U.S. prices to be deliberately maintained at a high level by such a multifaceted government program.[2] The U.S. Sugar Program effectively sets price floors for U.S.-produced raw and refined sugar through the USDA CCC's loan forfeiture system, where sugarcane millers and sugar beet processors can forfeit every pound of sugar they produce in exchange for a payment by CCC at a set rate. While these sugar loan rates are generally above prevailing world prices for raw and refined sugar,[3] USDA manages the quantity of sugar supplied to the United States in order to prevent U.S. prices from falling to these floor levels. USDA seeks to achieve this on an annual basis by: 1) regulating the quantity of U.S. producers' shipments (the Farm Bill limits U.S. shipments to 85 percent of estimated sugar consumption); and 2) controlling imports through a system of country-specific tariff rate quotas.[4] By combining a supply management program with set price minimums, USDA ensures that U.S. prices are consistently higher than world prices.[5] Over the ten-year period between CY 2004/05 and CY 2013/14, U.S. prices for raw and refined sugar have been, on average, 62.8 percent and 78.6 percent higher, respectively, than world prices for the same products.[6]

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[1] CR at V-17, PR at V-10.

[2] The U.S. Sugar Program is described in greater detail in section IV.B.1 of the Views of the Commission.

[3] The 2008 Farm Bill increased the raw cane sugar and refined beet sugar loan rates on a phased basis up to 18.75 cents per pound and 24.09 cents per pound, respectively. These rates remained unchanged in the 2014 Farm Bill. CR at I-33, PR at I-23. The raw cane sugar loan rate is 11.6 percent higher than the ten-year average of monthly world prices of raw sugar from CY 2004/05 to CY 2013/14. Similarly, the refined beet sugar loan rate is 14.3 percent higher than the ten-year average of monthly world prices of refined sugar over that period. Derived from calculations based on EDIS Doc. 563494.

[4] USDA does not place marketing allocations on domestic cane sugar refiners, nor do they provide any opportunity for these producers to forfeit sugar at established rates. Nonetheless, cane sugar refiners do not have an incentive to lower prices below their cost of production, which is substantially affected by the relatively high U.S. price of raw cane sugar. In addition, cane sugar refiners are limited in their production by the supply of raw cane sugar available in the U.S. market, which is governed by the U.S. sugar program's marketing allocations and system of quotas. Therefore, the price and quantity of domestically produced refined cane sugar is substantially affected by the U.S. sugar program.

[5] *See* Sweetener Users' Posthearing Brief, Appendix 1 at 3-4.

[6] Derived from calculations based on EDIS Doc. 563494.

Beyond leading to sugar being sold at a premium within the United States, the U.S. Sugar Program also has the effect of providing the U.S. industry with a guaranteed share of the market.[7] As discussed above, USDA grants U.S. producers 85 percent of estimated U.S. domestic sugar consumption, and divides that allotment among individual producers through a system of marketing allocations. Although U.S. producers reported that they compete "intensely" with each other,[8] the limitations inherent with marketing allocations mean that there is less incentive for U.S. producers to seek to compete aggressively on price in order to improve market share. Highly efficient producers cannot use their competitive advantage to greatly expand sales in a market where all domestic sales are capped by marketing allocations.[9] Moreover, because annual marketing allocations are set primarily on the basis of a firm's prior production and shipments,[10] domestic producers have an incentive to maintain production near their maximum levels in order to ensure that they have sufficient rights to sell when prices are high.[11] Therefore, marketing allocations encourage producers, including those with inefficient operations, to continue producing and shipping in the short term at maximum levels even during unprofitable periods.[12] Marketing allocations preserve space in this market for inefficient production that would otherwise be replaced by more efficient production.

As stated repeatedly by Petitioners[13] and supported by testimony of USDA,[14] the unrestricted duty free access granted to sugar imports from Mexico disrupted the carefully

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[7] *See* Sweetener Users' Prehearing Brief at 5; Sweetener Users' Posthearing Brief at 3.

[8] Hearing Tr. at 174, 176 (Buker), 177 (Berg).

[9] The CEO and President of American Crystal Sugar stated that his firm produces in the most efficient location in the world to make beet sugar, and for that reason, one of his predecessors had wanted to prevent having marketing allocations in the sugar program so that they could compete for additional market share. However, he states that over time it became apparent that the price stabilization inherent in the marketing allocation system was better for his firm and the industry. Hearing Tr. at 78 (Berg).

[10] CR at I-30-31, PR at I-21

[11] As discussed above, U.S. sugar prices generally do not fall below the price floors established by the CCC's forfeiture system, and are generally higher than sugar loan rates due to USDA's management of U.S. sugar supply. However, while these programs place lower bounds on prices in the U.S. market, they do not impose upper limits on prices. *See* Sweetener Users' Posthearing Brief at Appendix 1, 8. Therefore, when world prices rise and draw away imports or U.S. supply is otherwise constrained, as it was from 2008 to 2011, U.S. prices may also rise, leading to high profits for the domestic industry. Hearing Tr. at 114-115, 182-184 (Berg), 203-204 (Earley).

[12] In addition to U.S. producers, foreign exporters may also seek to maximize their shipments to the U.S. market even when it makes little sense in the short term to do so. Petitioners provided testimony that TRQ import suppliers have the incentive to serve the U.S. market even under uneconomical conditions, as they want to preserve their right to export to the United States under the TRQ system. Hearing Tr. at 108 (O'Malley).

[13] Petitioner's Posthearing Brief at 1, II-2-3, III-35-36. Petitioners asserted that the main factor that caused injury to the domestic industry was the "unfettered access to the United States for imports of sugar from Mexico" allowed by NAFTA. Petitioner's Posthearing Brief at III-45. One executive at the hearing referred to the market as fitting neatly within a USDA spreadsheet, stating, "If you go a few blocks from here to the U.S. Department of Agriculture, there's a spreadsheet, and they will go in and

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managed balance of supply in the U.S. market, where every other source was controlled. In effect, an increasing volume of lower-priced imports from Mexico trading freely in the United States made it more challenging for U.S. producers to sell at prices that were artificially higher than world prices. When U.S. producers were forced to lower prices in competition with sharply increasing, lower-priced imports from Mexico in CY 2012/13 and CY 2013/14, many became unprofitable.[15]

These investigations ultimately led to the U.S. government's negotiation of two landmark suspension agreements with Mexican producers/exporters and the government of Mexico. In a formula supported by almost all parties who have commented in these investigations,[16] the government of Mexico agreed to limit the volume of imports from Mexico to an estimated quantity of additional U.S. consumption needs. Similarly, Mexican producers/exporters agreed to export sugar at reference prices that are above the CCC's sugar loan rates. The Department of Commerce and the Commission have determined that these agreements eliminate the injurious effect of imports of the subject merchandise.[17]

The suspension agreements, which supersede the imposition of antidumping and countervailing duties, will remain in effect until terminated by one or more party to the agreements. By requiring Mexican producers to sell at minimum prices and restricting the quantity of subject imports under the same framework used to set all other allocations and quotas in the market, these agreements have the practical effect of extending key provisions of the U.S. Sugar Program to include imports from Mexico -- a highly unusual result of affirmative injury determinations under trade remedy laws.[18] Nonetheless, my responsibility in these investigations is to determine whether a domestic industry is materially injured by reason of unfairly traded subject imports, in accordance with U.S. law. Consequently, I join the Views of the Commission, and determine that a domestic industry is materially injured by reason of subject imports of sugar from Mexico.

(…Continued)
drop all these inputs…Mexico doesn't fit in that spreadsheet. It simply doesn't. There is no place to factor that in, and then they just bring the sugar to the market and do what they do to the price." Hearing Tr. at 82-83 (Berg).

[14] Letter dated Sept. 17, 2015 to Chairman Broadbent from Michael Scuse, Under Secretary, Farm and Foreign Agricultural Services, USDA at 1.

[15] CR/PR at Table E-1 and Table E-2.

[16] Petitioner's Prehearing Brief at 71-72; Letter dated Sept. 17, 2015 to Chairman Broadbent from Michael Scuse, Under Secretary, Farm and Foreign Agricultural Services, USDA at 2-3; Hearing Tr. at 17 (Ramos).

[17] *Sugar from Mexico*, Inv. Nos. 704-TA-1 and 734-TA-1 (Review), USITC Publication 4523 (April 2015); *Sugar from Mexico: Suspension of the Antidumping Investigation*, 79 Fed. Reg. 78039 (Dec. 29, 2014); *Sugar from Mexico: Suspension of the Countervailing Duty Investigation*, 79 Fed. Reg. 78044 (Dec. 29, 2014).

[18] USDA Statement on Signed Suspension Agreements ("The antidumping and countervailing duty suspension agreements are consistent with USDA's administration of the U.S. sugar program").

PART I: INTRODUCTION

BACKGROUND

These investigations result from a petition filed on March 28, 2014 with the U.S. Department of Commerce ("Commerce") and the U.S. International Trade Commission ("USITC" or "Commission") by the American Sugar Coalition and its members: American Sugar Cane League, Thibodaux, Louisiana; American Sugarbeet Growers Association, Washington, DC; American Sugar Refining, Inc., West Palm Beach, Florida; Florida Sugar Cane League, Washington, DC; Hawaiian Commercial and Sugar Company, Puunene, Hawaii; Rio Grande Valley Sugar Growers, Inc., Santa Rosa, Texas; Sugar Cane Growers Cooperative of Florida, Belle Glade, Florida; and United States Beet Sugar Association, Washington, DC, 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 sugar [1] from Mexico.

Following the Commission's and Commerce's preliminary affirmative determinations, Commerce suspended the antidumping duty ("AD") and countervailing duty ("CVD") investigations on sugar from Mexico, effective December 19, 2014, pursuant to suspension agreements.[2] The AD suspension agreement established reference prices, or minimum prices, to guard against undercutting or suppression of U.S. prices. These minimum prices are $0.26/pound by dry weight commercial value for refined sugar and $0.2225/pound by dry weight commercial value for all other sugar.[3] The CVD suspension agreement imposes an annual export limit on sugar imported from Mexico, based on 100 percent of U.S. needs as calculated by USDA, designed to prevent conditions of oversupply in the U.S. market.

Subsequently, on January 8, 2015, domestic producers and importers, Imperial Sugar Company ("Imperial"), Sugar Land, Texas and AmCane Sugar LLC ("AmCane"), Taylor, Michigan filed separate petitions with the Commission requesting reviews of the suspension agreements pursuant to sections 704(h) and 734(h) of the Tariff Act of 1930 (19 U.S.C. § 1671c(h), 1673c(h)). On March 19, 2015, the Commission determined that the agreements Commerce entered into with Mexican exporters of sugar and the government of Mexico suspending the antidumping and countervailing duty investigations concerning sugar from Mexico eliminate completely the injurious effect of subject imports.[4]

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[1] See the section entitled "The Subject Merchandise" in *Part I* of this report for a complete description of the merchandise subject to these investigations.

[2] *Sugar from Mexico: Suspension of Antidumping Investigation*, 79 FR 78039 (December 29, 2014), and *Sugar from Mexico: Suspension of Countervailing Duty Investigation*, 79 FR 78044 (December 29, 2014).

[3] The suspension agreement defines "Refined sugar" as sugar with at least 99.5 percent polarity or above. "Other sugar" is sugar that does not meet the definition of refined sugar.

[4] *Sugar from Mexico, Inv. Nos. 704-TA-1 and 734-TA-1 (Review)*, USITC Publication 4523 (April 2015), p. 1.

On January 16, 2015, Imperial and AmCane also submitted timely requests with Commerce to continue the antidumping and countervailing duty investigations on sugar from Mexico. Subsequently, Commerce resumed the investigations on May 4, 2015.[5] The following tabulation provides information relating to the background of these investigations.[6] [7]

Effective date	Action
March 28, 2014	Petition filed with Commerce and the Commission; institution of Commission investigations (79 FR 18697, April 3, 2014)
April 24, 2014	Commerce's notices of initiation (79 FR 22790, 22795)
May 12, 2014	Commission's preliminary determinations (79 FR 28550, May 16, 2014)
September 2, 2014	Commerce's preliminary CVD determination (79 FR 51956)
November 3, 2014	Commerce's preliminary AD determination (79 FR 65189); scheduling of final phase of Commission investigations (79 FR 75591, December 18, 2014)
December 19, 2014	AD and CVD investigations suspended (79 FR 78039, 78044, December 29, 2014)
May 4, 2015	Commerce's continuation of final investigations (80 FR 25278)
May 11, 2015	Commission's notice of revised scheduling (80 FR 28009, May 15, 2015)
September 16, 2015	Commission's hearing
October 20, 2015	Commission's vote
November 6, 2015	Commission's views

STATUTORY CRITERIA AND ORGANIZATION OF THE REPORT

Statutory criteria

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

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

[5] *Sugar from Mexico: Continuation of Antidumping and Countervailing Duty Investigations*, 80 FR 25278 (May 4, 2015).

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

[7] Appendix B presents the list of witnesses appearing at the hearing.

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--[8]

In evaluating the volume of imports of merchandise, the Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States is significant.

. . .

In evaluating the effect of imports of such merchandise on prices, the Commission shall consider whether. . .(I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.

. . .

In examining the impact required to be considered under subparagraph (B)(i)(III), the Commission shall evaluate (within the context of the business cycle and conditions of competition that are distinctive to the affected industry) all relevant economic factors which have a bearing on the state of the industry in the United States, including, but not limited to . . .

(I) actual and potential decline in output, sales, market share, profits, productivity, return on investments, and utilization of capacity, (II) factors affecting domestic prices, (III) actual and potential negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment, (IV) actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product, and (V) in {an antidumping investigation}, the magnitude of the margin of dumping.

In addition, Section 771(7)(J) of the Act (19 U.S.C. § 1677(7)(J)) provides that--[9]

[8] Amended by PL 114-27 (as signed, June 29, 2015), The American Trade Enforcement Effectiveness Act.

[9] Amended by PL 114-27 (as signed, June 29, 2015), The American Trade Enforcement Effectiveness Act.

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

Organization of report

Part I of this report presents information on the subject merchandise, subsidy and dumping margins, and domestic like product considerations. *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 and growers. *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

Sugar is generally used as a caloric sweetening agent in food. The leading U.S. producers[10] of sugar are ***, while leading producers of sugar in Mexico are ***. The leading U.S. importers of sugar from Mexico are ***. The leading importers of sugar from nonsubject countries are ***. U.S. purchasers of sugar commonly use sugar in industrial applications including the manufacture of baked goods, ice cream, confections, and beverages, as well as for direct consumer use. Leading U.S. purchasers of sugar include ***.

Apparent U.S. consumption of sugar totaled approximately *** short tons raw value ("STRV")[11] ($***) in crop year 2013/14.[12] Currently, 13 firms are known to mill sugarcane in the

[10] Throughout this report, references to U.S. producers encompass millers of sugarcane, sugarcane refiners, and processors of beet sugar. Additional information on the U.S. industry is contained in part III.

[11] USDA defines raw value as "its equivalent in terms of raw sugar testing 96 sugar degrees, as determined by a polarimetric test performed under procedures recognized by the International Commission for Uniform Methods of Sugar Analysis (ICUMSA). Direct- consumption sugar derived from sugar beets and testing 92 or more sugar degrees by the polariscope shall be translated into terms of raw value by multiplying the actual number of pounds of such sugar by 1.07. Sugar derived from sugarcane and testing 92 sugar degrees or more by the polariscope shall be translated into terms of raw value in the following manner: raw value = {*** + 0.93} x actual weight. For sugar testing less than 92 sugar degrees by the polariscope, derive raw value by dividing the number of pounds of the "total sugar content" (i.e., the sum of the sucrose and invert sugars) thereof by 0.972." USDA's Domestic Sugar Program and Reporting Glossary Terms, found at https://www.fsa.usda.gov/Internet/FSA_File/sugar_glossary.pdf, accessed July 29, 2015.

[12] The U.S. crop year begins on October 1 and ends on September 30 of the following year.

United States; seven[13] firms are known to refine sugarcane in the United States, including two firms that are integrated with milling operations; and seven firms are known to process sugar from sugar beets in the United States. U.S. producers' U.S. shipments[14] of refined sugar totaled *** STRV ($***) in 2013/14 and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value. U.S. imports of sugar from Mexico totaled 2.0 million STRV ($944.5 million) in 2013/14 and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value. U.S. imports of sugar from nonsubject sources totaled 1.0 million STRV ($489.7 million) in 2013/14 and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value.

SUMMARY DATA AND DATA SOURCES

A summary of data collected in these investigations is presented in appendix C, table C-1.[15] Except as noted, U.S. industry data are based on questionnaire responses of 25 firms[16] that accounted for all known U.S. production of raw and refined sugar during the period of investigation – October 2011 through September 2014. U.S. imports are based on official import data.

PREVIOUS AND RELATED INVESTIGATIONS

The Commission has conducted two previous import injury investigations on sugar or similar products. In March 1979, the Commission determined that an industry in the "Northeastern States region" of the United States was materially injured by reason of imports of sugar and syrups from Canada that the U.S. Department of the Treasury ("Treasury") had determined were being, or were likely to be, sold in the United States at less than fair value.[17]

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[13] This includes CSC Sugar.

[14] U.S. producers' U.S. shipments used to calculate apparent consumption includes only those refined shipments from U.S. inputs (i.e., fully attributable to U.S. production activities). See Part III for a further discussion of U.S. refiners' and processors' operations.

[15] Data obtained from high fructose corn syrup ("HFCS") producers are presented in Appendix D.

[16] In addition, the Commission received questionnaire data from Archer Daniels Midland Company ("ADM") and Royal Ingredients, LLC, producers of liquid sugar. During the preliminary phase investigations, the Commission found that ADM did not engage in sufficient production-related activities to be deemed a domestic producer. Royal Ingredients ***.

[17] S*ugars and Sirups from Canada, Determination of Material Injury in Investigation No. 731-TA-3 (Final)*, USITC Publication 1047, March 1980, p. 3. The Commission defined the regional industry in this investigation as domestic producers of refined sugar located in the states of Connecticut, Maine, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, and Vermont. *Ibid*., p. 8.

Commerce subsequently imposed an antidumping duty order on imports of sugar and syrups from Canada.[18] On October 1, 1998, the Commission instituted a review of the order on sugar and syrups from Canada. On September 15, 1999, the Commission determined that revocation of the antidumping duty order on sugar and syrups from Canada would not be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[19] Commerce accordingly revoked the order on October 28, 1999.[20]

The second proceeding concerned an antidumping duty order on raw sugar from Belgium, France, and Germany, and a countervailing duty order on sugar from the European Union. In May 1979, the Commission determined that an industry in the "Southeastern United States region" was being injured by reason of LTFV imports of raw cane sugar from Belgium, France, and Germany. Consequently, on June 13, 1979, Treasury imposed an antidumping duty order on raw sugar from Belgium, France, and Germany.[21]

On July 31, 1978, Treasury imposed a countervailing duty order on imports of sugar from the European Community.[22] On March 28, 1980, the Commission received a request from the Delegation of the European Community (now the European Union) for an investigation under section 104(b) of the Trade Agreements Act of 1979 of whether revocation of the countervailing duty order on sugar from the European Community would cause material injury or threat of material injury to a domestic industry. On May 6, 1982, the Commission determined that an industry in the United States would be threatened with material injury if the countervailing duty order on sugar from the European Community were revoked.[23] Accordingly, the order remained in effect.

On September 15, 1999, in the first sunset review, the Commission determined that revocation of the countervailing duty order on sugar from the European Union would likely lead to the continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time. The Commission also determined that revocation of the antidumping duty orders on sugar from Belgium, France, and Germany would likely lead to the

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[18] *Antidumping Duty Order; Sugars and Syrups From Canada*, 45 FR 24126 (April 9, 1980). The Commission's 1980 determination was appealed to the U.S. Court of International Trade ("CIT"), and after three remands, the CIT vacated the Commission's affirmative determination. The Commission appealed to the Federal Circuit, which reversed the CIT and reinstated the Commission's affirmative determination. *Sugar from the European Union; Sugar From Belgium, France, and Germany; and Sugar and Syrups from Canada, Investigations Nos. 104-TAA-7 (Review); AA1921-198–200 (Review)*; and *731-TA-3 (Review) ("First Review Determinations")*, USITC Publication 3238, September 1999, p. 3.

[19] *Sugar from the European Union; Sugar from Belgium, France, and Germany; and Sugar and Syrups From Canada*, 64 FR 54355 (October 6, 1999).

[20] *Revocation of Antidumping Duty Order: Sugar and Syrups From Canada*, 64 FR 58035 (October 28, 1999).

[21] 44 FR 29992 (May 23, 1979).

[22] 43 FR 33237 (July 31, 1978).

[23] *Sugar from the European Community, Inv. No. 104-TAA-7, USITC Pub. 1247* (May 1982).

continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[24]

On August 29, 2005, in the second sunset review, the Commission determined that revocation of the countervailing duty order on sugar from the European Union would not be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time. The Commission also determined that revocation of the antidumping findings on sugar from Belgium, France, and Germany would not be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[25] Commerce accordingly revoked the orders effective October 28, 2004.[26]

NATURE AND EXTENT OF ALLEGED SUBSIDIES AND SALES AT LTFV

Nature of subsidies

On September 23, 2015, Commerce published a notice in the *Federal Register* of its final determination of countervailable subsidies for producers and exporters of sugar from Mexico.[27] Table I-1 presents Commerce's final findings of subsidization of sugar in Mexico.

[24] *Sugar From the European Union; Sugar From Belgium, France, and Germany; and Sugar and Syrups from Canada, Inv. Nos. 104-TAA-7 (Review); AA1921-198-200 (Review); and 731-TA-3 (Review), USITC Pub. 3238* (Sept. 1999).

[25] *Sugar From the European Union; Sugar from Belgium, France, and Germany*, 70 FR 52446 (September 2, 2005).

[26] *Revocation of Antidumping Duty Findings and Countervailing Duty Order: Sugar from Belgium, France, Germany and the European Community*, 70 FR 54522 (September 15, 2005).

[27] *Sugar From Mexico: Final Affirmative Countervailing Duty Determination*, 80 FR 57337 (September 23, 2015).

Table I-1
Sugar: Commerce's final subsidy determination with respect to imports from Mexico

Producer/exporter	Subsidy rate (*percent*)
FEESA[1]	43.93
Ingenio Tala S.A. de C.V. and certain cross-owned companies of Grupo Azucarero Mexico S.A. de C.V. (collectively, the GAM Group)[2]	5.78
All others	38.11

[1] FEESA consists of the following sugar mills: Fideicomiso Ingenio El Modelo, Fideicomiso Ingenio San Cristobal, Fideicomiso Ingenio Plan De San Luis, Fideicomiso Ingenio San Miguelito, Fideicomiso Ingenio La Providencia, Fideicomiso Ingenio Atencingo, Fideicomiso Ingenio Casasano, Fideicomiso Ingenio El Potrero, and Fideicomiso Ingenio Emiliano Zapata.
[2] The GAM Group consists of the following entities: Ingenio Tala S.A. de C.V.; Ingenio El Dorado S.A. de C.V.; Ingenio Lazaro Cardenas S.A. de C.V.; Organizacion Cultiba, S.A.B. de C.V.; Grupo Azucarero Mexico S.A. de C.V.; ITLC Agricola Central S.A. de C.V.; Tala Electric S.A. de C.V.; Empresas y Servicios Organizados S.A. de C.V.; and Proveedora de Alimentors Mexico, S.A. de C.V.

Source: 80 FR 57337 (September 23, 2015).

Sales at LTFV

On September 23, 2015, Commerce published a notice in the *Federal Register* of its final determination of sales at LTFV with respect to imports of sugar from Mexico.[28] Table I-2 presents Commerce's final dumping margins with respect to imports of sugar from Mexico.

Table I-2
Sugar: Commerce's final weighted-average LTFV margins with respect to imports of sugar from Mexico

Producer/exporter	Dumping margin (*percent*)
FEESA[1]	40.48
Ingenio Tala S.A. de C.V. and certain affiliated sugar mills of Grupo Azucarero Mexico S.A. de C.V. (collectively, the GAM Group)[2]	42.14
All others	40.74

[1] FEESA consists of the following sugar mills: Fideicomiso Ingenio El Modelo, Fideicomiso Ingenio San Cristobal, Fideicomiso Ingenio Plan De San Luis, Fideicomiso Ingenio San Miguelito, Fideicomiso Ingenio La Providencia, Fideicomiso Ingenio Atencingo, Fideicomiso Ingenio Casasano, Fideicomiso Ingenio El Potrero, and Fideicomiso Ingenio Emiliano Zapata.
[2] The GAM Group consists of the following entities: Ingenio Tala S.A. de C.V.; Ingenio El Dorado S.A. de C.V.; Ingenio Lazaro Cardenas S.A. de C.V.; Organizacion Cultiba, S.A.B. de C.V.; Grupo Azucarero Mexico S.A. de C.V.; ITLC Agricola Central S.A. de C.V.; Tala Electric S.A. de C.V.; Empresas y Servicios Organizados S.A. de C.V.; and Proveedora de Alimentors Mexico, S.A. de C.V.

Source: 80 FR 57341 (September 23, 2015).

[28] *Sugar From Mexico: Final Determination of Sales at Less Than Fair Value*, 80 FR 57341 (September 23, 2015).

THE SUBJECT MERCHANDISE

Commerce's scope

Commerce has defined the scope of these investigations as follows: [29]

The product covered by this investigation is raw and refined sugar of all polarimeter readings derived from sugar cane or sugar beets. The chemical sucrose gives sugar its essential character. Sucrose is a nonreducing disaccharide composed of glucose and fructose linked by a glycosidic bond via their anomeric carbons. The molecular formula for sucrose is $C_{12}H_{22}O_{11}$; the International Union of Pure and Applied Chemistry (IUPAC) International Chemical Identifier (InChl) for sucrose is 1S/C12H22O11/c13-l-4-6(16)8(18)9(19)11(21-4)23-12(3-15)10(20)7(17)5(2-14)22-12/h4-11,13-20H,1-3H2/t4-,5-,6-,7-,8+,9-,10+,11-,12+/m1/s1; the InChl Key for sucrose is CZMRCDWAGMRECN-UGDNZRGBSA-N; the U.S. National Institutes of Health PubChem Compound Identifier (CID) for sucrose is 5988; and the Chemical Abstracts Service (CAS) Number of sucrose is 57-50-1.

Sugar described in the previous paragraph includes products of all polarimeter readings described in various forms, such as raw sugar, estandar or standard sugar, high polarity or semi-refined sugar, special white sugar, refined sugar, brown sugar, edible molasses, desugaring molasses, organic raw sugar, and organic refined sugar. Other sugar products, such as powdered sugar, colored sugar, flavored sugar, and liquids and syrups that contain 95 percent or more sugar by dry weight are also within the scope of this investigation.

The scope of the investigation does not include (1) sugar imported under the Refined Sugar Re-Export Programs of the U.S. Department of Agriculture;[30] (2) sugar products produced in Mexico that contain 95 percent or more sugar by dry weight that originated outside of Mexico; (3) inedible molasses (other than inedible desugaring molasses noted above); (4) beverages; (5) candy; (6) certain specialty sugars; and (7) processed food products that contain sugar (e.g., cereals). Specialty

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[29] *Sugar From Mexico: Final Affirmative Countervailing Duty Determination*, 80 FR 57337 (September 23, 2015).

[30] This exclusion applies to sugar imported under the Refined Sugar Re-Export Program, the Sugar-Containing Products Re-Export Program, and the Polyhydric Alcohol Program administered by the U.S. Department of Agriculture.

sugars excluded from the scope of this investigation are limited to the following: Caramelized slab sugar candy, pearl sugar, rock candy, dragees for cooking and baking, fondant, golden syrup, and sugar decorations.

Merchandise covered by this investigation is typically imported under the following headings of the HTSUS: 1701.12.1000, 1701.12.5000, 1701.13.1000, 1701.13.5000, 1701.14.1000, 1701.14.5000, 1701.91.1000, 1701.91.3000, 1701.99.1010, 1701.99.1025, 1701.99.1050, 1701.99.5010, 1701.99.5025, 1701.99.5050, 1702.90.4000, and 1703.10.3000. The tariff classification is provided for convenience and customs purposes; however, the written description of the scope of this investigation is dispositive.

THE PRODUCT

Description and applications[31]

The products covered by these investigations include sugar derived from sugarcane and sugar beets from Mexico. These sugar products include "raw" sugar (sugar with a sucrose content by weight in a dry state that corresponds to a polarimeter reading of less than 99.5 degrees) and "estandar," or standard, sugar, which is sometimes referred to as "high polarity" or "semi-refined" sugar (sugar with a sucrose content by weight in a dry state that corresponds to a polarimeter reading of 99.2 to 99.6 degrees).[32] Also included are "refined" sugar with a sucrose content by weight in a dry state that corresponds to a polarimeter reading of at least 99.9 degrees; brown sugar; liquid sugar (sugar dissolved in water); organic raw sugar; and organic refined sugar. Inedible molasses is not within the scope of these investigations. Certain "specialty" sugars (*e.g.*, rock candy, fondant, and sugar decorations) and processed food products that contain sugar (*e.g.*, beverages, candy, and cereals) are also not within the scope of these investigations.

Except for fructose-sugar blends, the sugar found in each of these products is chemically classified as sucrose, a carbohydrate that occurs naturally in fruits and vegetables. Sucrose is found in quantities large enough for commercial extraction in the stalk of sugarcane, a perennial subtropical grass, and in the white root of a sugar beet, an annual vegetable which

[31] Information in this section is drawn from *Sugar from Mexico*, Investigation Nos. 701-TA-513 and 731-TA-1249 (Preliminary), USITC Publication 4467, May 2014, pp. VII-8 through VII-10.

[32] There is some difference regarding industry terminology and Harmonized System (HS) nomenclature. The HS defines raw sugar as less than 99.5 degrees; the remaining sugar falls under an "other" subheading. The sugar industry generally refers to raw sugar as that which requires further processing for human consumption and refined sugar as that which requires no further processing for human consumption, regardless of the polarization value.

grows in more temperate climates. Sugar beets are usually grown in rotation with other crops to avoid disease and pest problems which occur when two beet crops are grown successively in the same field.

For the production of sugar, sugarcane (which contains approximately 11 percent sugar by weight) is initially cut and milled to obtain sugar juice. Through a process of filtering, evaporating, and centrifuging this juice, cane mills produce raw cane sugar, which consists of large sucrose crystals coated with molasses. This intermediate product is normally 90-99 percent pure sucrose[33] and is the principal "sugar" shipped in world trade. Raw cane sugar is not sold to U.S. consumers because the U.S. Food and Drug Administration ("FDA") considers it unsuitable for use, either as food or as an intermediate food ingredient, due to the high level of impurities it contains. Consequently, raw cane sugar is sold only to cane refineries, which further process the sugar through additional melting, filtering, evaporating, and centrifuging, to extract most of the remaining impurities and leave what is called refined sugar. Most U.S. cane refineries are located in facilities that do not include cane milling operations, and some are quite distant from raw cane mills. U.S. cane refineries rely on a mix of raw cane sugar from both domestic and imported sources.

Like sugarcane, sugar beets (which contain approximately 17 percent sugar by weight) are also initially processed to obtain sugar juice. Sugar beets grown in the United States are converted directly into refined sugar in the same facility using a continuous process in which no immediate raw sugar is produced. The sucrose from sugar beets and sugarcane are identical to one another.[34]

Liquid sugar is a combination of sugar and water. Liquid sugar accounts for approximately 17 percent of all sugar production in the United States.[35] Liquid sugar processors, sometimes referred to as "melt houses," utilize raw cane sugar and/or refined sugar to produce liquid sugar. These facilities include operations that melt refined sugar and add water, although some liquid sugar producers also purify raw and refined cane sugar using more sophisticated methods and machinery during the production process.

The primary use of sugar in the United States is human consumption, as a caloric sweetening agent in food. Among its various applications are use in bakery products, cereals, confections, sauces, and meat curing; use in dairy and ice cream applications; and sales directly to consumers. Most sugar is ultimately sold in pure granulated or powdered sucrose forms. Substantial quantities also reach consumers as liquid sugar, and in forms other than chemically pure sucrose, such as brown sugar[36] and invert sugar syrups, or as sugar blends with glucose or

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[33] Purity of sugar is described in "degrees." For example, 95 percent pure raw cane sugar would be described as "95 degree" polarity sugar.

[34] The Sugar Association, *All About Sugar*, available at www.sugar.org/all-about-sugar/ (accessed July 27, 2015).

[35] *Sugar from Mexico*, Investigation Nos. 701-TA-513 and 731-TA-1249 (Preliminary), USITC Publication 4467, May 2014, p. I-9.

[36] Brown sugar is normally produced by adding molasses to refined sugar that is fit for human consumption.

fructose. In calendar-year 2014, 62 percent of the total quantity of U.S. sugar deliveries (refined basis) was to industrial users, mainly as an ingredient in processed foods.[37] Retail deliveries accounted for 12 percent of the market that year. The remaining deliveries were to wholesale grocers, hotels, restaurants, government agencies, or other institutions.

Manufacturing processes[38]

Although converting sugar beets into refined sugar is a continuous process performed in one facility, the basic manufacturing steps are similar to the combined operations of milling sugarcane and refining raw cane sugar into a final product. The production of liquid sugar may occur at a cane refinery or beet factory, at a dedicated facility, or at an end-user's facility. A description of each type of manufacturing process follows.

Sugarcane mill

In a sugarcane mill, raw cane sugar is extracted from sugarcane through a process whereby the cane is sliced into pulp, water is added, and sugar juice is extracted. The leftover pulp (bagasse) is often used as fuel to power the mill. The sugar juice is then clarified by adding calcium hydroxide (lime) and carbon dioxide, which trap solid impurities and then allows these solids to settle out of the solution. The sugar juice is then crystalized and placed into evaporators and high-speed rotating centrifuges, where extra water is evaporated and the sugar is separated from blackstrap molasses (a byproduct sold mainly as animal feed). The final raw sugar product has a characteristic amber color and is sold or transferred to cane refineries for further processing.

Cane sugar refinery

In the first step of the cane sugar refining process, raw cane sugar is combined with a solution of molasses and water called "affination syrup." This mixture, called "magma," is placed in high-speed rotating centrifuges which separate some of the remaining impurities from raw sugar crystals. The crystals are then melted, run through mesh strainers, and separated from microscopic impurities in a process called "carbonatation." Now referred to as "liquor," the sugar solution is passed through "sweetland presses" and filtered through granular bits of char which absorb most of the remaining impurities. The final processing steps re-crystallize the sugar and evaporate any excess water, leaving the sugar crystals dry enough to be sorted, packaged, and stored for shipment to customers. A variety of products are produced

[37] *ERS Sugar and Sweetener Yearbook*, table 20a, available at http://www.ers.usda.gov/data-products/sugar-and-sweeteners-yearbook-tables.aspx#25456 (accessed July 23, 2015).

[38] Information in this section is drawn from *Sugar from Mexico*, Investigation Nos. 701-TA-513 and 731-TA-1249 (Preliminary), USITC Publication 4467, May 2014, pp. I-10 through I-12.

from this refined sugar, including granulated sugar, specialty sugars (such as brown sugar and powdered sugar), syrups, and molasses.

Sugar beet processor

Unlike sugarcane, sugar beets are processed from the sugar beet into refined sugar in a continuous process within the same manufacturing facility.[39] The beets are first sliced into thin strips called "cossettes," and hot water is added to remove sucrose and create "raw juice." Any leftover sugar beet pulp is pressed into pellets and sold as livestock feed. The sugar juice is then mixed with lime and carbon dioxide to trap and remove solid impurities from the solution. Excess water is removed by evaporators, and the sugar is then crystallized and separated from the rest of the solution, called molasses, by centrifuges. Molasses is sold as an ingredient for animal feed, and to manufacturers for making lysine, baker's yeast, and other products. At the end of the process, the sugar crystals are dried, cooled, and sorted for packaging according to crystal size.

Liquid sugar facility

Liquid sugar is produced at cane sugar refineries, beet sugar factories, melt houses, and end-user facilities. The production process depends on the nature of the sugar used as a raw material. Sugar refineries, some other producers, and end-users simply melt previously-refined sugar and add water. Some melt houses purify raw cane sugar or lower-quality refined sugar that may contain foreign matter using more involved processes such as filtration and ultraviolet light treatment. One liquid sugar producer, CSC Sugar LLC, is considered to be a refinery by the U.S. Department of Agriculture for the purposes of the sugar re-export program.[40] According to a U.S. industry source, in 2014, there were approximately 20 companies operating 38 melt houses in the United States.[41]

TARIFF TREATMENT

Based upon the scope set forth by Commerce, the merchandise subject to these investigations are imported under the provisions of the 2015 HTS shown in table I-3. Following

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[39] Some facilities may divert and store thick juice, which contains approximately 60 percent sugar, for later processing. However, this practice is not common in the U.S. industry.

[40] U.S. Department of Agriculture, Foreign Agricultural Service, "Licensees operating under 7 CFR 1530," undated, available at http://apps.fas.usda.gov/sugars/FASSugarsLicensees.aspx (accessed July 23, 2015). In the preliminary phase of these investigations, the Commission found CSC Sugar to be included in the domestic industry. *Sugar from Mexico*, Investigation Nos. 701-TA-513 and 731-TA-1249 (Preliminary), USITC Publication 4467, May 2014, p. 16.

[41] *Sugar from Mexico*, Investigation Nos. 701-TA-513 and 731-TA-1249 (Preliminary), USITC Publication 4467, May 2014, p. I-12.

HS revisions effective in 2012 (part of a periodic 5-year review at the World Customs Organization) raw cane sugar (subheading 1701.11) was divided into non-centrifugal (at least 69 degrees but less than 93 degrees; subheading 1701.13) and other (subheading 1701.14). As discussed earlier, standard industry terminology for "raw" and "refined" sugar may not correspond to the HTS definitions.

Table I-3
HTSUS classification of sugar products within the scope of the investigations

HTSUS subheading	Brief description
1701.12.1000	Raw beet sugar, in-quota
1701.12.5000	Raw beet sugar, over-quota
1701.13.1000	Raw cane sugar, non-centrifugal, in-quota
1701.13.5000	Raw cane sugar, non-centrifugal, over-quota
1701.14.1000	Raw cane sugar, centrifugal, in-quota
1701.14.5000	Raw cane sugar, centrifugal, over-quota
1701.91.1000	Sugar, other than raw, containing additional coloring but not flavoring, in-quota
1701.91.3000	Sugar, other than raw, containing additional coloring but not flavoring, over-quota
1701.99.1025	Sugar, other than raw, not containing additional flavoring or coloring, not specialty sugars, not for further processing, in-quota
1701.99.1050	Sugar, other than raw, not containing additional flavoring or coloring, not specialty sugars, for further processing in-quota
1701.99.5025	Sugar, other than raw, not containing additional flavoring or coloring, not specialty sugars, not for further processing, over-quota
1701.99.5050	Sugar, other than raw, not containing additional flavoring or coloring, not specialty sugars, for further processing, over-quota
1702.90.4000	Other cane and beet syrups, not elsewhere specified or included

Source: HTS, 2015.

Tariff-rate quotas on U.S. imports

U.S. imports of sugar from Mexico, including the products within the scope of these investigations, that are originating goods of Mexico have been granted duty-free treatment under the NAFTA since January 1, 2008, following staged reductions in special duty rates. U.S. imports of sugar from sources other than Mexico are currently subject to a system of World Trade Organization ("WTO") tariff-rate quotas ("TRQs"), which have been in place since October 1990.[42] The TRQs were proclaimed following a GATT ruling against the U.S. sugar quota system

[42] Additional U.S. note 5(a)(i) to chapter 17 of the Harmonized Tariff Schedule provides for separate TRQs for imports of raw cane sugar and for imports of certain other sugars, syrups, and molasses. The United States' minimum in-quota sugar import quantity is currently set by commitments made in

(*continued*...)

that was in effect at the time. Pursuant to market access commitments made under the Uruguay Round agreements, the United States has agreed to annually import aggregate quantities of not less than 1,117,195 metric tons (1,231,484 short tons) of raw cane sugar and not less than 22,000 metric tons (24,251 short tons) of other sugars (including refined sugar[43] and raw beet sugar), syrups, and molasses at low (in-quota) duty rates. The U.S. Trade Representative ("USTR") allocates the entire raw cane sugar TRQ trigger quantity on a country-by-country basis; for refined sugar, while a portion of the TRQ in-quota quantity is allocated to specific countries, the remainder is accorded on a global first-come, first-served basis.[44] For fiscal year ("FY") 2014 (October 1, 2013 through September 30, 2014)—the most recently completed quota year—the raw cane sugar TRQ trigger quantity was the minimum 1,117,195 metric tons, raw value (1,231,484 STRV), and the refined sugar TRQ trigger quantity was 122,000 metric tons, raw value (134,481 STRV), including 101,656 metric tons, raw value (112,056 STRV), reserved for specialty sugar.[45] Table I-4 presents the raw sugar TRQ allocations for FY 2014.

(…*continued*)
Schedule XX of the GATT Marrakesh Protocol; however, USDA can adjust the figure upward under certain circumstances, to allow a larger quantity of sugar to enter at the lower, in-quota, duty rate.

[43] Sugar imported under the refined sugar TRQ can be produced from either sugar beets or sugarcane.

[44] The raw cane sugar TRQ is administered by a system of licenses called Certificates of Quota Eligibility ("CQEs"). CQEs are provided by the USDA to foreign governments to distribute to exporters. Each shipment must be accompanied by a valid CQE.

[45] U.S. Trade Representative, "U.S. Trade Representative Froman Announces FY 2014 WTO Tariff-Rate Quota Allocations for Raw Cane Sugar, Refined and Specialty Sugar and Sugar-Containing Products," press release, September 17, 2013, https://ustr.gov/about-us/policy-offices/press-office/press-releases/2013/september/WTO-trq-for-sugar (accessed July 27, 2015). Refined sugar is defined by USDA as "sugar of which the sucrose by weight, in the dry state, corresponds to a polarimeter reading of 99.5 degrees or more." Specialty sugar is refined sugar that meets specifications determined by Customs. An increasing portion of the refined sugar TRQ has been reserved for organic sugar in recent years, owing to limited U.S. production and a growing demand by the organic processed foods industry.

Table I-4

U.S. raw sugar TRQ WTO allocations and entries, FY 2014

Country	Entries final (*metric tons raw value*)	TRQ[1] (*metric tons raw value*)	Final shortfalls (*metric tons raw value*)	Entries' share of TRQ (*percent*)
Argentina	21,021	49,804	28,783	42.2
Australia	94,350	96,132	1,782	98.1
Belize	7,794	12,741	4,947	61.2
Bolivia	0	9,265	9,265	0.0
Brazil	167,374	167,942	568	99.7
Colombia	26,800	27,797	997	96.4
Costa Rica	17,374	17,374	0	100.0
Dominican Republic	110,619	203,847	93,228	54.3
Ecuador	12,207	12,741	534	95.8
El Salvador	29,986	30,114	128	99.6
Fiji	10,424	10,424	0	100.0
Guatemala	53,908	55,595	1,687	97.0
Guyana	11,800	13,898	2,098	84.9
Honduras	11,464	11,582	118	99.0
India	0	9,265	9,265	0.0
Jamaica	11,499	12,741	1,242	90.3
Malawi	3,003	3,000	-3	100.0
Mauritius	2,149	6,318	4,169	34.0
Mexico[2]	0	7,258	7,258	0.0
Mozambique	15,057	15,057	0	100.0
Nicaragua	24,323	24,323	0	100.0
Panama	23,589	33,588	9,999	70.2
Paraguay	2,812	7,258	4,446	38.7
Peru	44,888	47,487	2,599	94.5
Philippines	128,536	156,359	27,823	82.2
South Africa	24,220	26,639	2,419	90.9
Swaziland	18,532	18,532	0	100.0
Thailand	13,419	16,216	2,797	82.8
Zimbabwe	12,394	13,898	1,504	89.2
Total	899,542	1,117,195	217,653	80.5

[1] In September 2013, USDA set the raw sugar TRQ at the minimum level to which the United States is committed in the Uruguay Round Agreement on Agriculture. In July 2014, USTR reallocated 99,290 metric tons raw value of unused TRQ.

[2] All sugar from Mexico currently entering the United States comprises originating goods under the NAFTA.

Note.—The federal fiscal year begins on October 1 and ends on September 30.

Source: Compiled from USDA Sugar and Sweeteners Yearbook, table 57e, retrieved on March 10, 2015 at http://www.ers.usda.gov/data-products/sugar-and-sweeteners-yearbook-tables.aspx; and U.S. Trade Representative, "USTR Announces Reallocation of Unused FY2014 World Trade Organization Tariff Rate Quota Volume for Raw Cane Sugar," press release, July 3, 2014, available at https://ustr.gov/about-us/policy-offices/press-office/press-releases/2014/July/USTR-Announce-Reallocation-Unused-2014-WTO-TariffRate-Quota-Volume-Raw-Cane-Sugar (accessed July 28, 2015).

Raw Cane Sugar

Raw cane sugar imports under the TRQ are assessed an in-quota general rate of 1.4606 cents per kilogram (0.6625 cent per pound). This tariff is reduced by 0.020668 cent per kilogram (0.009375 cent per pound) for each degree of purity under 100 degrees (or fractions thereof) to a minimum of 0.943854 cent per kilogram (0.428129 cent per pound). Eligible in-quota imports from Canada receive duty-free treatment under the North American Free Trade Agreement (NAFTA), as do in-quota imports from countries eligible for duty-free treatment under preferential trade arrangements (PTAs) including the Generalized System of Preferences (GSP),[46] the Caribbean Basin Economic Recovery Act (CBERA),[47] the African Growth and Opportunity Act (AGOA), and the Central America-Dominican Republic Free Trade Agreement (CAFTA-DR) as well as free trade agreements (FTAs) with Australia, Bahrain, Chile, Colombia, Israel, Jordan, Korea, Malaysia, Morocco, Oman, Panama, Peru, and Singapore.[48] Tier I tariff rates have not changed during the period of investigation.[49]

Raw cane sugar imports in excess of the quota are not subject to quantity limits and are subject to a "tier II" general duty rate equal to 33.87 cents per kilogram (15.36 cents per pound). Tier II tariff reductions have been completed since 2000 in line with the United States' NAFTA and Uruguay Round commitments.[50] In-quota (tier I) tariff rates and over-quota (tier II) tariff rates are not cumulative; sugar imports are either subject to the tier I or the tier II rate, as the HTS has separate subheadings for each tier.[51]

In addition to the WTO TRQs for raw cane sugar, additional special tariff-rate quotas have been granted under various FTAs during the transition or staging periods. These FTA TRQs are set forth in HTS chapter 99, have their own duty rate staging, and are applied to the Tier II

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[46] U.S. imports of sugar under HTS subheadings 1701.12.10, 1701.13.10, 1701.13.20, 1701.14.10, 1701.14.20, 1701.99.10, and 1701.99.10 from Brazil and HTS subheading 1701.91.10 from the Philippines are not eligible for duty-free treatment under the GSP. See General Note 4 (d) of the HTS.

[47] U.S. imports of raw cane sugar under HTS heading 1701 from Antigua and Barbuda, Montserrat, Netherlands Antilles, Saint Lucia, and Saint Vincent and the Grenadines are not eligible for duty-free treatment under the CBERA. See HTS general note 7(d)(i).

[48] The quantity of duty-free imports from countries under these free trade agreements may be limited by conditions related to the countries' net trade or production status for sugar.

[49] Quota imports under the Colombia and Panama FTAs are administered by certificates of quota eligibility (CQEs).

[50] As of 2000, the United States has fulfilled its Uruguay Round tier II tariff reduction commitments. Any further reductions would result from the present Doha Round of trade negotiations or from future such talks. Tier II tariff rates for Mexico were phased out completely as of January 1, 2008.

[51] The in-quota rates also apply to imports of raw cane sugar under general note 15 to the HTS (relating to imports not entered for general consumption) and to imports of raw cane sugar to be used in the production of polyhydric alcohols or to be refined and re-exported in refined form or in sugar-containing products, or to be substituted for domestically produced raw cane sugar that has been or will be exported, although these shipments are not counted toward the trigger quantities that would cause Tier II rates to be charged. These products are not in the scope of these investigations.

tariff rate lines. Generally, these additional quotas are phased in over a period of several years with a small perpetual annual increase at the end of the phase-in period. The additional quotas are subject to the beneficiaries being net exporters, with duty-free treatment granted to the lesser of the scheduled quantity or the net export balance. These quotas apply to refined sugar and various sugar-containing products as well.[52]

Refined Sugar[53]

The combined TRQ for refined sugar for fiscal year 2014 was 122,000 metric tons, raw value (134,482 STRV), including 101,656 metric tons, raw value (112,056 STRV) reserved for specialty sugars.[54] Of the quantity not reserved for specialty sugars, 12,050 metric tons, raw value (13,283 STRV) is allocated to Canada. The remaining 8,294 metric tons, raw value (9,142 STRV) are allocated on a first-come, first-served basis.[55] Canada may utilize the first-come, first-served portion of the TRQ before filling its reserved amount, thus potentially limiting the amount available to other countries.

Various countries benefit from duty-free access under PTAs and FTAs for in-quota (tier I) U.S. imports of refined sugar. These include GSP (subject to exclusions mentioned in footnote 43), Australia, Bahrain, CAFTA-DR, Canada, Chile, Colombia, CBERA (subject to certain exclusions), Israel, Jordan, Korea, Morocco, Oman, Panama, Peru, and Singapore. All other countries have tariff rates ranging from 1.43 to 1.66 cents per pound, depending on the polarity of the sugar being imported. For over-quota (tier II) imports, all countries except Mexico and those with additional quota access under FTAs (see discussion in the section on raw sugar) are levied a tariff equal to 16.21 cents per pound.

Sugar-Containing Products

Along with the raw and refined sugar TRQs, the USTR annually establishes and publishes a TRQ for certain sugar-containing products.[56] For fiscal year 2014, the USTR established a

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[52] Currently, additional sugar TRQs are granted under FTAs with Bahrain, CAFTA-DR, Chile, Colombia, Jordan, Korea, Morocco, Oman, Panama, Peru, and Singapore.

[53] The products subject to the tariff rate for refined sugar include raw beet sugar and sugars, syrups, and molasses imported under HTS subheadings 1701.12.10, 1701.91.10, 1701.99.10, 1702.90.10, and 2106.90.44.

[54] Some specialty sugars included in this TRQ are not in the scope of these investigations.

[55] U.S. Trade Representative, "U.S. Trade Representative Froman Announces FY 2014 WTO Tariff-Rate Quota Allocations for Raw Cane Sugar, Refined and Specialty Sugar and Sugar-Containing Products," press release, September 17, 2013, https://ustr.gov/about-us/policy-offices/press-office/press-releases/2013/september/WTO-trq-for-sugar (accessed July 28, 2015).

[56] The products subject to the tariff rate quota for certain sugar-containing products include products imported under HTS subheadings 1701.91.54, 1704.90.74, 1806.20.75, 1806.20.95, 1806.90.55, 1901.90.56, 2101.12.54, 2101.20.54, 2106.90.78 and 2106.90.95. These products include

(*continued*...)

sugar-containing products TRQ of 64,709 metric tons (71,329 short tons), of which 59,250 metric tons (65,312 short tons), or 92 percent of the total TRQ, is allocated to Canada.[57] Sugar-containing products other than certain brown sugars and organic sugars are not in the scope of these investigations.

Safeguards

U.S. imports of various sugar and sugar-containing products subject to TRQs are also subject to additional safeguard duties.[58] These duties are cumulative and are applied in addition to over-quota (Tier II) duties if prices fall below a certain level. The safeguard duties rise as prices fall, within specified bands. Safeguard duties are not applicable to imports from free trade agreement beneficiaries, including Mexico.[59]

U.S. SUGAR PROGRAM[60]

History

The U.S. Government has played an active role in the domestic sugar industry for many years. The first price-support legislation for the U.S. sugar industry, called the Jones-Costigan Act ("Sugar Act"), was instituted in 1934 and set quotas on domestic production and foreign imports based on estimated U.S. demand for the coming year. In the 1970s, inflation forced the demise of this "sugar program," as sugar prices quickly increased and the legislative tools did very little to bring prices back down to their historic level. By November 1974, world raw sugar prices reached 57 cents per pound (from 10 cents per pound the previous year), and on January 1, 1975, the Sugar Act was abandoned. With the Sugar Act's repeal, the Secretary of Agriculture lost the authority to set domestic sugar quotas; import quotas, acreage allotments, and direct payment to farmers were also eliminated.

Three years later, due to increased production in world markets, sugar prices declined to an average of 8 cents per pound. To counteract this decline, and lessen its impact on U.S.

(…*continued*)
flavored/colored sugar, sugar confectionary, and food preparations (e.g., dry powder mixes) containing sugar.

[57] U.S. Trade Representative, "U.S. Trade Representative Froman Announces FY 2014 WTO Tariff-Rate Quota Allocations for Raw Cane Sugar, Refined and Specialty Sugar and Sugar-Containing Products," press release, September 17, 2013, available at https://ustr.gov/about-us/policy-offices/press-office/press-releases/2013/september/WTO-trq-for-sugar (accessed July 28, 2015). The remaining in-quota quantity is available to other countries on a first-come, first-served basis. Specialty sugars are defined in CFR 2011.202.

[58] These duties are applied to imports under HTS subheading 9904.17.

[59] See U.S. Note 1. Subchapter IV, Chapter 99 of the *Harmonized Tariff Schedule of the United States (2014)*.

[60] Information in this section is drawn from *Sugar from Mexico*, Investigation Nos. 701-TA-513 and 731-TA-1249 (Preliminary), USITC Publication 4467, May 2014, pp. I-17 through I-23.

farmers, Congress passed the Food and Agriculture Act ("FAA") in 1977. The FAA established a loan (or purchase) program in which cane millers and beet processors could receive loans for every pound of sugar they produced. The loans could be defaulted, and any sugar pledged as collateral forfeited to the Government, if the market price was not higher than the per-pound loan rate. In 1982, after a hiatus of seven years, Congress re-established quotas on sugar imports.

1996-2002

Under Section 156 of the Federal Agriculture Improvement and Reform Act of 1996 (the "Fair Act"), the U.S. sugar program continued to grant loans to domestic producers. Loans were administered by the Commodity Credit Corporation ("CCC") of the U.S. Department of Agriculture ("USDA"), and credits (or "rates") averaged 18 cents per pound for raw cane sugar and 22.9 cents per pound for refined beet sugar.[61] These rates could not be increased but could be reduced by administrative action if domestic and export subsidies were reduced by the European Union and 10 other sugar producing countries.

Sugar loans could be either "recourse" or "nonrecourse" loans. Processors receiving nonrecourse loans were required to make minimum payments for sugarcane or sugar beets delivered to them, and to pay penalties for forfeiting the loan collateral to the CCC. Conversely, a recourse loan required no minimum payments to growers and no penalty for forfeiture; however, the processor remained liable for any losses the CCC incurred in selling the forfeited sugar. Loans granted by the CCC to U.S. sugar mills and sugar beet processors were recourse, unless in-quota imports of sugar amounted to, or exceeded, 1.5 million STRV. If this occurred, nonrecourse loans would be made available and all recourse loans made during the fiscal year would be converted to nonrecourse loans. Prior to 1996, the sugar program was designed to operate at no net cost to the Federal Government; the Secretary of Agriculture set import quotas at levels which kept U.S. sugar prices above the loan rates to discourage defaults. The Fair Act did not renew this "no-net-cost" provision of the program.

2002–2008

The Farm Security and Rural Investment Act of 2002 (Farm Bill) was signed into law on May 13, 2002 and was effective through Federal fiscal year 2007. Enactment of the 2002 Farm Bill resulted in changes to the U.S. sugar program, the most significant of which included the elimination of recourse loans, the reinstatement of a payment-in-kind ("PIK") program, and the establishment of domestic "marketing allotments" for processed sugar.

The 2002 Farm Bill established that all loans made to U.S. sugar beet or sugarcane processors are nonrecourse. Under these provisions, the USDA was required to accept sugar pledged as collateral as payment in full, in lieu of cash repayment of a loan. The Farm Bill

[61] Loan rates are lower for raw cane sugar primarily because it is an intermediate product requiring further processing by refiners.

terminated penalties for forfeitures to the CCC, and extended nonrecourse loans to "in-process" beets and cane syrups, allowing processors to obtain loans on these products at 80 percent of the ordinary loan rates (unchanged from the 1996 Fair Act at 22.9 cents per pound for beet processors, and 18 cents per pound for producers of raw cane sugar). Loan rates could be reduced by the USDA if foreign producers reduce export subsidies and support levels for sugar below their current WTO commitments.

The 2002 Farm Bill authorized a program, offered provisionally in 2000 and 2001, allowing processors to bid on raw cane sugar or refined beet sugar held by the USDA in CCC inventories, in exchange for agreement from the processor to reduce its own production. This "payment-in-kind" (PIK) program also allowed for growers of sugar beets and sugarcane to bid for a quantity of CCC inventory they would accept in exchange for reducing planted acreage, or for forgoing the harvest of a specified acreage of sugar beets or sugarcane.

The 2002 Farm Bill reactivated the provision, suspended during application of the 1996 Fair Act, that the U.S. sugar program be administered at no net cost to the Federal Government. Under the provisions of the Farm Bill, the Secretary of Agriculture was directed to achieve the "no net cost" requirement by avoiding, to the maximum extent possible, any forfeitures of sugar to the CCC, which result when the market price for sugar was less than the per pound rate of a nonrecourse loan, plus interest and costs. The PIK program was one method by which the USDA could control excess supplies of sugar. Marketing allotments provide another method.

Under the provisions of the Farm Bill, the USDA was authorized to establish flexible marketing allotments which restricted the amount of sugar individual processors could market in the United States. The overall quantity of sugar to be allotted for a given crop year was determined by subtracting the sum of 1.532 million STRV, and any carry-in stocks (or inventory) of sugar, from the USDA's estimate of domestic consumption, plus a reasonable carryover stock. This overall allotment quantity ("OAQ") was divided between beet and cane sugar at a set ratio of 54.35 percent for beet and 45.65 percent for cane. Beet sugar processors were then assigned allocations based on their sugar production in the 1998-2000 crop years, while cane sugar allocations were assigned on the basis of past marketings, current ability to market, and past processing levels. Processors who produced sugar beyond their allotment were required to postpone sales, and either store the excess or sell it outside the domestic "food-use" market.

Petitioners further explain that if an allotment holder produces more sugar than it is permitted to sell under its allotment, then that producer may sell the excess sugar to another producer that has unfilled allotment, or may export the sugar. Over-allotment sugar may not be used as collateral for loans under the sugar loan program. As a practical matter, most producers hold excess sugar at their own expense until the beginning of the next crop year, when that sugar may be sold under their new crop year allotment. In addition, petitioners state that the cane sugar allotment has been larger than the raw cane sugar production in the United States in recent years and the USDA has reassigned unfilled cane sugar allotment to raw cane imports under the WTO TRQ.[62]

[62] Petitioners' posthearing brief, September 23, 2015, Part II, p.4 and 12, and Part III, p. 26.

Under the provisions of the 2002 Farm Bill, the USDA's authority to restrict the marketing of domestically produced sugar through allotments was suspended if imports of sugar for human consumption exceeded 1.532 million STRV, such that the overall allotment quantity would have to be reduced. Marketing allotments would remain suspended until the USDA estimated that imports were reduced to under this "trigger" level.

Table I-5 lists cane millers and beet processors' marketing allotments for FY 2012 through Adjusted FY 2015.

Table I-5
Sugar: Beet processors and cane processors marketing allocations, Federal fiscal years 2012-2015

Firm	Final FY 2012	Final FY 2013	Final FY 2014	Initial FY 2015	Adjusted FY 2015
	Quantity (*STRV*)				
Beet Processors' Marketing Allocations:					
Amalgamated Sugar Co.	1,125,852	1,130,074	1,039,693	1,162,220	1,071,703
American Crystal Sugar Co.	1,803,354	1,940,762	1,913,912	1,996,116	1,758,711
Michigan Sugar Co.	682,656	545,095	659,618	560,601	687,124
Minn-Dak Farmers Co-op.	343,119	366,556	447,778	376,983	425,000
So. Minn Beet Sugar Co-op.	564,885	712,371	605,200	732,635	542,816
Western Sugar Co.	604,965	539,013	546,050	554,200	545,042
Wyoming Sugar Growers, LLC	42,360	44,194	37,421	45,451	48,167
Subtotal, beet processors	5,167,190	5,278,064	5,249,671	5,428,206	5,078,562
Cane Processors' Marketing Allocations:					
Florida Crystals	747,151	719,606	690,330	954,615	753,723
Growers Co-op of Florida	378,773	365,335	341,100	417,076	395,341
U.S. Sugar Corp	800,734	820,863	818,521	946,876	859,983
Louisiana Sugar Cane Products, Inc.	1,070,902	1,164,218	1,131,388	1,245,224	1,088,768
M.A. Patout & Sons	483,620	560,747	516,131	548,448	520,517
Rio Grande Valley	170,745	171,480	170,860	201,557	146,258
Gay & Robinson, Inc.[1]	22,637	n/a	n/a	n/a	n/a
Hawaiian Commercial & Sugar Company	245,499	230,936	275,000	245,499	237,000
Subtotal, cane processors	3,920,060	4,033,186	3,943,330	4,559,294	4,001,588
Reassignment to imports	420,000	400,000	650,000	n/a	1,000,000
Total	9,507,250	9,711,250	9,843,000	9,987,500	10,080,150

[1] Gay & Robinson stopped harvesting sugarcane in 2010. *Sugar era ending on Kauai as Gay & Robinson pulls out*, Honolulu Advertiser, September 11, 2008, http://the.honoluluadvertiser.com/article/2008/Sep/11/ln/hawaii809110380.html. In FY 2014, the CCC determined that the Hawaiian cane processor, Gay and Robinson Inc., permanently terminated operations because it had not processed sugarcane for two consecutive crop years. The Gay and Robinson, Inc. FY 2012 allocation of 73,145 STRV was reassigned to the State of Hawaii and then further reassigned to the mainland sugarcane-producing states, because Hawaii is not expected to use all of its cane sugar allotment.

Source: *USDA Increases and Reassigns Fiscal Year 2012 Overall Allotment Quantity and Increases Fiscal Year 2012 Raw Sugar Tariff-Rate Quota,* 77 FR 23450, April 19, 2012; http://www.fsa.usda.gov/Internet/FSA_File/sugar_allot_allocs_fy2013.pdf; http://www.fsa.usda.gov/Internet/FSA_File/fy_2014_overall_beet.pdf; and USDA Announces 2014-Crop Sugar Loan Rates and FY 2015 Sugar Program Provisions, September 26, 2014, found at http://www.fsa.usda.gov/FSA/newsReleases?area=newsroom&subject=landing&topic=ner&newstype=newsrel&type=detail&item=nr_20140926_rel_0152.html; USDA, FAS, FY 2015 Cane and Beet Sugar Reassignments Announced, May 4, 2015. http://www.fsa.usda.gov/FSA/newsReleases?area=newsroom&subject=landing&topic=ner&newstype=newsrel&type=detail&item=nr_20150504_rel_0056.html.

2008–Present

The current U.S. sugar program was established by the Food, Conservation, and Energy Act of 2008 (P.L. 110-246; 2008 Farm Bill). The Agricultural Act of 2014 (P.L. 113-79; 2014 Farm Bill) essentially maintained and continued both the domestic and import components of the U.S. sugar program under the 2008 Farm Bill through the 2018 crop year.[63] The main changes effected by the 2008 Farm Bill included an increase in the loan rates, the elimination of the allotment suspension mechanism, the requirement for USDA to set the initial OAQ at 85 percent of estimated U.S. human consumption of sugar, the requirement to set the WTO TRQs at the minimum level for the first half of the fiscal year, and the establishment of the Feedstock Flexibility Program, whereby surplus sugar stocks are required to be sold by the CCC for conversion into ethanol.

The base raw cane sugar loan rate was phased upward from 18.00 cents per pound in FY 2009 to 18.75 cents per pound in FY 2013. The refined beet sugar loan rate became subject to a formula beginning in FY 2010, with the refined beet sugar loan rate equal to 128.5 percent of the raw cane sugar rate; the refined beet sugar rate amounted to 24.09 cents per pound in FY 2013. The 2008 Farm Bill continued the PIK program, but required that planted beets or cane that is diverted from production must be used as bioenergy feedstocks. The 2008 Farm Bill also increased USDA storage payment rates for forfeited raw cane sugar from 8 cents to 10 cents per hundredweight and for forfeited refined beet sugar from 10 cents to 15 cents per hundredweight. The 2008 Farm Bill eliminated prepayment penalties for loans to processors to construct or upgrade storage facilities. The 2008 Farm Bill also required that any reassignment of unused cane and beet allocations be to imports of raw cane sugar. The 2008 Farm Bill also eliminated the requirement for reallocating import TRQ shortfalls. In addition, TRQs must be set at the minimum levels on October 1 and not increased until April 1, except in the event of emergencies.[64] The 2008 Farm Bill also required USDA to establish "orderly" shipping patterns for imports under TRQs and FTAs. In addition, the Farm Bill required the United States to restore its membership in the International Sugar Organization.

Prior to FY 2013, the administration of the U.S. sugar program had not resulted in forfeitures since 2004. According to USDA, sugar loan forfeitures in FY 2013 were the result of high domestic sugar production, large imports of sugar from Mexico which narrowed U.S.-world raw sugar price margins, and world prices falling below U.S. price support levels for the first time in several years. [65] As a result, the USDA's Commodity Credit Corporation (CCC) took several actions that year to divert sugar supplies from the U.S. market for human consumption and dispose of forfeitures. These actions included sales of sugar by the CCC for ethanol production and other non-food uses under the Feedstock Flexibility Program (as described

[63] See Section 1301.

[64] This provision generally has been interpreted to refer to natural disasters, such as hurricanes and refinery explosions.

[65] USDA, ERS, *Sugar and Sweeteners Outlook*, November 15, 2013, p. 12.

above) and a Re-export Program credit exchange.[66] The Re-export credit exchange involved swapping a given amount of CCC-owned sugar for a multiple amount of sugar that would have been imported, either with the export credits accumulated by U.S. sugar refiners under the Refined Sugar Re-export Program[67] or certificates of quota eligibility (CQEs) issued under the Colombia and Panama FTAs.[68] Through these methods, the USDA effectively removed 1,047,490 STRV of sugar from the U.S. market, at a net cost of $258,716,027 for crop year 2012/13 (table I-6). The average CCC net cost per pound removed was 12.35 cents (raw value basis) compared with an average U.S. raw cane sugar price of 21.00 cents per pound for fiscal year 2013.[69]

[66] USDA, ERS, *Sugar and Sweeteners Outlook*, November 15, 2013, p. 7.

[67] The U.S. Refined Sugar Re-Export Program allows a U.S. sugar refiner to import world-priced (i.e., low-priced) sugar for refining on the condition of exporting it as refined sugar or selling it to licensed manufacturers of sugar-containing products. In addition, another program, the Sugar-Containing Products Re-Export Program, allows U.S. firms to buy sugar from any of the refiner participants for use in products that will be exported onto the world market. USDA, ERS, "Sugar and Sweeteners," November 14, 2014 found at http://www.ers.usda.gov/topics/crops/sugar-sweeteners/trade.aspx

[68] USDA's Economic Research Service (ERS) computed the ratios of credits/CQEs to sugar at 3.239 for the July 10, 2013 exchange and 2.656 for exchanges during August and September 2013. The advantage to export credit and CQE holders was that they could sell the exchanged sugar on the world market (for which the price margin had narrowed), while the advantage to the CCC was that it minimized its losses. USDA, ERS, *Sugar and Sweeteners Outlook*, November 15, 2013, pp. 7–9.

[69] USDA, ERS, "Sugar and Sweeteners Yearbook Tables," Table 4--U.S. raw sugar price, duty fee paid, New York, monthly, quarterly, and by calendar and fiscal year, available at http://www.ers.usda.gov/datafiles/Sugar_and_Sweeteners_Yearbook_Tables/World_and_US_Sugar_and_Corn_Sweetener_Prices/Table04.xls (accessed July 23, 2015).

Table I-6
USDA Commodity Credit Corporation (CCC) actions to remove surplus sugar during crop year 2012/13

Date	Program action	Quantity removed (*STRV*)	CCC acquisitions (*STRV*)	CCC acquisitions (*dollars*)	CCC sales (*dollars*)	CCC net cost (*dollars*)	CCC net cost per pound removed (*cents*)
6/18/13	Re-export program credit exchange	329,760	100,572	43,835,033	0	43,835,033	6.65
7/10/13	Re-export program credit exchange	51,322	17,090	6,871,428	0	6,871,428	6.69
7/31/13	Feedstock flexibility program (FFP)	7,118	7,118	3,587,220	854,100	2,733,120	19.20
8/30/13	Re-export program credit exchange	154,193	56,712	23,413,237	0	23,413,237	7.59
9/19/13	Re-export program credit exchange	72,572	28,663	11,155,714	0	11,155,714	7.69
9/26/13	FFP	136,026	136,026	65,902,337	12,607,542	53,294,794	19.59
9/30/13	FFP	216,750	216,750	103,736,550	11,325,350	92,411,200	21.32
11/22/13	FFP and non-food use	79,750	79,750	33,198,950	8,197,450	25,001,500	15.67
12/13/13	Total	1,047,490	642,681	291,700,469	32,984,442	258,716,027	12.35

Source: USDA, Farm Service Agency, *Sugar and Sweeteners Outlook*, January 2014.

DOMESTIC LIKE PRODUCT ISSUES

In the preliminary phase of these investigations, the Commission defined a single domestic like product that was coextensive with the scope of the investigations.[70] The petitioners sought a single domestic like product encompassing all types of sugar described in the scope definition, including both raw and refined sugar, whether derived from sugarcane or sugar beets. They also argued that the Commission should not include high fructose corn syrup ("HFCS") within the domestic like product. Respondent importer Diazteca argued that the Commission should define separate like products corresponding to raw cane sugar, refined cane sugar, and refined beet sugar. The Government of Mexico argued that the Commission should include HFCS within the domestic like product definition.[71]

The Commission found that the evidence pertaining the Commission's semi-finished product factors supported the inclusion of raw and refined cane sugar within the same domestic like product definition. It found that raw sugar is dedicated to refined sugar production, with no separate market for raw sugar; both raw and refined sugar consist of sucrose, with physical differences determined by the degree of processing; and the value added through raw cane sugar refining appears moderate, although the process is complex and capital-intensive. The Commission therefore included both raw and refined cane sugar in the same domestic like product.[72]

The Commission also found that both refined cane sugar and refined beet sugar should be included in the same domestic like product. It explained that refined cane sugar and refined beet sugar are similar with respect to physical characteristics and uses, interchangeability, channels of distribution, producer and customer perceptions, and price. Although refined cane sugar and refined beet sugar are produced in separate facilities with separate employees, the processes used to produce them are similar.[73]

Lastly, the Commission found that a clear dividing line separated sugar from HFCS, and did not include HFCS in the domestic like product. Although sugar and HFCS share general physical characteristics and uses, the Commission explained certain key physical differences between sugar and HFCS cause each product to be favored for specific applications, thereby limiting their practical interchangeability. In this regard, the Commission observed that only soft drink producers have fully switched from sugar to HFCS, despite the historically lower price of HFCS than sugar, indicating that customers and producers perceive sugar and HFCS to be

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[70] *Sugar from Mexico*, Investigation Nos. 701-TA-513 and 731-TA-1249 (Preliminary), USITC Publication 4467, May 2014, p. 14.

[71] *Sugar from Mexico*, Investigation Nos. 701-TA-513 and 731-TA-1249 (Preliminary), USITC Publication 4467, May 2014, p. 8.

[72] *Sugar from Mexico*, Investigation Nos. 701-TA-513 and 731-TA-1249 (Preliminary), USITC Publication 4467, May 2014, p. 13.

[73] *Sugar from Mexico*, Investigation Nos. 701-TA-513 and 731-TA-1249 (Preliminary), USITC Publication 4467, May 2014, p. 11.

different products. The Commission also noted that sugar and HFCS are produced in separate manufacturing facilities using different employees and production processes. [74]

In these final phase investigations, the petitioners support the like product definition adopted in the preliminary determination, stating that the Commission should again find one domestic like product coterminous with the scope of the investigation established by the Department of Commerce — which includes sugar derived from sugar cane or beets, whether raw or semirefined or refined and includes brown sugar, liquid sugar, organic raw and organic refined sugar.[75] The Mexican Sugar Chamber state that the Commission should consider whether refined sugar and raw/estandar sugar constitute separate like products.[76] They maintain that refined sugar (not for further refining) is consumed directly by industrial users or consumers, whereas raw/estandar sugar (for use in further refining) is further processed by refiners. Mexican respondents also maintain that the two products are not interchangeable, nor are they produced in the same manufacturing facilities. Mexican respondents stated that they are not perceived as the same or interchangeable products by producers and consumers. Finally, pricing for refined sugar is generally higher than that for raw/estandar sugar.[77] In addition, they urged the Commission to consider whether HFCS should be a part of the like product definition.[78]

Raw sugar and refined sugar

In a semi-finished products analysis, the Commission examines the following: (1) the significance and extent of the processes used to transform the upstream into the downstream articles; (2) whether the upstream article is dedicated to the production of the downstream article or has independent uses; (3) differences in the physical characteristics and functions of the upstream and downstream articles; (4) whether there are perceived to be separate markets for the upstream and downstream articles; and (5) differences in the costs or value of the vertically differentiated articles. Information regarding these five semi-finished product factors concerning raw and refined sugar are discussed below.

Extent of processes used to transform raw sugar into refined sugar

As discussed in the manufacturing processes section above, sugar cane refineries utilize a complex multi-step process to transform raw cane sugar into refined sugar, suitable for

[74] *Sugar from Mexico*, Investigation Nos. 701-TA-513 and 731-TA-1249 (Preliminary), USITC Publication 4467, May 2014, p. 14.

[75] Petitioners' prehearing brief, September 4, 2015, p. 11.

[76] Mexican Sugar Chamber's Comments on Draft Questionnaires, December 15, 2014, p. 1.

[77] Mexican Sugar Chamber's Comments on Draft Questionnaires, December 15, 2014, p. 2.

[78] Mexican Sugar Chamber's Comments on Draft Questionnaires, December 15, 2014, p. 2.

human consumption.[79] Raw sugar is sugar that has a sucrose content by weight in a dry state that corresponds to a polarimeter reading of 99.2 to 99.6 degrees. Cane refineries further process the raw sugar through melting, filtering, evaporating, and centrifuging, leaving behind refined cane sugar with a polarimeter reading above 99.9 degrees.

Dedication for use

All raw sugar is used as the main input in the production of refined cane sugar.

Differences in physical characteristics and functions

Both raw and refined cane sugar are composed of sucrose. Raw sugar typically has a sucrose content by weight in a dry state that corresponds to a polarimeter reading of less than 99.5 degrees, while refined sugar is at least 99.9 degrees. While the HTSUS defines raw sugar as less than 99.5 degrees, the sugar industry generally considers sugar requiring further processing for human consumption to be "raw sugar" and sugar as that requiring no further processing for human consumption to be "refined sugar," regardless of the polarization value.

Separate markets

All raw cane sugar sold in the United States is sold to refineries for further processing because the FDA does not allow raw sugar to be sold for human consumption.

Differences in the costs or value

Further information concerning the differences in the costs or value of raw and refined sugar can be found in Parts III and VI. The unit value of U.S. commercial shipments of raw sugar in 2011/12-13/14 was between $*** and $*** per short ton raw value, while the unit value for refined sugar was between $*** and $*** per short ton raw value.

HFCS and sugar

Although 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, the Commission determines what domestic product is like the imported articles Commerce has identified. The Commission may, where appropriate, include domestic articles in the domestic like product in addition to those described in the scope. The Commission's decision regarding the appropriate domestic product(s) that are "like" the subject imported product is based on a number of factors including: (1) physical characteristics and uses; (2) common manufacturing facilities and

[79] Sugar beets similarly go through a multi-step process, although refined sugar produced from sugar beets is done in a continuous process within the same manufacturing facility.

production employees; (3) interchangeability; (4) customer and producer perceptions; (5) channels of distribution; and (6) price. Information regarding these six factors concerning HFCS and sugar are discussed below.

The Commission asked all U.S. sugar producers, U.S. HFCS producers, U.S. importers, U.S. purchasers, and foreign producers to compare refined sugar and HFCS. Their responses are summarized below and a tabulation of the responses is presented in table I-7.

Characteristics and uses

Firms were asked to describe the differences and similarities in the physical characteristics and end uses between refined sugar and HFCS. Many firms noted that while HFCS and sugar have different physical characteristics, both can be used as a sweetener in a number of food and beverage applications. HFCS is a liquid product, while sugar is dry. Crystalline sugar (sucrose) consists primarily of glucose and fructose molecules joined by a covalent bond. HFCS also consists primarily of fructose and glucose, but does not contain a covalent bond; rather it consists of an unbound blend of glucose and fructose molecules in a free state in liquid form. Some firms noted that sugar can be liquefied into a syrup by dissolving it in water, and can be split into fructose and glucose syrup. This is called invert sugar and has the exact same functionality as HFCS.

In terms of end uses, firms noted that the comparability of sugar and HFCS usually depends on the application. HFCS competes with sugar in certain applications such as carbonated beverages, yeast raised bread, and syrups. In other applications, like chocolate, dry mixes, certain other confections, many frozen foods, cereals, tabletop usage and applications where labeling issues are important, HFCS may not be a good substitute for sugar.

Table I-7

Comparability of sugar and HFCS

Comparability Item	Number of firms reporting				
	Fully	Mostly	Somewhat	Not at all	N/A or no familiarity
Characteristics and uses:					
U.S. sugar producers	0	3	10	4	2
U.S. HFCS producers	0	0	5	0	0
U.S. importers	0	1	7	0	5
U.S. purchasers	0	2	14	7	7
Foreign producers	2	12	2	0	1
All firms	2	18	38	11	15
Interchangeability:					
U.S. sugar producers	0	4	12	2	2
U.S. HFCS producers	0	0	5	0	0
U.S. importers	0	1	7	0	5
U.S. purchasers	0	1	15	7	7
Foreign producers	2	12	2	0	0
All firms	2	18	41	9	14
Manufacturing:					
U.S. sugar producers	0	0	1	14	4
U.S. HFCS producers	0	0	3	1	1
U.S. importers	0	0	1	5	7
U.S. purchasers	0	2	1	12	13
Foreign producers	0	0	0	14	2
All firms	0	2	6	46	27
Channels of distribution:					
U.S. sugar producers	0	1	14	0	4
U.S. HFCS producers	0	0	3	2	0
U.S. importers	1	0	6	0	6
U.S. purchasers	3	6	9	1	10
Foreign producers	1	0	15	0	0
All firms	5	7	47	3	20
Customer and producer perceptions:					
U.S. sugar producers	0	0	12	4	3
U.S. HFCS producers	0	0	5	0	0
U.S. importers	0	1	6	1	5
U.S. purchasers	0	2	12	9	6
Foreign producers	13	0	2	1	0
All firms	13	3	37	15	14
Price:					
U.S. sugar producers	1	0	7	5	5
U.S. HFCS producers	0	0	2	3	0
U.S. importers	1	0	3	2	6
U.S. purchasers	1	1	4	12	10
Foreign producers	1	1	0	12	1
All firms	4	2	16	34	22

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

Interchangeability

Most firms generally agreed that HFCS and sugar are only interchangeable in certain industrial applications. HFCS is preferred for some soft drinks and some soft bakery goods, while sugar is typically preferred for frozen and other baked goods. One purchaser indicated that HFCS is only partially interchangeable for ice cream since ice cream needs to have sugar in the formula, while several foreign producers noted that HFCS and cane sugar are fully interchangeable in the manufacture of beverages, sodas, syrups and ice cream. Many firms stated that sugar and HFCS are not interchangeable for household use. American Crystal Sugar noted that most sodas in the United States are sweetened with HFCS while sodas sweetened with sugar are a niche market. It does not consider soda sweetened with sugar to be a growing market.[80]

Manufacturing

Sugar and HFCS are produced in separate manufacturing facilities with different employees. The production process of the sweeteners is completely different, and the machinery and technology used is also different. Sugar refining involves the extraction of sucrose from cane or beets, while HFCS involves the transformation of corn starch to fructose at the molecular level.

Channels of distribution

Many firms reported that channels of distribution for HFCS and sugar were similar for industrial uses in beverages, sodas syrups and ice cream. However, HFCS is not generally sold for consumer use, while sugar is sold at the retail level for direct consumption.

Customer and producer perceptions

Firms commented on general consumer perceptions of sugar and HFCS, noting while both products are caloric sweeteners, some consumers perceive HFCS to be less natural than sugar. Other firms noted that because sugar and HFCS have somewhat different uses, customer and producer perceptions differ somewhat. Specifically, producers and customers perceive that sugar and HFCS differ in terms of their functional applications and end uses because HFCS is predominantly used as the lowest cost sweetener by the U.S. beverage industry, while sugar is predominantly used in other applications, such as baking. In addition, consumers would not consider using HFCS as a table top sweetener or in their kitchens.

Many foreign producers opined, however, that HFCS and cane sugar are fully comparable for consumers because they cannot discern if a beverage or an ice cream contains

[80] Hearing transcript, pp. 148-149 (Berg).

sugar or HFCS or both products in any proportion. Once in its final use, they noted, the shelf life of products manufactured with HFCS or cane sugar is very similar.

Price

Most firms noted that HFCS generally sells at a lower price than sugar. American Crystal Sugar noted that it would be an expensive endeavor for the major beverage manufacturers to switch from HFCS to sugar in the manufacture of sodas.[81] Some firms noted that the price varies depending on the price of corn and sugar. Both have different production cost drivers and HFCS has lower raw material input costs. This results in different pricing for each product.

The Commission issued U.S. HFCS producer questionnaires to five firms believed to produce HFCS. All firms, representing all known HFCS production in the United States, provided useable data on their HFCS operations. A summary of data obtained from these producers are presented in Appendix D.

[81] Hearing transcript, p. 149 (Berg).

PART II: CONDITIONS OF COMPETITION IN THE U.S. MARKET[1]

U.S. AND GLOBAL MARKET CHARACTERISTICS

Sugar is a basic food item consumed throughout the world. There are a large number of sugar-producing countries, although production is somewhat concentrated. Cane sugar dominates world production of sugar, accounting for about 80 percent of the annual total in most years, and the remaining 20 percent is derived from beets. Brazil and India are the primary producers of cane sugar, and the EU, China, and the United States are the leading producers of beet sugar (see Part VII).

The United States is a major, although not the leading, producer, importer, and consumer of sugar; U.S. producers export relatively little sugar. Based on data gathered in these investigations, apparent U.S. consumption of sugar rose *** percent from crop year 2011/12 to crop year 2012/13, and then remained nearly unchanged in crop year 2013/14. USDA estimates that U.S. sugar use in food in the 2015/16 crop year will be slightly above the USDA's estimated level in the 2014/15 crop year, but still slightly below the level in the 2013/14 crop year.[2]

In the United States, cane growers supply cane to millers for conversion into raw sugar, which is then converted into refined sugar by processors. Processors also convert sugar beets into refined sugar. Processors may be owned or partially owned by growers. While cane millers' and beet processors' allotments under the U.S. sugar program limit their individual sales volumes in a given year, processors, including (but not limited to) processors partially owned by U.S. growers and/or millers, can process U.S. raw sugar, imported raw sugar from tariff-rate quota countries or Mexico, or imported estandar from Mexico.[3] Additionally, processors can still compete with each other on price, and unsold sugar will go into storage. One processor described processors as competing "intensely" with each other.[4]

U.S. PURCHASERS

The Commission received 31 usable questionnaire responses from firms that bought sugar during October 2011-September 2014.[5] Purchaser *** is ***. Purchaser *** is related to

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[1] ***.

[2] *Sugar and Sweeteners Outlook*, USDA Economic Research Services, May 18, 2015.

[3] See hearing transcript, p. 34 (Snyder), p. 38 (Buker), and p. 42 (O'Malley). Refiners that do not have vertically-integrated milling operations are called "destination refiners." These refiners typically import raw sugar in order to produce refined sugar because they do not have sufficient access to domestically-produced raw sugar. Hearing transcript, p. 64 (Gorrell).

[4] Hearing transcript, pp. 176-77 (Berg) and posthearing brief of Sweetener Users Association and Barry Callebaut, p. 12.

[5] Several purchasers (including ***) indicated that they did not know the source of their sugar purchases, or had purchased refined sugar and did not know the source of the feedstock (without checking with their supplier). Subject to that qualification, all purchasers reported purchasing domestic

(*continued*...)

importer ***. Purchasers reported establishment locations across the United States, including in California, Illinois, Minnesota, Nebraska, New York, Puerto Rico, Tennessee, and Texas.

The largest responding purchaser was ***, *** that reported 2013/14 crop year purchases representing *** percent of all purchases reported in these investigations. No other purchaser's share exceeded 9 percent of reported purchases. Other large purchasers included ***. Purchasers' customers spanned several levels of the food production chain, with distributors selling to retailers and food producers, while retailers and food producers sold to individuals and businesses.

Twenty responding purchasers described themselves as industrial end users, five as distributors, four as retailers, one (***) as a refiner, one as a liquid sugar producer, and one as a repackager. Five distributor or repackager purchasers[6] (***) compete for sales to their customers with the manufacturers or importers from which they purchase sugar, but two (***) indicated that they do not. *** stated that there is no exclusivity in the U.S. sugar market. *** described its ***. *** described the U.S. sugar market as highly competitive, with competition mostly based on price but also sometimes on service.

Twenty-three purchasers reported purchasing only refined sugar, one (***) reported purchasing only raw sugar, and seven (***) reported purchasing both raw and refined sugar.

CHANNELS OF DISTRIBUTION

In the United States, sugar is commonly used in industrial food applications, including the manufacture of baked goods, ice cream, confections, and beverages, as well as for direct consumer use. U.S. producers sold almost *** of their sales to industrial end users and split the bulk of their remaining sales to grocery chains and distributors, as shown in table II-1. In the 2012/13 and 2013/14 crop years, U.S. importers sold most of their sugar from Mexico to industrial end users.

Table II-1
Sugar: U.S. producers' and U.S. importers' channels of distribution, crop years 2011/12 through 2013/14

* * * * * * *

Geographic distribution

Nine of 22 responding U.S. producers and 3 of 11 importers reported selling to all regions (table II-2). U.S. producers shipped about 69 percent of their sales between 101 and 1,000 miles of their U.S. point of shipment, about 14 percent of their sales less than 101 miles, and about 17 percent of their sales over 1,000 miles. Importers shipped just over half of their

(…*continued*)
sugar. Ten purchasers reported purchasing sugar from Mexico. Nine purchasers reported purchases from nonsubject countries, including Belgium, Brazil, Canada, Central American countries, Paraguay, and South Africa.

[6] Including ***.

sales between 101 and 1,000 miles of their U.S. point of shipment and approximately 32 percent of their sales within 100 miles of their U.S. point of shipment. At the hearing, purchaser Just Born stated that due to higher transportation costs, imports of Mexican sugar do not compete with U.S. sugar in the Northeast.[7]

Table II-2
Sugar: Geographic market areas in the United States served by U.S. producers and importers, by number of responding firms

Region	U.S. producers	U.S. imports from Mexico
Northeast	15	6
Midwest	13	7
Southeast	17	8
Central Southwest	18	8
Mountains	12	4
Pacific Coast	12	7
Other[1]	4	1
Present in all continental regions	9	3
Total responding	22	11

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

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

SUPPLY AND DEMAND CONSIDERATIONS

U.S. supply

Domestic production

Based on available information, U.S. producers of sugar have the ability to respond to changes in demand with low-to-moderate changes in the quantity of shipments of U.S.-produced sugar to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of some capacity and some inventories, constrained by the absence of export markets or production of alternative products. The regulated nature of the sugar industry limits the flexibility of the U.S. producers in adjusting output in response to price changes. While there are no controls on the amount of sugar produced, sales by individual U.S. producers are limited by marketing allotments (see Part I) that specify the amount of sugar that they may sell during a given crop year.[8] Additionally, the availability of raw sugar and/or sugar beets constrain U.S. production of refined sugar.

[7] Hearing transcript, p. 191 (Jones).

[8] However, the allotments are not always filled. See petitioners' posthearing brief, responses to written questions, p. 4, and posthearing brief of Sweetener Users Association and Barry Callebaut, exhibit 1, pp. 19-20.

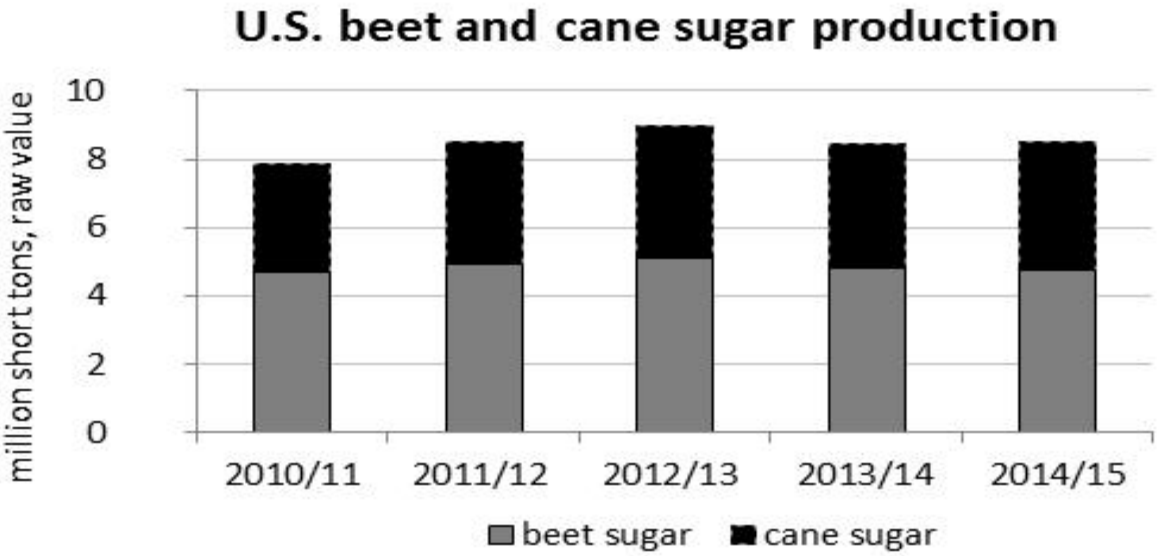
Industry capacity

Domestic refined sugar capacity utilization remained above *** percent during crop years 2011/12 through 2013/14. This moderate-to-high level of capacity utilization suggests that U.S. processors and refiners may have some capacity to increase production of sugar in response to an increase in prices, assuming they have access to sufficient raw cane sugar or sugar beets.

Petitioners described growers, refiners, and millers with "no choice" but to sell their product into the market, because of limited ability to change capacity quickly.[9] On the other hand, the Sweetener Users Association described growers as having the ability to adjust supply annually. It added that U.S. acreage planted had risen by 2012/2013 because of earlier higher prices. [10] It also stated that U.S. growers had achieved high productivity gains and could grow more sugar on fewer acres due to "a fabulous job of controlling their costs."[11]

Historically, U.S. sugar production is somewhat higher for beet sugar than for cane sugar. Figure II-1 shows U.S. sugar supply divided into beet and cane production.

Figure II-1
Sugar: U.S. beet and cane production, 2010/11 crop year through 2014/15 crop year



Source: ERS/USDA

[9] Hearing transcript, pp. 54 (Hillman) and p. 84 (Berg).
[10] Hearing transcript, pp. 200-201 (Earley).
[11] Hearing transcript, p. 249 (Earley).

Alternative markets

U.S. refiners and processors generally exported less than *** percent of total shipments, indicating that U.S. producers have almost no ability to shift shipments between the U.S. market and other markets in response to price changes. Additionally, Canada has maintained antidumping duties on U.S. sugar since the 1990s.[12]

Inventory levels

U.S. processors' and refiners' inventories were *** percent of their total shipments in 2013/14, down somewhat from the previous two crop years. These inventory levels suggest that U.S. producers may have some limited ability to respond to changes in demand with changes in the quantity shipped from inventories.

The USDA estimates that ending stocks (the stock of sugar left over from the past crop year) will fall from the 2013/14 crop year through the 2015/16 crop year, resulting in a gradual decline in the U.S. sugar industry's stocks-to-use ratio from 2013/14 to 2015/16.[13]

Production alternatives

All responding U.S. producers stated that they could not switch production from sugar to other products.

Supply constraints[14]

Some producers and purchasers indicated that they had experienced at least some recent inability to supply or obtain U.S.-produced sugar within a desired timeframe. While 13 of 21 responding U.S. producers reported not having refused, declined, or been unable to supply sugar since October 1, 2011, eight reported that they had. These eight U.S. producers cited issues such as refiners delaying raw sugar shipments due to excess sugar, limited production capacity at *** due to ***, drought leading to lower acreage planted, rail service issues, or an inability to meet sales demand during initial startup and, periodically, due to mechanical issues in production. Additionally, *** stated that since the filing of the petition in these investigations, it has had limited new sales due to uncertainty over the supply of raw sugar.

Purchasers also identified various supply issues. Purchaser *** described *** as being unable to supply sugar ***, even though it had more sugar under annual contract with the firm. *** described *** as "not an infrequent occurrence." Similarly, *** described suppliers as having limited ability to supply above annual contracts. *** stated that it has had multiple

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[12] Hearing transcript, p. 89 (Berg).

[13] *Sugar and Sweeteners Outlook*, USDA Economic Research Services, May 18, 2015.

[14] Eighteen purchasers indicated that no firm had refused, declined, or been unable to supply sugar to them since October 1, 2011. However, eleven reported that one or more firms had done so.

situations in which domestic suppliers had been unable to meet commitments in a timely fashion.[15]

Additionally, three purchasers described railroad transport issues, sometimes in combination with supply shortages at the end of crop years, as creating difficulties for them in securing supplies of sugar. *** described railroad capacity constraints stemming from increased rail system demand from the Bakken oil fields in North Dakota.

Subject imports from Mexico[16]

Based on available information, producers of sugar from Mexico have the ability to respond to changes in demand with moderate changes in the quantity of shipments of sugar to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the existence of some excess capacity, some inventories and some alternative markets, constrained by a lack of alternative products.

Industry capacity

Mexican capacity utilization was 78.4 percent in the 2013/14 crop year, down from 90.1 percent in 2012/13. This moderate-to-high level of capacity utilization suggests that Mexican producers may have some capacity to increase production of sugar in response to an increase in prices. Petitioners described Mexican producers as increasing production (in part due to subsidies from the Government of Mexico) from 5.6 million tons in crop year 2011/12 to levels over 7 million tons in subsequent years, and USDA has forecast that Mexican production will decline in 2014/15 and return to 2013/14 levels (over 7 million tons) in 2015/16.[17] [18]

Mexican production consists of both fully refined sugar and estandar (see Part I). The Sweetener User Association indicated that about 30 percent of Mexican sugar is fully refined, and the rest is estandar, of various degrees of purity.[19]

In 2015, the Government of Mexico announced that it will privatize the last nine sugar mills that it owns - mills that account for a quarter of Mexican sugar production - in a process described as "designed to ensure balanced output of refined and standard sugar." In June 2015,

[15] *** stated that while it had not experienced any difficulties securing sugar since October 2011, it had faced a "severe" supply shortage in 2005 due to Hurricane Katrina and ***. It described securing Mexican sugar over 2005-2009 in response to this shortage.

[16] The Commission received 17 questionnaire responses from Mexican producers. These firms' exports to the United States accounted for 97.8 percent of U.S. imports of sugar from Mexico during the 2013/14 crop year.

[17] Prehearing brief of the Sweetener Users Association and Barry Callebaut, p. 51.

[18] Hearing transcript, p. 52 (Hillman). See also posthearing brief of petitioners, p. 1.

[19] Hearing transcript, p. 204 (Earley).

four of the nine mills were sold.[20] The Government of Mexico had expropriated 27 sugar mills in 2001 due to their failing financial health.[21]

Alternative markets

Most (generally more than 60 percent) Mexican producers' shipments go to their home market, with the United States being Mexican producers' largest export market. Shipments to other export markets represented 12.4 percent of Mexican producers' shipments in 2013/14. These data indicate that Mexican producers may have some ability to shift shipments between the U.S. market and other export markets in response to price changes.

The Sweetener Users Association and Barry Callebaut described the Government of Mexico as engaging in actions that demonstrate its commitment to "stable trade" in sugar between the United States and Mexico. They stated that examples of this commitment include the Government of Mexico working to increase shipments of refined sugar to the United States after Hurricane Katrina and after the explosion of Imperial's refinery, as well as the Government of Mexico allegedly diverting 700,000 metric tons of Mexican-produced sugar away from export to the U.S. market in 2013.[22] Petitioners stated that there was no binding agreement, and that sugar discussions between the Governments of the United States and Mexico do not cover U.S. sugar regulations.[23]

On the other hand, Imperial described Mexican refined sugar as having increased after Hurricane Katrina and *** but having remained at those levels since, even though U.S. capacity has been restored.[24]

Inventory levels

Mexican producers' inventories as a share of total shipments decreased to 12.4 percent in 2013/14 from 21.7 percent in 2012/13. This inventory level suggests that Mexican producers may have some ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

All responding Mexican producers stated that they could not switch production from sugar to other products.

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[20] See "Mexico sells four state sugar mills, five remain unsold," *Reuters,* June 12, 2015.

[21] See "Mexico to tender 9 state-held sugar mills in late March – source." *Reuters*, March 9, 2015.

[22] Prehearing brief of Sweetener Users Association and Barry Callebaut, p. 9, hearing transcript, pp. 216-217 (Herrmann), and posthearing brief ofSweetener Users Association and Barry Callebaut, p. 3 and exhibit 1, p. 71..

[23] Hearing transcript, p. 120 (Hillman), and petitioners' posthearing brief, answers to hearing questions, p. 39, and exhibits 9 and 10.

[24] Prehearing brief of Imperial, p. 3 and p. 6.

Supply constraints[25]

Four of 13 importers reported they have refused, declined, or been unable to supply sugar since October 1, 2011. Importers cited limited production capacity at the ***, allocations in 2011 and 2012 due to supply shortages, and aggressive forward pricing from beet sugar producers against a lack of forward pricing ability for sales of Mexican sugar.[26]

The Countervailing Duty Suspension Agreement imposes a quota on U.S. imports of Mexican sugar, which is calculated based on U.S. needs. The USDA estimates that Mexico will export 1,526 million STRV in 2014/15 and forecasts exports of 2,116 million STRV in 2015/16 to the United States.[27] Purchasers *** indicated that they had had difficulty purchasing sugar from Mexico after the imposition of provisional measures in these (related) antidumping and countervailing duty investigations.[28]

Nonsubject imports

American Crystal described the largest influence on the world sugar market as supply from Brazil. It added that minor drought conditions in Brazil along with a monsoon in India had contributed to high world prices before the period of investigation. However, it also added that the U.S. sugar market is insulated to a large extent from the world sugar market.[29] The Sweetener Users Association also attributed higher U.S. sugar prices at the beginning of the period of investigation to a world sugar shortage.[30]

Imports from all countries other than Mexico are regulated by U.S. sugar TRQs. The largest sources of nonsubject imports during 2010/11 to 2012/13 were Brazil, the Dominican Republic, the Philippines, and Guatemala. Combined, these countries accounted for 51 percent of nonsubject imports in 2013/14. The Sweetener Users Association described recent changes to U.S. law, as well as how the law was administered, as having restricted USDA's ability to increase TRQ imports, thus causing tighter U.S. supplies of sugar, over 2008-2011.[31]

Petitioners stated that the reason why some TRQ countries left their quotas unfilled in fiscal year 2013 was that Mexican sugar was competing in the U.S. market at much lower prices.[32] Petitioners described Mexican imports as pushing TRQ imports out of the U.S. market by competing with lower prices.[33] On the other hand, Sweetener Users Association and Barry

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[25] Seventeen purchasers indicated that no firm had refused, declined, or been unable to supply sugar to them since October 1, 2011. However, eleven did.

[26] Additionally, purchaser *** stated that ***.

[27] *Sugar and Sweeteners Outlook*, USDA Economic Research Services, May 18, 2015.

[28] Additionally, purchaser *** stated that importer *** did not have additional sugar available for purchase at the end of 2014, but *** did not indicate why *** did not.

[29] Hearing transcript, pp. 113-114 (Berg).

[30] Hearing transcript, p. 203 (Earley).

[31] Hearing transcript, pp. 198-203 and pp. 235-236 (Earley).

[32] Hearing transcript, pp. 44-45, (O'Malley).

[33] Hearing transcript, p. 75 (Cannon).

Callebaut described TRQ imports as being diverted away from the U.S. market to more profitable markets over the period of investigation.[34]

New suppliers

Sixteen purchasers indicated that they were not aware of any new suppliers in the U.S. market since October 2011, while fifteen indicated that they were. New suppliers listed included Blackhive, CSC Sugar, SucroCan, National Sugar Marketing,[35] and Louis Dreyfus (***).

Product range, mix, and marketing

Fifteen producers and nine importers stated that there had not been any significant changes in the product range, product mix, or marketing of sugar since October 2011. Seven producers and four importers did report such changes, with most producers citing the impact of Mexican sugar in the U.S. market. Producer *** described the market for evaporated cane juice as disappearing except in ***, whereas importer *** identified the introduction of evaporated cane juice as an alternative to refined sugar. *** cited the marketing of liquid sugar with color and the push for non-GMO (genetically-modified organism) products as changes to the U.S. market.

U.S. demand

Based on available information, the overall demand for sugar is likely to experience small changes in response to changes in price. The main contributing factor is the small cost share of sugar in most of its end-use products.

End uses

U.S. demand for sugar depends on the demand for U.S.-produced sugar-containing products. Reported end uses include bakery products, beverages, confectionary products, food products, and candy.

As might be expected from a product with a wide variety of end uses, purchasers reported a wide variety of answers to how demand for their final products incorporating sugar had changed since October 1, 2011. Six purchasers reported that such demand had increased, four reported that it had not changed, seven reported that it had fluctuated, and five reported that it had decreased. Sixteen purchasers reported that changes in demand for their products produced from sugar had changed their demand for sugar, while six reported that it had not. Those sixteen generally described demand for their particular products as driving their demand for sugar. *** indicated that demand for *** had increased while demand for many of its other

[34] Posthearing brief of Sweetener Users Association and Barry Callebaut, exhibit 1, p. 25 and p. 34.

[35] *** described National Sugar Marketing as a joint venture of Amalgamated Sugar and Sucden, selling refined beet sugar from Amalgamated Sugar and imported cane sugar from Sucden. See ***.

products had not. *** described decreased demand for finished food products leading to its decreased demand for sugar. *** stated that it had switched some of its product formulations from sugar to HFCS due to the cost of sugar.

Cost share

Sugar typically accounts for a small share of the cost of the downstream food products in which it is used, except for consumer sugar products, such as brown and granulated sugar, in which it accounts for a larger share of the final cost. Importers reported that cost shares for sugar used in beverages, chocolate, and other food products ranged from 1 to 15 percent of the cost of the end product. However, most producers and importers reported higher cost shares for brown sugar, granulated sugar, powdered sugar, repackaged sugar, and liquid sucrose, for which the sugar they supplied represented from 68 to 100 percent of share of the products. In the preliminary phase, petitioners stated that the cost of sugar is a small part of the cost of sugar-containing foods and other products that use sugar. Petitioners claim that the cost share of sugar in food products ranges from 1 to 11 percent, citing 2013 and 2015 American Sugar Alliance surveys of retail products.[36]

Purchasers reported that the cost share of sugar in various products was 3-6 percent for ice cream, 1-30 percent for beverages, *** percent for chocolate, *** percent for frosting, 4-45 percent for gum and confections, 1-20 percent for cereal, and *** for liquid sugar.
Some of the highest reported cost shares were for ***. Overall, purchasers listed 24 products with sugar cost shares of 1-10 percent, 12 products with sugar cost shares of 11-20 percent, and 13 products with sugar cost shares over 20 percent.

Business cycles

Producers, importers, and purchasers were asked if the U.S. sugar market were subject to business cycles and/or other conditions of competition distinctive to sugar, including trends in world sugar prices relative to U.S. prices, trends in refining capacity, trends in acreage planted, trends in the usage of GMO seeds, trends in the world's use of biofuels, and other distinctive conditions of competition. Two producers, one importer, and four purchasers answered that the sugar market was not subject to any business cycles, but a majority of firms answered that it was, as summarized below.

[36] Petitioners' postconference brief, Part II, Answers to Commission Staff Questions, p. 2. The 2015 survey showed a maximum cost share of less than 8 percent. Petitioners' prehearing brief, p. 16. The Sweetener Users Association and Barry Callebaut stated that these estimates are based on the final retail price of the products, and not the cost of the downstream product to the downstream producer. Posthearing brief of the Sweetener Users Association and Barry Callebaut, exhibit 1, p. 66.

General business cycles

Nineteen producers, 10 importers, and 21 purchasers stated that the U.S. sugar market is subject to business cycles. Purchasers described the sugar crop cycle as having a harvest usually in September-October, with purchaser *** adding that sugar farmers may need cash during harvest season and thus may liquidate their inventories. However, purchaser *** indicated that if the harvest is poor, prices will rise at harvest time. Importer *** stated that the U.S. and Mexican sugar harvest times are different. *** stated that weather can have a large impact on sugar supply. Other firms described sugar demand as rising somewhat in colder months (due to more baking) and/or during holiday periods, including in December and around Easter. *** added that sugar demand for beverages may rise more in summer months. Importer *** indicated that while U.S. beet sugar can be priced 2-3 years forward, Mexican sugar cannot be, and so Mexican sugar prices are more responsive to seasonal market dynamics.

Trends in world sugar prices

Eleven producers, six importers, and twenty-one purchasers described trends in world sugar prices as a condition of competition in the U.S. sugar market. Many firms noted that the U.S. price of sugar is usually higher than the world price of sugar, and a smaller number described U.S. prices as following the same trends as world prices (but at a higher level). *** stated that the world experienced an extreme sugar shortage in 2010, with supply rising since then. They added that the typical U.S. price premium above the world price of sugar was based on factors specific to the U.S. and Mexican sugar markets. Multiple purchasers indicated that while U.S. sugar prices cannot go below the U.S. government set loan rate, they follow the same general trends as world prices, albeit at a higher level. See Part V for more information on U.S. and world sugar prices. Multiple producers as well as *** also noted that if U.S. prices are not sufficiently higher than world prices, or if there are world sugar shortages, then there are fewer imports of sugar. *** stated that production in Brazil and India had a large impact on world sugar prices.

The Sweetener Users Association and Barry Callebaut described the difference between the U.S. and world sugar prices as determining how much foreign sugar producers exported to the United States. The Sweetener Users Association and Barry Callebaut stated that when the U.S. and world sugar prices are close enough to be offset by transportation costs and the U.S. tariff-rate quota tariff on sugar, then exports to the United States decreased.[37]

Trends in refining capacity

Nine producers, 7 importers, and 21 purchasers indicated that trends in refining capacity are a condition of competition in the U.S. sugar market. Several producers and

[37] Prehearing brief of the Sweetener Users Association and Barry Callebaut, p. 23 and exhibit 11.

importer *** described U.S. sugar prices as rising when U.S. capacity was tight. *** described the *** as having had an impact on the U.S. market. Importer *** stated that U.S. producers' inefficient use of capacity could lead to higher prices. Purchasers had widely varying descriptions of trends in refining capacity since 2011. *** described U.S. refining capacity as tight or leading to lower sugar usage. *** described crop acreage plantings as restricted by refining capacity, and *** described U.S. refining capacity as decreasing. However, *** stated that U.S. refining capacity had increased with the opening of a new Louisiana Sugar refinery in Gramercy, LA, with *** adding that the new refining capacity had led to lower sugar prices. *** stated that the cycle of prices affecting capacity and capacity in turn affecting prices can take between 18 and 24 months.

Trends in acreage planted

Twelve producers, 5 importers, and 19 purchasers indicated that the U.S. sugar market is subject to trends associated with acreage of sugar crops planted. Several producers and most purchasers indicated that more crops planted meant lower U.S. prices. *** stated that acreage planted is mostly controlled by production allocations in the U.S. government's sugar program. *** described acreage planted as fairly steady from year to year, and *** stated that U.S. cane plantings are subject to land limitations. *** indicated that prices of sugar relative to other crops may lead farmers to plant fewer sugar crops, especially beets. *** described acreage devoted to sugar in the United States as fairly steady since 2009, but increasing 26 percent in Mexico over the same period.

Usage of GMO seeds

Two producers, 3 importers, and 16 purchasers indicated that the U.S. sugar market is subject to trends related to the use of genetically modified organism (GMO) seeds. Two producers, two importers, and five purchasers indicated that GMO beet sugar had led to higher crop yields for beet sugar, with varying effects from price stability to increased competitiveness with imports. ***.

Global use of biofuels

Four producers, 3 importers, and 14 purchasers indicated that the U.S. sugar market is subject to trends related to the world's use of biofuels. These firms usually indicated that biofuel use of sugar is concentrated in Brazil, and so some of these firms indicated that the use of sugar in biofuels has more of an impact on the world price than on the U.S. price. Nonetheless, two producers and several purchasers did note that the effect of sugar use in biofuels on the world price can substantially affect the U.S. price or availability of raw sugar. *** stated that Brazilian production of sugar for food (sucrose) had varied widely over recent years while its overall sugar production had been relatively stable. It concluded that ethanol production in Brazil was mostly a buffer against Brazilian sugar production fluctuations.

Other distinctive conditions

Thirteen producers, six importers, and twenty-three purchasers indicated that the U.S. sugar market is subject to other distinctive conditions of competition. Most of these firms described the U.S. sugar market as affected by weather changes and/or U.S. government policy. Notable weather changes named included hurricanes, including Hurricane Katrina (which *** described as causing a large price spike and supply shortage), and droughts. Firms also described government policies as affecting the U.S. sugar market, with *** stating that government policy that "shields" U.S. producers from import competition can cause shortages when the government does not make correct supply and demand forecasts. *** also described government forecast errors as potentially causing shortages. *** stated that in some countries in which the millers and growers are not integrated, production can vary widely from year to year, and can lead to government-sponsored export programs. Additionally, *** noted that plant explosions and other capacity changes can be a condition of competition in the U.S. sugar market. Other factors listed by firms included HFCS substitution, transportation issues, and currency movements.

Changes in business cycles or conditions of competition

Eighteen producers, 7 importers, and 20 purchasers indicated that there had been changes in the business cycles or conditions of competition for sugar since October 2011, while 2 producers, 5 importers, and 10 purchasers indicated that there had not been.

Firms noting a change in cycles described a wide range of changes, including fluctuations in the beet and cane crops, increased imports from Mexico (cited by 13 producers), new U.S. refining capacity, limited ability to set forward contracts, high sugar prices over 2010-2012, weather, and the filing of these investigations.

Demand trends

Most producers and importers, as well as a plurality of purchasers, reported an increase in U.S. demand for sugar since October 2011. They generally described the increase as small, and ascribed it to an increased U.S. population and consumer substitution away from products using HFCS. A majority of producers and importers, as well as a plurality of purchasers stated that demand had increased outside the U.S. market (table II-3).

Table II-3
Sugar: Firms' responses regarding U.S. demand and demand outside the United States

Item	Increase	No change	Decrease	Fluctuate
Demand in the United States				
U.S. producers	17	0	4	0
Importers	9	0	2	1
Purchasers	11	5	4	7
Demand outside the United States				
U.S. producers	13	0	2	4
Importers	9	0	1	0
Purchasers	10	5	2	2

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

U.S. demand trends

Among firms describing an increase in U.S. demand, fifteen producers, six importers, and three purchasers attributed the increase to U.S. population growth, with purchaser *** estimating that population growth drives a typical 1.0 to 1.5 percent annual increase in U.S. sugar consumption. Three producers, three importers, and four purchasers named greater demand for organic food and/or substitution away from HFCS as reasons for increased sugar demand. For example, purchaser *** stated that consumer preference for organic or non-GMO food has led to increased use of sugar over HFCS, which is "always" GMO.

Purchasers (and importer ***) often ascribed decreased or fluctuating U.S. demand for sugar to increasing consumer health concerns, which either lead to an absolute decrease in consumption or an increased substitution of low-calorie, natural sweeteners. Two purchasers that described fluctuating U.S. demand indicated that sugar was preferred over other sweeteners, such as HFCS, but *** described HFCS substitution for sugar as moderating U.S. sugar consumption growth. *** indicated that demand for beet sugar had decreased, but demand for cane sugar had increased.[38]

Foreign demand trends

Most firms reported increasing or stable foreign demand for sugar, and often described increased foreign demand as having the same drivers as increased U.S. demand, i.e., substitution away from HFCS and population growth. Importers *** estimated world demand growth in the range of 1 to 3 percent per year. Purchaser *** stated that more parts of the world are developing a taste for sugar. Purchasers ***, producer ***, and *** described increased demand from China, Asia, and/or other parts of the developing world.

*** stated that Mexican sugar demand had fallen due to substitution by HFCS and because of a Mexican soda tax. Similarly, petitioners stated that Mexican consumption fell from

[38] Producers describing decreased demand for sugar usually attributed the decrease to substitution away from U.S. sugar and toward Mexican sugar.

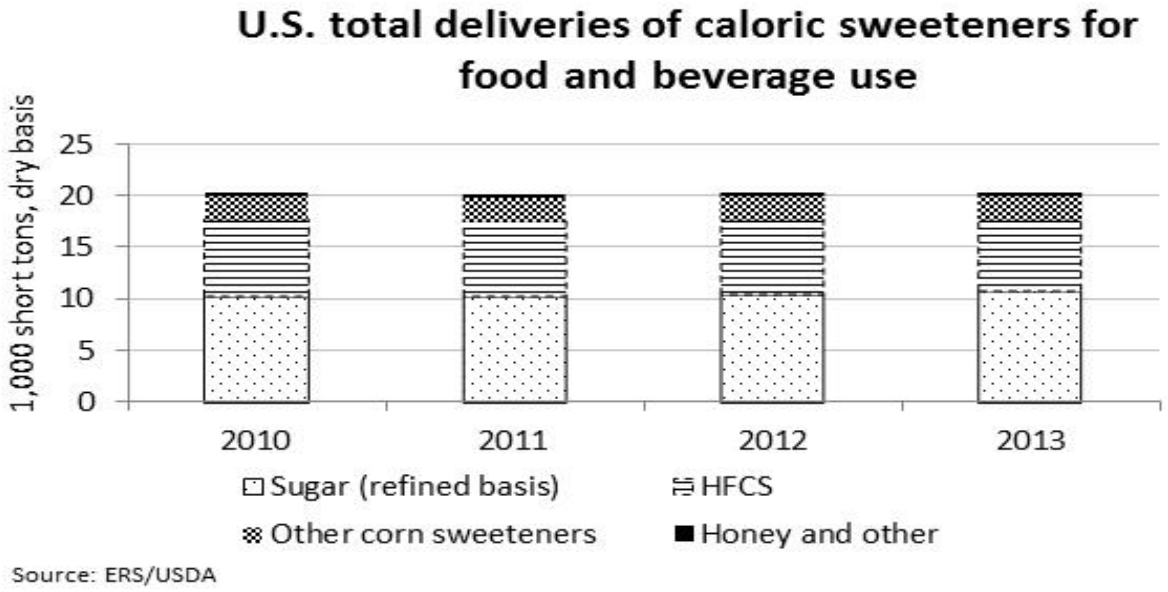
2012/13 to 2013/14.[39] However, The Sweetener Users Association and Barry Callebaut stated that USDA has forecast Mexican sugar consumption to rise nearly 10 percent from 2013/14 to 2015/16.[40]

Substitute products

Market participants offered mixed assessments of whether there are substitutes for sugars. Six U.S. producers, 6 importers, and 17 U.S. purchasers stated that there are no substitutes for sugar. On the other hand, 16 U.S. producers, 4 importers, and 13 purchasers indicated that there are substitutes for sugar, identifying HFCS above all others.

HFCS and sugar are the two largest sweeteners used in the U.S. food market (figure II-2; HFCS prices at figure II-3). There has been an ongoing public debate among health experts as to whether sugar or HFCS has more health risks. While in the past, consumers may have regarded HFCS as a preferable ingredient to sugar, there has been some shift in perceptions among the public to regarding sugar as less harmful to one's health than HFCS.[41]

Figure II-2
U.S. consumption of caloric sweeteners by type, 2010-2013



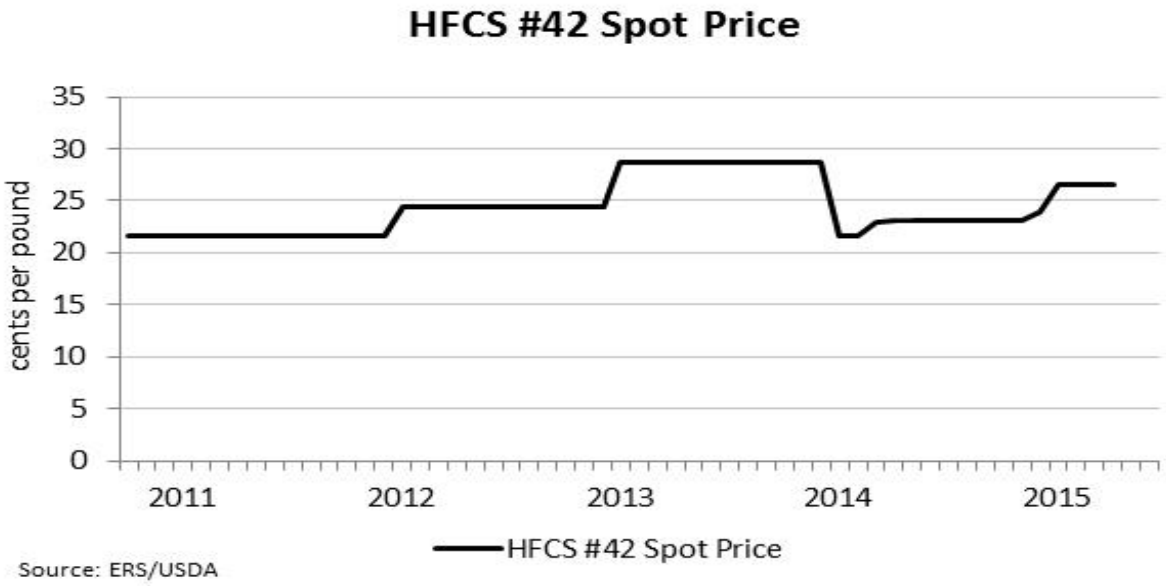
Source: ERS/USDA

[39] Petitioners' prehearing brief, p. 8.

[40] Prehearing brief of The Sweetener Users Association and Barry Callebaut, p. 56.

[41] See, for example, Hope Warshaw, "High-fructose corn syrup vs. sugar," *The Washington Post,* June 18, 2013; Kiera Butler, "Is Sugar Really Healthier than Corn Syrup?" *Mother Jones*, March 14, 2011; and Dr. Joseph Mercola, "Sugar May Be Bad But This Sweetener Is Far More Deadly," *The Huffington Post*, April 19, 2010.

Figure II-3
Price of HFCS, October 2010 to April 2015



Sixteen producers and five importers named HFCS as a substitute for sugar in numerous products, particularly beverages but also baked goods, dairy products, and other processed foods. (*** pointed out that HFCS is not sold for retail consumption.) Other substitutes named by producers and importers included both artificial sweeteners and natural sweeteners such as stevia, glucose, and dextrose. Firms reported these substitutes were used in a range of beverages and processed foods. However, fewer producers and importers named these products as substitutes than they did HFCS.

Among purchasers naming substitutes, twelve named HFCS as a substitute in numerous processed food products, including beverages, confections, ice cream, salad dressings, and tomato sauce. Purchasers also identified lactose, natural sweeteners (such as stevia and agave), artificial sweeteners (such as aspartame and acesulfame), dextrose, and dried glucose.

In the preliminary phase of these investigations, petitioners indicated that HFCS prices restrict the ability for sugar to regain the market share that it has lost to HFCS. They also indicated that there has been no significant substitution of HFCS or other sweeteners for sugar over the Commission's period of investigation.[42] In this final phase, U.S. Sugar elaborated that HFCS had taken all of the soft drink market from sugar in the 1970s, but had not taken other end use markets since then because it could not be used in some other applications. It continued that other countries might still use sugar in soft drinks, due to logistical issues of having sugar supply much closer than HFCS supply.[43]

[42] Petitioners' postconference brief, Part II, Answers to Commission Staff Questions, p. 3.

[43] Hearing transcript, p. 147 (Buker). American Crystal also described recent U.S. soda products made with sugar as only a small niche. Hearing transcript, p. 148 (Berg).

In final phase questionnaires, six producers (discussing 14 potential substitutes) and one importer (discussing 2 potential substitutes) indicated that changes in the price of sugar substitutes had not affected the price of sugar, while six producers (discussing 9 potential substitutes) and four importers (discussing 5 potential substitutes) stated that they had. Several producers noted that the price of sugar had fallen recently while the price of HFCS had risen. However, *** described HFCS as having affected the price of sugar both positively and negatively. Other producers noted that HFCS was less expensive than sugar, and that it had already displaced sugar for most of the soft drink industry. Producers and importers generally regarded artificial sweeteners as having little impact on sugar prices.

Six purchasers stated that changes in the price of HFCS had not affected the price of sugar, while three stated that they had. *** described switching from HFCS to sugar for its *** due to negative publicity surrounding HFCS. Similarly, *** described HFCS as a competitive substitute for sugar, and *** stated that substitution between sugar and HFCS has affected the price of sugar. It continued that substitution was easiest - even simply by wholesale replacement - in beverages and ***, and somewhat more difficult in baking applications due to the need for product reformulation. It added that substitution in *** has been of significant volumes. On the other hand, *** stated that sugar prices are determined only by the supply and demand for sugar itself. *** described HFCS as priced below sugar, and *** added that the price of HFCS tends not to affect the price of sugar.

Five purchasers indicated that changes in the price of other sugar substitutes had not affected the price of sugar, although *** stated that as the prices of stevia and agave fall, consumers tend to prefer those sweeteners to sugar.

SUBSTITUTABILITY ISSUES

The degree of substitution between domestic and imported sugar depends upon such factors as relative prices, quality (e.g., grade standards, reliability of supply, defect rates, etc.), and conditions of sale (e.g., price discounts/rebates, lead times between order and delivery dates, payment terms, product services, etc.). Available data show that most purchasers identified differences between U.S. and Mexican sugar, but nonetheless usually purchase sugar based on price. Staff believes that there is moderate-to-high degree of substitutability between domestically produced sugar and sugar imported from Mexico.

Lead times

Sugar is primarily sold from inventory. U.S. producers and importers reported that over three-fourths of their commercial shipments were sold from inventory.[44] For producers, lead-times for sales from inventory typically ranged from 1 to 11 days, although three reported lead times between 14 and 30 days. U.S. producers' commercial shipments that were produced-to-order had lead times of 3 to 28 days. U.S. importers' lead times for sales from U.S. inventory

[44] However, *** stated that while all of its sales are technically ***.

were generally 1 to 7 days and 15 to 60 days from Mexican inventory. Importers of Mexican sugar reported very small quantity of produced-to-order sales, and one importer reported that the lead time for such orders was *** days.

Knowledge of country sources

Thirty purchasers[45] indicated they had marketing/pricing knowledge of domestic product, 22 of Mexican product, and 10 of product from nonsubject countries. Nonsubject countries listed included Belgium, Brazil, Canada, Central American countries, and India.

As shown in table II-4, most purchasers always or usually make sugar purchasing decisions based on the producer, but most purchasers only sometimes or never make purchasing decisions based on the country of origin of the sugar. Most purchasers reported that their customers only sometimes or never make purchasing decisions based on the producer or country of origin of the sugar purchased. At least six purchasers reported that their suppliers' product must meet specifications or be approved, while others cited factors such as quality, price, service, availability, and reliability as reasons to base purchases on producer. *** noted that only certain producers provide "fair trade" or organic sugar.

Table II-4
Sugar: Purchasing decisions based on producer and country of origin

Purchaser/Customer Decision	Always	Usually	Sometimes	Never
Purchaser makes decision based on producer	12	6	7	6
Purchaser's customers make decision based on producer	1	3	11	8
Purchaser makes decision based on country	8	2	8	15
Purchaser's customers make decision based on country	1	1	15	8

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

Purchasers offered different reasons for making their purchasing decisions based on country of origin. *** reported that U.S. sugar regulations restrict their ability to purchase sugar from outside the United States and/or Mexico. *** stated that it purchased Mexican sugar because of supply disruptions (including from Hurricane Katrina in 2005) to the U.S. sugar supply, and added that only the availability of Mexican sugar had ***. *** indicated that they do not purchase sugar from some countries because of their own codes or sustainability rules. However, other purchasers, including *** indicated that they could purchase from any country if quality and/or price are satisfactory.

When asked why customers might prefer to purchase sugar from particular producers or countries, responding purchasers identified brand name preference, country-of-origin preference, and as social sustainability policies. *** stated that the number of customers having a country-of-origin preference is small.

[45] ***.

Factors affecting purchasing decisions

Purchasers were asked to rank the three most important factors they considered when purchasing sugar. The most often cited first-most important factor firms consider in their purchasing decisions for sugar were quality (12 firms), price/cost (12 firms),[46] and certification (5 firms) as shown in table II-5. Reliability, service, availability, and type of sugar were other factors named by at least one firm as one of the top three factors considered in purchasing sugar.

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

Factor	First	Second	Third	Total
Quality	12	10	2	24
Price/cost	12	7	8	27
Certification/qualification/meeting specs	5	0	1	6
Reliability	1	2	5	8
Service	1	3	2	6
Availability	0	3	7	10
Type of sugar	0	2	0	2
Other[1]	0	3	4	7

[1] Other factors include shipment period, meeting terms and conditions, and product range.

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

Twenty-two purchasers reported that they usually purchase the lowest-priced sugar available. Three indicated that they always did so, while five stated that they sometimes did, and two indicated that they never did.

Seventeen purchasers explained why they had purchased sugar from one country source although a comparable product was available from another country at a lower price. Several identified other factors such as availability, color, GMO issues, granulation, humidity content, meeting specifications, reliability, quality, and U.S. sugar quotas/duties. *** stated that Mexican sugar was competitive with the U.S. product, and so it had chosen the U.S.

[46] When asked what characteristics their firms considered when determining the quality of sugar, firms listed many factors including color, granulation, shelf-life, moisture, flavor, aroma, and texture. Purchasers also indicated that high-quality sugar should be free of non-sugar material and be able to pass a microbiological analysis for numerous organisms, including salmonella and molds. Few purchasers named differences between refined cane and refined beet sugar as a quality consideration, but at the hearing, purchaser Just Born stated that refined cane sugar works better than refined beet sugar in some of its candy applications. Hearing transcript, p. 190 (Jones). However, purchaser Adams and Brooks stated that it could use either refined cane or refined beet sugar. Hearing transcript, p. 194 (Brooks).

product for quality, availability, packaging, and transportation reasons. *** stated that it usually purchases sugar from U.S. producers on a forward basis, but that when it purchases from Mexico, it does so on a spot basis for a short period of time. *** stated that because Mexican sugar was outside the U.S. sugar quota system, it had made a decision to use it as an alternate source of supply in case of problems securing U.S. sugar.

Purchasers were asked if certain grades/types/sizes of sugar were available from only certain country sources. Fourteen answered yes, and 15 answered no. Of the purchasers answering yes, three cited organic sugar as only available from some country sources. Seven purchasers named estandar, blanco, and/or high-color (i.e., lower-polarity and less refined) sugar as products available only from Mexico. *** stated that pearl sugar is available only from Belgium. *** stated that it used domestic refined sugar for 95 percent of its applications because of its specification requirements.

Importance of specified purchase factors

Purchasers were asked to rate the importance of 15 factors in their purchasing decisions (table II-6). A large portion of purchasers rated availability, price, reliability of supply, product consistency, and quality meeting industry standards as very important. The only factors that a plurality of purchases did not name as very important were minimum quantity requirements, packaging, product range, and quality exceeding industry standards.

Table II-6
Sugar: Importance of purchase factors, as reported by U.S. purchasers, by factor

Factor	Very important	Somewhat important	Not important
Availability	29	2	0
Delivery terms	16	15	0
Delivery time	24	6	1
Discounts offered	13	10	8
Extension of credit	13	9	9
Minimum quantity requirements	4	10	17
Packaging	8	14	9
Price	30	1	0
Product consistency	28	3	0
Product range	5	16	10
Quality exceeds industry standards	7	17	7
Quality meets industry standards	27	2	2
Reliability of supply	29	2	0
Technical support/service	13	11	7
U.S. transportation costs	24	6	1

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

Supplier certification

Twenty-nine of 31 responding purchasers require their suppliers to become certified or qualified to sell sugar to their firm. Most purchasers reported that the time to qualify a new supplier ranged from 30 to 180 days. Only four purchasers reported certification times of less than 30 days, and one *** indicated that certification could take up to a year. Purchasers identified many factors that were involved in receiving certification, including quality, ability to meet HACCP, SEDEX, and/or FDA specifications,[47] reliability, responsible sourcing, credit worthiness, registration with the government in some form, third-party audits, and price or total delivered cost (named by three purchasers). Qualification may involve inspections of the suppliers' plants.

Twenty-five purchasers reported that no domestic or foreign supplier had failed in its attempt to qualify product, or had lost its approved status since October 2011. However, six did. *** stated that it did not qualify *** Mexican producers. *** stated that it did not qualify *** because ***. *** reported that *** lost its certification due to ***. *** reported that *** that meant those firms did not receive certification. *** indicated that it did not certify a Colombian producer.

Changes in purchasing patterns

Purchasers were asked about changes in their purchasing patterns from different sources since late 2011 (table II-7). Pluralities of responding purchasers reported constant purchases of U.S. product, increased purchases of Mexican product, and decreased purchases of nonsubject imports. Purchasers described a wide variety of reasons for purchasing pattern changes, including price and demand changes, acquisitions and divestments, and government actions, as discussed below.

Table II-7
Sugar: Changes in purchase patterns from U.S., subject, and nonsubject countries

Source of purchases	Did not purchase	Decreased	Increased	Constant	Fluctuated
United States	0	7	7	13	4
Mexico	13	3	6	2	2
Other	15	4	2	2	4

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

Purchasers reporting increased purchases of U.S. product cited increased demand, recent unavailability of Mexican sugar, or acquisitions of other firms. Purchases reporting

[47] HACCP stands for Hazard Analysis and Critical Control Points, an FDA food safety management system. See http://www.fda.gov/Food/GuidanceRegulation/HACCP/ downloaded May 29, 2015. SEDEX is a "collaborative platform for sharing ethical supply chain data." SEDEX also says that it is "not a standard setting body, code of conduct or certification." See http://www.sedexglobal.com/about-sedex/ downloaded May 22, 2015.

decreased purchases of U.S. product cited replacement with "cost-competitive" Mexican sugar, increased quality of Mexican sugar, requests for non-GMO sugar, and decreased demand for *** products or products using relatively more sugar. Purchasers reporting fluctuating purchases for U.S. sugar also cited reasons such as price and sales fluctuations. Both ***, while describing different purchasing patterns (fluctuating and decreasing respectively) also noted that product reformulations had had an impact on their purchasing patterns.

Purchasers reporting increased purchases of Mexican product cited approval of estandar and Mexican refined sugar in production, increased demand, and the "product cost" of Mexican sugar. Purchasers reporting decreased purchases from Mexico cited pricing, seasonal availability, and recent unavailability of Mexican sugar.

Purchasers reporting changes in their purchasing patterns for sugar from all other countries listed demand changes, price changes, seasonal availability, testing and use of organic sugar, and substitution for Mexican sugar.

Fifteen purchasers indicated that they had not changed suppliers since October 2011, while sixteen indicated that they had. Among those reporting changes, *** stated that it had stopped using *** until it was able to supply ***. *** reported dropping ***. *** reported adding Mexican sugar supplier *** for price reasons. *** reported qualifying *** while dropping *** because *** had ***. *** described no longer purchasing from ***, which it described as not a consistently reliable supplier.

In more general comment as to why they had changed suppliers, *** described adding and dropping suppliers annually as part of its normal operations. *** indicated that it varies volumes among a group of suppliers that is generally the same, and *** reported buying from a group of *** suppliers, based on bid criteria. *** described its portfolio of suppliers as *** and changing to suit its changing needs.

If purchasers had purchased from only one country, they were asked to explain why they did so. The 12 responding purchasers generally described purchasing U.S. product because of timely supply of sugar that meets specifications, established relationships, quality, service, price, and reliability.

Importance of purchasing domestic product

Eighteen purchasers reported that they did not require domestic product for any of their 2013/2014 crop year purchases of sugar. Nine purchasers indicated that they had purchased at least some domestic sugar in 2013/2014 due to customer requirements, two stated that they had purchased U.S. sugar due to legal requirements, and four stated that there were other reasons for requiring domestic product. (For example, ***). However, 28 purchasers indicated that the majority of their sugar purchases did not require domestic product.

Purchasers were asked if they or their customers purchased sugar from one country in particular over other sources of supply. Fourteen answered no, but 16 answered that they did. Those that did reported purchasing U.S. sugar for reasons including quality, logistics, packaging, transportation, duty avoidance, and price. Three purchasers reported that their customers prefer U.S. sugar for at least a small share of purchases, perhaps for reasons of a perceived quality advantage. One purchaser reported purchasing from Brazil for quality reasons.

Estandar and refined sugar

Petitioners stated that in addition to refiners, sugar end users also purchase estandar, and that for uses where color is not an issue, estandar is used in the same ways as refined sugar.[48] Similarly, the Sweetener User Association stated that most industrial users have a polarity requirement (usually 99.8 percent) but that color can be more important.[49] Imperial described estandar as an acceptable sugar for consumption assuming that it is shipped in a food-grade manner (i.e., shipped in bags or in stainless steel bulk railcars); if it touches the ground or is shipped on a bulk truck or vessel, it must be refined first.[50]

Purchasers that produce food or beverage products were asked whether they can use estandar and refined sugar in the same applications. Fifteen stated that they could not, and six stated that they could. Of these six, *** stated that it could not use both refined sugar and estandar in the majority of its applications, and that it prefers refined sugar. *** also indicated that it could use both in some, but not all, of its applications and indicated that it preferred to use refined sugar because estandar can have some molasses flavor. *** also stated that using estandar in place of refined sugar requires significant effort (including approval by its customers), but that it began such efforts due to supply shortages after Hurricane Katrina. It added that it continues to use estandar to ensure supply, and not for price reasons. *** stated that it is not difficult to switch between estandar and refined (when it is possible to switch), and that it makes its decisions based on the relative price of each. *** also stated that switching between estandar and refined sugar is relatively easy (when it is possible to switch). *** stated that it could use estandar and refined sugar when making *** for ***.

Producers, importers, and purchasers that are sugar refiners or industrial users provided mixed responses regarding whether raw sugar, estandar, semi-refined, and/or fully refined sugar could be used interchangeably in various applications.[51] Six producers, 3 importers, and 20 purchasers answered that they could not, but 7 producers, 5 importers, and 5 purchasers (***) answered that they could. Purchaser *** stated that it could use estandar and Mexican refined sugar in some applications, but not in all applications. *** stated that it could use estandar, semi-refined sugar, and fully-refined sugar interchangeably in ***, but that doing so required "significant effort." It reported doing so to ensure supply continuity. *** also indicated that while it uses different forms of sugar, it needs to change material handling when it does so. Purchaser *** indicated that it could use estandar, semi-refined sugar, and fully-refined sugar interchangeably in ***. *** stated that all products ***. However, among purchasers stating they could not use the products interchangeably, *** stated that its customers wanted only low-color sugar, eliminating the possibility of using estandar.

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[48] Hearing transcript, p. 100 (O'Malley) and p. 105 (Buker).

[49] Hearing transcript, p. 240 (Earley).

[50] Posthearing brief of Imperial, exhibit 1, p. 3.

[51] At the hearing, U.S. Sugar stated that when it refines estandar, it mixes estandar with raw sugar, and described estandar and raw sugar as identical for refining purposes. Hearing transcript, pp. 106-107 (Buker).

Purchasers were also asked if their firms pay a premium for higher-polarity sugar when it could use a lower-polarity sugar in the same application. Fourteen answered that they did not, and four (***) stated that they might. *** described paying a premium for bulk sugar up to *** polarity while penalizing sugar below *** polarity. *** estimated that they pay a *** premium for higher-polarity sugar (***). *** estimated that it would pay a ***-cent per pound premium. *** indicated that the reason for a premium is that refined sugar is in higher demand.

At the hearing, U.S. Sugar stated that during the period of investigation, it had purchased Mexican estandar at delivered prices lower than those at which it could purchase raw sugar from millers less than 20 miles away from its facility.[52] Imperial stated that Mexican estandar is less expensive than U.S. refined sugar, and added that it is slightly less expensive to process estandar than TRQ import sugar, and so refiners sometimes prefer Mexican estandar to TRQ import sugar.[53] The Sweetener User Association and its counsel stated that while they did not expect estandar to sell for more than raw sugar, since U.S. refiners use both interchangeably, market power among U.S. refiners likely had a larger effect on U.S. prices than the difference between refined sugar and estandar.[54]

Comparisons of domestic products, subject imports, and nonsubject imports

Purchasers were asked a number of questions comparing sugar produced in the United States, Mexico, and nonsubject countries. First, purchasers were asked for a country-by-country comparison on the same 15 factors (table II-8) for which they were asked to rate the importance.

A majority of purchasers indicated that U.S. sugar was superior to Mexican sugar in terms of delivery time, product range, quality exceeding industry standards, reliability of supply, and technical support/service. A majority of purchasers indicated that U.S. and Mexican sugar were comparable on price; however, a large minority reported that U.S. sugar was higher-priced than Mexican sugar.

[52] Hearing transcript, p. 40 (Buker). See also hearing transcript, p. 56 (Hillman) and petitioners' posthearing brief, p. 2, p. 14, and exhibits 1 and 2.

[53] Posthearing brief of Imperial, exhibit 1, p. 5.

[54] Hearing transcript, pp. 240-246 (Earley and Hudgens).

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

Factor	U.S. vs. Mexico			U.S. vs. Other			Mexico vs. Other		
	S	C	I	S	C	I	S	C	I
Availability	13	13	1	9	8	2	3	13	0
Delivery terms	11	16	0	5	13	0	2	12	1
Delivery time	19	6	1	11	6	0	7	8	1
Discounts offered	2	18	4	1	14	1	4	10	0
Extension of credit	7	19	1	3	13	1	0	11	4
Minimum quantity requirements	2	23	1	2	13	1	2	12	0
Packaging	12	15	0	6	11	0	1	13	0
Price[1]	1	14	11	4	5	6	3	7	3
Product consistency	12	14	1	7	9	0	2	11	1
Product range	14	10	3	5	9	4	0	13	3
Quality exceeds industry standards	14	13	0	6	11	0	1	12	2
Quality meets industry standards	9	17	1	5	12	0	1	13	1
Reliability of supply	14	10	3	4	11	1	1	8	4
Technical support/service	19	8	0	7	9	0	0	10	3
U.S. transportation costs[1]	10	12	5	4	10	2	5	8	0

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

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

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

Comparison of U.S.-produced and imported sugar

As shown in table II-9, most U.S. producers indicated that U.S., Mexican, and nonsubject-country sugar were "always" or "frequently" interchangeable, while most importers and purchasers indicated that U.S., Mexican, and nonsubject-country sugar were "frequently" or "sometimes" interchangeable.

Table II-9
Sugar: Interchangeability between sugar produced in the United States and in other countries, by country pairs

* * * * * * *

In additional comments, producer *** stated that some nonsubject countries face difficulties marketing sugar in the U.S. market because they can ship only limited quantities and the transportation logistics are complicated. *** described estandar from Mexico as competing with both U.S. raw and U.S. refined sugar. *** stated that raw sugar is a fungible product.

Among importers, *** described sugar from Mexico as being sometimes estandar and always cane, while U.S. sugar can be beet or cane. It continued that some consumers prefer cane sugar because it is non-GMO, and added that organic sugar is never interchangeable with non-organic sugar. *** stated that raw sugar from Brazil, Central America, and Mexico is rarely food-grade quality. It added that refined sugar from these countries often needs further

processing. It further added that because some consumers are avoiding GMO foods, sugar producers need to segregate cane and beet sugar. *** also noted that raw and refined sugar are not always interchangeable, nor is estandar with raw or refined. It added that not all of its customers have approved Mexican or nonsubject sugar. *** stated that the sugar it purchases from specific Mexican producers is always interchangeable with its domestic refined sugar. *** stated that Mexican and Central American raw sugar is interchangeable with U.S. raw sugar.

Among purchasers, several described differences between Mexican and U.S. sugar that limit interchangeability, including differences that reflect differences between refined sugar and estandar. *** stated that refined sugar is interchangeable among country sources, but refined sugar and estandar are not interchangeable. *** also stated that comparisons depend on whether the sugar is refined or estandar. *** stated that estandar's interchangeability with other sugar is limited by estandar's color. *** offered a similar assessment, adding that impurities and taste differences limited estandar's interchangeability. *** also stated that color and purity limit the interchangeability of U.S. and Mexican sugar, but did not specify whether it was referring to estandar or not. *** stated that in general, Mexican sugar is not comparable in quality to U.S. and Canadian sugar. Similarly, *** stated that U.S. and Mexican sugar can be used interchangeably, but significant research and development work must be done beforehand to ensure that the end product is acceptable to consumers. *** stated that not all Mexican sugar has the requisite size, color, ash, and packaging for its requirements. *** stated that Mexican sugar comes in a wide variety of quality levels. However, *** stated that as long as refined sugar meets its quality and supplier requirements, it is interchangeable among country sources. *** stated that estandar from Mexico competes with both U.S. raw and refined sugar.

In additional comments, *** stated that beet sugar is GMO and cane sugar can be non-GMO, limiting interchangeability. *** described granulation, size, and color as factors that limit the interchangeability of sugar among countries. *** stated that *** are not interchangeable with sugar from other countries. *** stated that color was a difference between Mexican and Brazilian organic sugar.

As can be seen from table II-10, all responding purchasers reported that domestically produced product "always" or "usually" met minimum quality specifications. Fifteen responding purchasers reported that Mexican sugar "always" or "usually" met minimum quality specifications, while five responding purchasers reported that it only "sometimes" does.

Table II-10
Sugar: Ability to meet minimum quality specifications, by source[1]

Source	Always	Usually	Sometimes	Rarely or never
United States	19	10	0	0
Mexico	7	8	5	0
Other countries	5	6	3	0

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

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

In addition, producers, importers, and purchasers were asked to assess how often differences other than price were significant in sales of sugar from the United States, Mexico, or nonsubject countries. As seen in table II-11, most purchasers answered that non-price differences were "always" or "frequently" significant across almost all country-by-country comparisons, most producers answered that such differences were "sometimes" or "never" significant, and importers showed mixed results depending on the comparison.

Table II-11
Sugar: Significance of differences other than price between sugar produced in the United States and in other countries, by country pair

* * * * * * *

In further comments, *** stated that U.S. sugar producers, unlike Mexican and Central American suppliers, ship mostly in bulk and charge significant premiums otherwise. *** indicated that many purchasers prefer U.S. sugar for reasons of quality control, but added that Mexican product has been able to gain market share at lower prices. *** stated that U.S. producers offer advantages over imports in terms of lead time, quality, and range, but added that purchasers expect all those advantages while still expecting U.S. producers to meet the lowest prices in the market. Three other producers named logistics, transportation costs, and/or packaging as important non-price factors.

Among importers, *** stated that its transportation costs from Mexico are a significant non-price factor in its sales of sugar in the United States. *** stated that it offered unrefined sugars not normally available in the United States. *** described sourcing sugar from Mexico as necessary due to past supply disruptions.

Among purchasers, *** stated that Mexican sugar always has an advantage over other countries' sugar because of the lack of U.S. duties and the low-cost logistics. *** described the availability of organic sugar and fair-trade certified product as important factors. *** stated that most Mexican sugar ***. Similarly, *** indicated that U.S. sugar is preferred because it arrives by bulk rail. *** indicated that quality, packaging, availability, and transportations were factors that had led it to avoid purchasing Mexican sugar. *** described quality and technical support as important non-price factors. *** stated that reliability of supply and quality standards were important. *** indicated that Mexican sugar ***, which are disadvantages for ***. Additional responses from firms regarding non-price facters were consistent with information provided in response to interchangeability.

ELASTICITY ESTIMATES

This section discusses elasticity estimates; parties were encouraged to comment on these estimates in their prehearing or posthearing briefs. Petitioners did so in their prehearing brief, concluding that the staff's original estimate of the elasticity of demand was too high, the staff's original estimate of the elasticity of substitution was too low, and the staff's original estimate of the elasticity of supply was too high. Petitioners' analysis was based on other

published estimates of these elasticities,[55] whereas staff's original estimates were based on the data collected in questionnaires in this phase of these investigations. Staff has revised its estimates to take into account the outside studies referenced by petitioners.

U.S. supply elasticity

The domestic supply elasticity[56] for sugar measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price of sugar. The elasticity of domestic supply depends on several factors including the level of excess capacity, the ease with which producers can alter capacity, producers' ability to shift to production of other products, the existence of inventories, and the availability of alternate markets for U.S.-produced sugar. Analysis of these factors earlier indicates that the U.S. industry has the ability to somewhat increase or decrease shipments to the U.S. market; an estimate in the range of 0.3 to 3 is suggested.

U.S. demand elasticity

The U.S. demand elasticity for sugar measures the sensitivity of the overall quantity demanded to a change in the U.S. market price of sugar. This estimate depends on factors discussed earlier such as the existence, availability, and commercial viability of substitute products, as well as the component share of the sugar in the production of any downstream products. Based on the available information, the aggregate demand for sugar is likely to be somewhat inelastic; a range of -0.1 to -0.75 is suggested.[57]

Substitution elasticity

The elasticity of substitution depends upon the extent of product differentiation between the domestic and subject imported products.[58] Product differentiation, in turn, depends upon such factors as quality (e.g., chemistry, appearance, etc.) and conditions of sale (e.g., availability, sales terms/discounts/promotions, etc.). Based on available information, the

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[55] See petitioners' prehearing brief at pp. 14-15 and exhibit 1.

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

[57] In the preliminary phase, petitioners cited estimates of the price elasticity of demand for sugar ranging from -0.11 to -0.30, suggesting that demand is inelastic. Petition, pp. 34-36, Petitioners' postconference brief, p. 19, and email from John Greenwald, counsel for petitioners, May 1, 2014. On the other hand, Mexican Sugar Chamber respondents indicated that they thought that sugar demand was more elastic under different assumptions. Mexican Sugar Chamber respondents' postconference brief, Exhibit 8, response to "Page 268 Q10."

[58] The substitution elasticity measures the responsiveness of the relative U.S. consumption levels of the subject imports and the domestic like products to changes in their relative prices. This reflects how easily purchasers switch from the U.S. product to the subject products (or vice versa) when prices change.

elasticity of substitution between U.S.-produced sugar and subject imported sugar is likely to be in the range of 2 to 10.[59]

[59] In the prehearing report, staff estimated a range of 2 to 5 based on questionnaire responses summarized in this chapter. This wider range takes into account analysis discussed by petitioners in their prehearing brief. See petitioners' prehearing brief, exhibit 1.

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 all segments of the sugar industry in the United States: 1) growers of sugarcane and sugar beets; 2) millers of sugarcane; 3) cane sugar refiners; and 4) processors of beet sugar.[1]

The Commission issued U.S. producer questionnaires to the 26 firms believed to mill or refine sugarcane or process beet sugar. Twenty-five firms, representing the vast majority of sugar production in the United States, provided useable data on their sugar operations. The Commission received questionnaires from all known sugarcane millers and sugarcane refiners;[2] and from all known sugar beet processors during 2011/12 to 2013/14. In addition, the Commission received 87 usable U.S. grower questionnaires.[3]

[1] Sugar beet processors produce refined sugar from beets in one continuous process, while refined sugar produced from sugarcane is typically milled by one firm, and then further refined by another firm. There are some sugarcane refiners (see table III-3) that are also sugarcane millers.

[2] In addition, the Commission received U.S. producer questionnaire responses from Archer Daniels Midland Company ("ADM") and Royal Ingredients. ADM produces only liquid sugar and invert sugar at eight sweetener stations located throughout the United States. ADM's Answers to Staff Questions at the Conference, April 23, 2014, p. 1. Royal Ingredients ***. In the preliminary phase of these investigations, the Commission determined that ADM does not engage in sufficient production-related activities to be deemed a domestic producer. *Sugar from Mexico*, Investigation Nos. 701-TA-513 and 731-TA-1249 (Preliminary), USITC Publication 4467, May 2014, p. 17. Accordingly, ADM's data are not included in the domestic industry data.

[3] In the preliminary phase of these investigations, the Commission requested petitioners to provide a list of the *** largest suppliers of sugar beets to the beet processors, as well as the ten largest suppliers of sugarcane to the cane millers in the last crop year 2012/13. In these final phase investigations, the Commission sent U.S. grower questionnaires to 92 farms that provided useable data from the preliminary phase investigations.

U.S. SUGAR BEET AND SUGARCANE GROWERS

Sugar beet growers

Sugar beets are currently grown in ten U.S. States: California, Colorado, Idaho, Michigan, Montana, Minnesota, Nebraska, North Dakota, Oregon, and Wyoming.[4] The 2012 Census of Agriculture identified 3,913 farms growing sugar beets in the United States, down from 4,022 in 2007 and 5,027 in 2002.[5] U.S. sugar beet processors are farmer-owned cooperatives;[6] most sugar beet farmers lease their land.[7]

Sugar beets are an annual crop, planted in the spring and harvested in the fall.[8] Harvested beets are delivered directly to the beet processors and they produce sugar for human consumption in one continuous process.[9] The beets are stored for processing into refined sugar through the following winter and into the spring.

Over 90 percent of sugar beets are genetically modified organisms ("GMO").[10] Commercial planting of GMO sugar beets began in the United States in 2008, with the stated goal of making weed management simpler and more effective.[11] Round-up ready sugar beets allow the application of the herbicide glyphosate without harming the crop.[12] Accordingly, to one producer, the GMO seed has improved the sugar beet yield somewhat, but it has also increased the price of seed, up from $50 an acre five years ago to $200 an acre.[13]

Sugarcane growers

Sugarcane is currently grown in four U.S. States: Florida, Hawaii, Louisiana, and Texas.[14] The 2012 Census of Agriculture identified 666 farms growing sugarcane in the United States, down from 692 in 2007 and 953 in 2002.[15] Sugarcane is a perennial grass that will yield commercially viable sucrose content for three or more years. Sugarcane fields are replanted or taken out of production in three or four year cycles.[16] Once a crop of sugarcane is planted, it is

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[4] Compiled from USDA Sugar and Sweeteners Yearbook, table 14, retrieved on January 21, 2015 at http://www.ers.usda.gov/data-products/sugar-and-sweeteners-yearbook-tables.aspx.

[5] 2012 Census of Agriculture, United States Department of Agriculture, p. 8.

[6] Petitioner's postconference brief, p. 18.

[7] Conference transcript, p. 24 (Snyder).

[8] Hearing transcript, p. 32 (Snyder).

[9] Hearing transcript, pp. 32-33 (Snyder).

[10] Conference transcript, p. 56 (Snyder).

[11] Diazteca's postconference brief, p. 4, fn 1, citing GMO Compass, www.gmo-compass.org.

[12] Hearing transcript, p. 158 (Berg).

[13] Conference transcript, pp. 57-58 (Snyder).

[14] Compiled from USDA Sugar and Sweeteners Yearbook, table 15, retrieved on January 21, 2015 at http://www.ers.usda.gov/data-products/sugar-and-sweeteners-yearbook-tables.aspx.

[15] 2012 Census of Agriculture, United States Department of Agriculture, p. 8.

[16] Hearing transcript, p. 28 (Landry).

difficult to convert it to other crops due to the sugarcane's extended life cycle and high cost of planting.[17] Cane sugar is non-GMO.[18] The sugarcane harvest starts in late September and continues for 180 days. U.S. cane mills typically operate seasonally over the October-to-March harvesting season,[19] as sugarcane is best processed within 24 hours after it is cut.[20]

Production of sugar beets and sugarcane

USDA data relating to U.S. growers' production of sugar beets and sugarcane are presented in table III-1. Acres of sugar beets harvested decreased by 4.9 percent from 2011/12 to 2013/14, while production of sugar beets increased by 13.5 percent during the same period. Acres of sugarcane harvested increased by 3.9 percent from 2011/12 to 2013/14, while production increased by 4.6 percent over the same period.

[17] Hearing transcript, p. 28 (Landry).

[18] Imperial Sugar, Cane Sugar vs. Beet Sugar, http://www.imperialsugar.com/sugar-101/cane-sugar-vs-beet-sugar, accessed on April 25, 2014.

[19] The crop year is October through September for Florida, Louisiana, and Texas. The crop year for Hawaii corresponds with the calendar year.

[20] Petitioner's postconference brief, p. 17.

Table III-1
Sugar: U.S. sugar beet and sugarcane production and yield, crop years 2001/02 – 2015/16

Crop year	Sugar beets			Sugarcane		
	Acres harvested (*1,000s*)	Production (*1,000 short tons*)	Yield (*tons per acre*)	Acres harvested (*1,000s*)	Production (*1,000 short tons*)	Yield (*tons per acre*)
2001/02	1,243.4	25,764	20.7	970.3	32,775	33.8
2002/03	1,360.7	27,707	20.4	971.9	33,903	34.9
2003/04	1,347.8	30,710	22.8	930.6	31,942	34.3
2004/05	1,306.7	30,021	23.0	879.5	27,243	31.0
2005/06	1,242.9	27,433	22.1	858.2	24,728	28.8
2006/07	1,303.6	34,064	26.1	846.6	27,962	33.0
2007/08	1,246.8	31,834	25.5	827.9	28,273	34.2
2008/09	1,004.5	26,881	26.8	821.6	26,131	31.8
2009/10	1,148.5	29,783	25.9	817.0	28,484	34.9
2010/11	1,156.1	32,034	27.7	825.3	25,663	31.1
2011/12	1,213.2	28,896	23.8	827.1	27,738	33.5
2012/13	1,204.1	35,224	29.3	854.9	30,500	35.7
2013/14	1,154.0	32,789	28.4	859.5	29,023	33.8
2014/15	1,146.7	31,365	27.4	825.5	28,894	35.0
2015/16[1]	1,144.0	34,573	30.2	835.4	29,576	35.4

[1] Proejcted.

Source: Compiled from USDA Sugar and Sweeteners Yearbook, tables 14 and 15, retrieved on September 18, 2015 at http://www.ers.usda.gov/data-products/sugar-and-sweeteners-yearbook-tables.aspx.

Table III-2 presents a summary of production data received from sugar beet and sugarcane farmers, based on 87 usable questionnaire responses. *** farms reported that they *** the petition. Data received represents 21.8 percent of sugar production[21] and 19.4 percent of sugarcane and sugar beets harvested[22] in 2013/14.

Table III-2
Sugar: Reported U.S. sugar beet and sugarcane production and acreage, crop years 2011/12 – 2013/14

Item	2011/12	2012/13	2013/14
Acres owned/leased (*acres*)	711,009	747,826	778,195
Acres harvested (*acres*)	359,292	388,095	391,283
Production (*short tons*)	12,410,653	14,144,915	13,461,952
Other products harvested (*acres*)	295,725	299,477	322,735

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

[21] Coverage is based on responding growers reported production (13.462 million short tons) and USDA total sugar beet and sugarcane production (61.812 million short tons).

[22] Coverage is based on responding growers reported acreage harvested (391,283) and USDA total acres of sugar beets and sugarcane harvested (2.014 million).

Farms were asked to report any changes in their operations since October 2011. Changes reported are presented in the following tabulation:[23]

Event	Number of reporting farms
Purchase or expansion of land	44
Sale or reduction of land	13
Increase in production of sugarcane or sugar beets	44
Decrease in production of sugarcane or sugar beets	31
Adverse weather conditions affecting crop yield	45
Labor disputes or shortages	12

Growers were asked to describe the constraints that set the limits on their growing capabilities. Growers reported weather conditions, including drought, and land availability as the primary constraints that limit growing capabilities. Other constraints included company marketing allocations and the amount of shares owned by each farm, proper crop rotations (important for sugar beets but not sugarcane), machinery, and labor.

U.S. SUGARCANE MILLERS, CANE REFINERS, AND SUGAR BEET PROCESSORS

Sugarcane mills are located close to cane producing areas because it becomes increasingly difficult to recover sucrose from sugarcane once it has been cut. There are 13 sugarcane millers in the United States operating in Hawaii, Florida, Louisiana, and Texas. Once raw cane sugar is milled it is shipped to a refiner for further processing. There are seven sugarcane refineries in the United States, including Hawaiian Commercial & Sugar and United States Sugar Corporation, which have vertically integrated milling and refining operations. Beet processing is a continuous process, as was detailed in Part I. There are seven sugar beet processors, operating in 15 locations in the following states: California, Colorado, Idaho, Nebraska, North Dakota, Michigan, Minnesota, Montana, and Wyoming.

In addition to sugarcane millers, sugarcane refiners, and sugar beet processors, the petitioners identified liquid sugar production as another segment in the U.S. sugar market. Petitioners claim that these “melt houses" do not produce edible sugar from sugar beets or from raw cane sugar; rather they liquefy the sugar that has been produced by refiners. Petitioners state that unlike refiners, melt houses cannot make refined sugar from raw cane sugar. Melt houses must obtain edible sugar - refined or estandar - from producers in the United States, mills in Mexico, or producers in other countries. Melt houses do not increase the purity of the sugar. Cane refiners, on the other hand, take any form of raw cane sugar or

[23] The Commission gathered data from the beet processors’ and the sugarcane miller/refiners’ *** largest supplier farms in the preliminary phase of these investigations. These farms may not accurately represent the average farm profile.

estandar, and engage in a number of steps and processes, including affination, defecation,[24] clarification, absorption, and crystallization to reduce impurities, before evaporating it to create granulated sugar. Melt houses are simply adding water to create liquid sugar. [25] Petitioners estimate that there are 20 current companies or entities in the United States that are engaged in melting sugar to produce liquid sugar.

In the preliminary phase of these investigations, the Commission stated that because the only producers of liquid sugar and invert syrup that provided information on their operations were CSC Sugar and ADM, it did not opine on whether melt houses categorically engage in sufficient production-related activities to be included in the domestic industry.[26] In these final phase investigations, the Commission received U.S. producer questionnaires again from CSC Sugar and ADM. It did not receive any additional questionnaires from firms who are primarily engaged in melting sugar. In the preliminary phase, the Commission determined that CSC Sugar is a domestic sugar refiner, capable of processing raw sugar unfit for human consumption into refined liquid sugar and invert syrup.[27] The Commission also determined that ADM does not engage in sufficient production-related activities to be deemed a domestic producer.[28] In these final phase investigations, petitioners state that while they may not agree with the Commission's decision to include CSC in the domestic industry, they do not contest that decision. They state, however, that the Commission should continue to exclude melt houses, such as ADM, that do not engage in refining or any other sugar production related activity beyond mixing sugar with water to produce liquid sugar.[29]

Table III-3 presents U.S. producers of sugar, their production locations, positions on the petition, and shares of total reported raw and refined production.

As indicated in table III-3, ***.[30] In addition, as discussed in greater detail below, nine U.S. producers directly import the subject merchandise from Mexico or purchase imported sugar.

Producers were asked to report any changes in operations since October 2011. There were two reported plant openings, two closings, and one relocation. ***.

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[24] Defecation is a clarification process to purify sugar juice during the refining process. It generally involves the addition of lime (calcium oxide) to the sugar juice, heating the mixture, and removing the resulting precipitate of non-sucrose substances. Meade, George P. and James C. P. Chen, Cane Sugar Handbook, Tenth Edition, 1977, John Wiley & Sons, Inc., pp. 110-111.

[25] Petition, p. 11, fn. 14 and pp. 28-30.

[26] Commission staff asked parties to provide comments on how to seek additional information from melt houses in this final phase investigation. Petitioners proposed an additional producer question regarding the value added of melting and Respondents did not address this issue.

[27] *Sugar from Mexico*, Investigation Nos. 701-TA-513 and 731-TA-1249 (Preliminary), USITC Publication 4467, May 2014, p. 16.

[28] *Sugar from Mexico*, Investigation Nos. 701-TA-513 and 731-TA-1249 (Preliminary), USITC Publication 4467, May 2014, p. 17.

[29] Petitioners' prehearing brief, September 4, 2015 p. 13.

[30] In addition, ***.

Table III-3

Sugar: U.S. producers, their position on the petition, location of production, and share of reported production, October 2011 through September 2014

Firm	Position on petition	Production location(s)	Share of production (percent)
U.S. sugar cane millers:			
Alma Plantation	***	Lakeland, LA	***
Cajun Sugar Cooperative	***	New Iberia, LA	***
Cora Texas	***	White Castle, LA	***
Florida Crystals[1]	***	South Bay, FL Pahokee, FL	***
Hawaiian Commercial & Sugar[2]	***	Puunene, HI	***
Lafourche Sugars	***	Thibodaux, LA	***
Louisiana Sugar Cooperative ("LASUCA")[3]	***	St. Martinville, LA	***
Lula-Westfield[4]	***	Belle Rose, LA Paincourtville, LA	***
M.A. Patout & Son[5]	***	Jeanerette, LA Raceland, LA Franklin, LA	***
Rio Grande Valley Sugar Growers	***	Santa Rosa, TX	***
St. Mary Sugar Cooperative	***	Jeanerette, LA	***
Sugar Cane Growers Cooperative of Florida[6]	***	Belle Glade, FL	***
U.S. Sugar Corporation	***	([7])	***
All U.S. millers			100.0
U.S. cane refiners and beet processors:			
U.S. cane refiners:			
AmCane Sugar	***	Taylor, MI Toledo, OH	***
American Sugar Holdings[8]	***	Yonkers, NY Arabi, LA Baltimore, MD Crockett, CA South Bay, FL	***
CSC Sugar[9]	***	El Paso, TX Fort Worth, TX Fairless Hills, PA Covington, TN Chicago, IL New Canaan, CT	***
Hawaiian Commercial & Sugar[10]	***	([11])	***
Imperial Sugar[12]	***	Port Wentworth, GA Gramercy, LA Ludlow, KY	***
Louisiana Sugar Refining[13]	***	Gramercy, LA	***
U.S. Sugar	***	Clewiston, FL	***
Subtotal, U.S. cane refiners			54.0

Table continued on next page.

Table III-3--Continued

Sugar: U.S. producers, their position on the petition, location of production, and share of reported production, October 2011 through September 2014

Firm	Position on petition	Production location(s)	Share of production (percent)
U.S. sugar beet processors:			
American Crystal[14]	***	Moorhead, MN Hillsboro, ND Crookston, MN East Grand Forks, MN Drayton, ND Sidney, MT	***
Michigan Sugar	***	Bay City, MI Caro, MI Croswell, MI Sebewaing, MI	***
Minn-Dak Farmers Coop	***	Wahpeton, ND	***
Southern Minnesota Beet Sugar[15]	***	Renville, MN Brawley, CA	***
Amalgamated Sugar[16]	***	Paul, ID Twin Falls, ID Nampa, ID	***
Western Sugar Coop	***	Denver, CO Billings, MT Fort Morgan, CO Lovell, WY Scottsbluff, NE Torrington, WY	***
Wyoming Sugar	***	Worland, WY	***
Subtotal, U.S. sugar beet processors			46.0
Total, all U.S. processors or refiners			100.0

[1] Florida Crystals is ***.
[2] Hawaiian Commercial & Sugar is ***.
[3] LASUCA ***.
[4] Lula-Westfield is ***.
[5] M.A. Patout & Son's ***.
[6] Sugar Cane Growers Cooperative of Florida is ***.
[7] This firm's position on the petition and production locations is reported under the U.S. processor/refiners group. 100% of its milled raw sugar is used in its own refining operations.
[8] American Sugar Holdings is ***.

Footnotes continued on next page.

Table III-3--Continued

Sugar: U.S. producers, their position on the petition, location of production, and share of reported production, October 2011 through September 2014

[9] CSC Sugar is ***.
[10] Hawaiian Commercial & Sugar is ***.
[11] This firm's position on the petition and production locations are reported under the U.S. millers group. While this firm does refine some of its own raw sugar, most of its raw sugar is sold commercially.
[12] Imperial Sugar is ***.
[13] Louisiana Sugar Refining is ***.
[14] American Crystal's ***.
[15] Southern Minnesota Beet Sugar's ***.
[16] Amalgamated Sugar ***.

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

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

There were four reported expansions. ***. U.S. Sugar undertook over 49 large-scale improvement initiatives, such as installing a large contiguous wi-fi network between every tractor in its sugarcane fields. In addition each field is traced by a solar-powered, radio-frequency identification system to enable 100 percent of its cane to be processed within eight hours of being cut.[31]

There were three reported acquisitions. ***.

There was one reported consolidation. ***.

There were three reported prolonged shutdowns or production curtailments. ***.

U.S. PRODUCTION, CAPACITY, AND CAPACITY UTILIZATION

Official USDA statistics regarding U.S. sugar production from sugar beets and sugarcane is presented in table III-4.

[31] Hearing transcript, p. 38 (Buker).

Table III-4
Sugar: U.S. sugar production, crop years 2001/02 – 2013/14, and forecast for 2014/15 – 2015/16

Crop year	Production (*1,000 STRV*)			Share (*percent*)	
	Beet sugar	Cane sugar	Total	Beet sugar	Cane sugar
2000/01	4,680	4,089	8,769	53.4	46.6
2001/02	3,915	3,985	7,900	49.6	50.4
2002/03	4,462	3,964	8,426	53.0	47.0
2003/04	4,692	3,957	8,649	54.3	45.7
2004/05	4,611	3,265	7,876	58.5	41.5
2005/06	4,444	2,955	7,399	60.1	39.9
2006/07	5,008	3,438	8,445	59.3	40.7
2007/08	4,721	3,431	8,152	57.9	42.1
2008/09	4,166	3,318	7,484	55.7	44.3
2009/10	4,575	3,400	7,975	57.4	42.6
2010/11	4,659	3,172	7,831	59.5	40.5
2011/12	4,900	3,588	8,488	57.7	42.3
2012/13	5,078	3,904	8,982	56.5	43.5
2013/14	4,794	3,667	8,462	56.7	43.3
2014/15[1]	4,825	3,764	8,589	56.2	43.8
2015/16[1]	5,034	3,700	8,734	57.6	42.4

[1] Forecast made by USDA's Interagency Commodity Estimates Committee for sugar.

Source: Compiled from USDA Sugar and Sweeteners Yearbook, table 16, retrieved on September 18, 2015 at http://www.ers.usda.gov/data-products/sugar-and-sweeteners-yearbook-tables.aspx.

Table III-5 and figures III-1 and III-2 present U.S. producers' reported production, capacity, and capacity utilization. U.S. milling capacity for sugar production increased between 2011/12 and 2013/14 by *** percent and refining capacity increased by *** percent. Production of raw sugar increased by *** percent and production of refined sugar increased by *** percent from crop years 2011/12 to 2013/14.

Table III-5
Sugar: U.S. producers' capacity, production, and capacity utilization, crop years 2011/12 through 2013/14

* * * * * * *

Figure III-1
Sugar: U.S. millers' capacity, production, and capacity utilization, crop years 2011/12 through 2013/14

* * * * * * *

Figure III-2
Sugar: U.S. refiners' and processors' capacity, production, and capacity utilization, crop years 2011/12 through 2013/14

* * * * * * *

Cane refineries ideally run on a continuous basis, 12 days on, two days off. Thus, capacity can be defined as 312 operating days in a year times the average daily melt rate.[32] Sugar beet processors define capacity according to the tons of sugar beets that can be sliced daily. Machines typically run continuously from late August/early September through May or sometimes June.[33]

No U.S. producer reported the ability to switch production (capacity) between sugar and other products using the same equipment and/or labor. Reported constraints in the manufacturing process for the cane millers include weather, availability of water, cane supply, and plant capacity.

Cane refineries generally reported that production is constrained by the raw sugar supply. Sugar beet processors reported the following production constraints: sugar content and quality of the beets, weather, beet slicing capacity, crystallizing equipment sizes, shipping capacity, environmental permits, and USDA marketing allocations. American Crystal Sugar states that while it typically is short of filling its yearly marketing allocation, its cannot process more sugar beets during the August to May processing period. Construction of a new sugar beet factory would cost over one billion dollars, and the company cannot justify that investment given the pricing of sugar and the incremental amount of volume that it would sell.[34] CSC Sugar ***.

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

Table III-6 presents U.S. millers' U.S. shipments and table III-7 presents U.S. refiners' U.S. shipments, export shipments and total shipments. The quantity of U.S. refiners' and processors' commercial U.S. shipments increased from 2011/12 to 2013/14 by *** percent, while the value of their commercial U.S. shipments decreased by *** percent. The unit values of U.S. shipments decreased by *** percent from 2011/12 to 2013/14. U.S. producers reported exports to be *** percent of total shipments during 2011/12 to 2013/14. *** U.S. producers reported exporting to ***. ***.

Table III-6
Sugar: U.S. millers' (i.e., raw sugar) U.S. shipments, export shipments, and total shipments, crop years 2011/12 through 2013/14

* * * * * * *

Table III-7
Sugar: U.S. refiners' and processors' (i.e., refined sugar) U.S. shipments, export shipments, and total shipments, crop years 2011/12 through 2013/14

* * * * * * *

[32] Conference transcript, p. 73 (O'Malley).
[33] Conference transcript, p. 74 (Berg).
[34] Hearing transcript, pp. 87-88 (Berg).

U.S. PRODUCERS' INVENTORIES

Table III-8 presents U.S. producers' end-of-period inventories and the ratio of these inventories to U.S. production, U.S. shipments, and total shipments over the period examined**.** U.S. millers' inventories of sugar increased overall by *** percent from 2011/12 to 2013/14, while U.S. refiners' inventories of sugar decreased by *** percent. Inventories of refined sugar relative to total shipments decreased by *** percentage points from 2011/12 to 2013/14.

Table III-8
Sugar: U.S. producers' inventories, crop years 2011/12 through 2013/14

* * * * * * *

U.S. PRODUCERS' IMPORTS AND PURCHASES

Ten U.S. producers reported imports and/or purchases of imported sugar since October 1, 2011. Five of those firms reported directly importing from Mexico. Domestic producers typically import sugar because production of sugarcane and sugar beets in the United States does not supply enough sugar to meet U.S. demand.[35] ***. U.S. Sugar explained that its factory is designed to produce more refined sugar than the raw sugar it mills in order to maximize efficiencies. Because of the marketing allotment, its additional raw sugar needs must be met by either TRQ imports or imports from Mexico.[36] Data for each of the ten companies and estimated value added of U.S. shipments of U.S. refining operations are presented in tables III-9 through III-19.

Table III-9
Sugar: * purchases of sugar and U.S. production by source of input, crop years 2011/12 through 2013/14**

* * * * * * *

Table III-10
Sugar: * imports, purchases of sugar, and U.S. production by source of input, crop years 2011/12 through 2013/14**

* * * * * * *

[35] Hearing transcript, p. 20 (Cassidy).
[36] Hearing transcript, p. 38 (Buker).

Table III-11

Sugar: * imports, purchases of sugar, and U.S. production by source of input, crop years 2011/12 through 2013/14**

* * * * * * *

Table III-12

Sugar: * imports and U.S. production by source of input, crop years 2011/12 through 2013/14**

* * * * * * *

Table III-13

Sugar: * imports and U.S. production by source of input, crop years 2011/12 through 2013/14**

* * * * * * *

Table III-14

Sugar: * imports, purchases of sugar, and U.S. production by source of input, crop years 2011/12 through 2013/14**

* * * * * * *

Table III-15

Sugar: * imports and U.S. production by source of input, crop years 2011/12 through 2013/14**

* * * * * * *

Table III-16

Sugar: * purchases of sugar and U.S. production by source of input, crop years 2011/12 through 2013/14**

* * * * * * *

Table III-17

Sugar: * purchases of sugar and U.S. production by source of input, crop years 2011/12 through 2013/14**

* * * * * * *

Table III-18

Sugar: * purchases of sugar and U.S. production by source of input, crop years 2011/12 through 2013/14**

* * * * * * *

Table III-19

Sugar: Estimated value added of U.S. shipments of U.S. refining operations, crop years 2011/12 through 2013/14

* * * * * * *

U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

Table III-20 shows U.S. producers' employment-related data during the period examined. The level of production-related workers (PRWs) for U.S. millers decreased by *** percent, while the level of PRWs for U.S. processors and U.S. refiners increased by *** percent. Total hours worked decreased by *** percent for U.S. millers and increased by *** percent for U.S. processors and U.S. refiners. Wages paid to U.S. millers decreased by *** percent for U.S. millers and increased by *** percent for U.S. processors and U.S. refiners. Hourly wages increased for both cane millers and processors and refiners from crop years 2011/12 to 2013/14.

Table III-20

Sugar: U.S. producers' employment related data, crop years 2011/12 through 2013/14

* * * * * * *

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

U.S. IMPORTERS

The Commission issued importer questionnaires to 29 firms believed to be importers of subject sugar, as well as to all U.S. producers of sugar.[1] Usable questionnaire responses were received from 14 companies, representing 76.2 percent[2] of total imports of sugar from Mexico, and *** percent[3] of total imports of sugar from all other sources between October 2011 and September 2014. Table IV-1 lists all responding U.S. importers of sugar from Mexico and other sources, their headquarters, and their shares of U.S. imports, October 2011 through September 2014.

[1] The Commission issued questionnaires to those firms identified in the petition, ***.

[2] Coverage was based on total reported imports from Mexico during October 2011 through September 2014 (3.914 million STRV) versus official import statistics (5.139 million STRV).

[3] Coverage was based on total reported imports from nonsubject sources during October 2011 through September 2014 (*** STRV) versus Customs data which includes TRQ HTS numbers (5.273 million STRV).

Table IV-1
Sugar: U.S. importers, their headquarters, and share of total imports by source, October 2011 through September 2014

Firm	Headquarters	Share of imports by source (*percent*)		
		Mexico	All other sources	Total imports
Able Sales Company, Inc.	San Juan, PR	***	***	***
AmCane Sugar LLC	Taylor, MI	***	***	***
American Sugar Holdings, Inc.[1]	Yonkers, NY	***	***	***
Barry Callebaut USA LLC[2]	Chicago, IL	***	***	***
C. Czarnikow Sugar Inc.[3]	Miami, FL	***	***	***
Cargill Inc.[4]	Minneapolis, MN	***	***	***
CSC Sugar, LLC[5]	New Canaan, CT	***	***	***
ED&F Man Sugar Inc.[6]	Miami, FL	***	***	***
Evergreen Sweeteners	Hallandale Beach, FL	***	***	***
General Mills Inc.	Minneapolis, MN	***	***	***
H-E-B Grocery Co.	San Antonio, TX	***	***	***
LD Commodities Sugar Holdings LLC (including Imperial Sugar Company and LD Commodities Sugar Merchandising LLC)[7]	Wilton, CT	***	***	***
Walrus Trading, LLC[8]	Houston, TX	***	***	***
Zucrum Foods LLC dba Zucarmex USA[9]	Nogales, AZ	***	***	***
Total		100.0	100.0	100.0

[1] American Sugar Holdings is ***.
[2] Barry Callebaut USA ***.
[3] C. Czarnikow Sugar's ***.
[4] Cargill's ***.
[5] CSC Sugar is ***.
[6] ED&F Man Sugar is ***.
[7] LD Commodities Sugar Holdings is ***.
[8] Walrus Trading is ***.
[9] Zucrum Foods is ***.

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

U.S. IMPORTS

Tables IV-2 and IV-3 and Figure IV-1 present data for U.S. imports of sugar from Mexico and all other sources. Import data is based on official import statistics, HTS statistical reporting numbers, 1701.11.1000 (historical), 1701.11.5000 (historical), 1701.12.1000, 1701.12.5000, 1701.13.1000, 1701.13.5000, 1701.14.1000, 1701.14.5000, 1701.91.1000, 1701.91.3000, 1701.99.1020 (historical), 1701.99.1025, 1701.99.1030 (historical), 1701.99.1050, 1701.99.5020 (historical), 1701.99.5025, 1701.99.5030 (historical), 1701.99.5050, and 1702.90.4000.[4]

In 2012, HTS subheading 1701.11, which had covered raw "cane sugar" was discontinued and replaced by 1701.13, "Cane sugar specified in subheading note 2 to this schedule" (non-centrifugal sugar), and 1701.14, "Other cane sugar." These new subheadings are subdivided into 8-digit tariff rate lines to administer the TRQ, but no statistical reporting numbers exist under them. To present an accurate data set from October 2011 through September 2014, HTS heading 1701.11 is also included in import data throughout this report. In 2012, HTS statistical subheadings 1701.99.1020 and 1701.99.1030 were broken out into 1701.99.1025, 1701.99.1050 and 1701.99.1010 (out of scope).

Likewise, HTS statistical subheadings 1701.99.5020 and 1701.99.5030 were replaced by 1701.99.5025, 1701.99.5050, and 1701.99.5010 (out of scope). To present an accurate data set from October 2011 through September 2014, HTS statistical subheadings 1701.99.1020, 1701.99.1030, 1701.99.5020, and 1701.99.5030 are also included in import data throughout this report.

Imports of sugar from Mexico increased overall from crop years 2011/12 to 2013/14 by 89.9 percent. Imports of sugar from nonsubject sources decreased from crop years 2011/12 to 2013/14 by 44.3 percent.

[4] All import data are reported on a raw value basis. HTS items identified as refined or specialty sugars were converted to a raw basis by multiplying by 1.07. HTS items identified as raw sugar were not converted. This method may slightly understate the true raw basis of these imports, since some product entering as raw sugar in the HTS may have a polarity level less than 99.5 (the HTS definition of raw sugar) but more than 93.0 degrees (the polarity for which raw sugar converts to 100 percent refined sugar using the 1.07 conversion rate).

Table IV-2
Sugar: U.S. imports, by source, crop years 2011/12 through 2013/14

Item	Crop year		
	2011/12	2012/13	2013/14
	Quantity (*1,000 STRV*)		
Mexico	1,060	2,066	2,013
All other sources	1,850	891	1,030
Total U.S. imports	2,910	2,957	3,043
	Value (*1,000 dollars*)		
Mexico	849,302	1,042,073	944,524
All other sources	1,298,565	493,989	489,740
Total U.S. imports	2,147,867	1,536,063	1,434,264
	Unit value (*dollars per STRV*)		
Mexico	801	504	469
All other sources	702	554	475
Total U.S. imports	738	519	471
	Share of quantity (*percent*)		
Mexico	36.4	69.9	66.2
All other sources	63.6	30.1	33.8
Total U.S. imports	100.0	100.0	100.0
	Share of value (*percent*)		
Mexico	39.5	67.8	65.9
All other sources	60.5	32.2	34.1
Total U.S. imports	100.0	100.0	100.0
	Ratio to U.S. refined sugar production (*percent*)		
Mexico	***	***	***
All other sources	***	***	***
Total U.S. imports	***	***	***

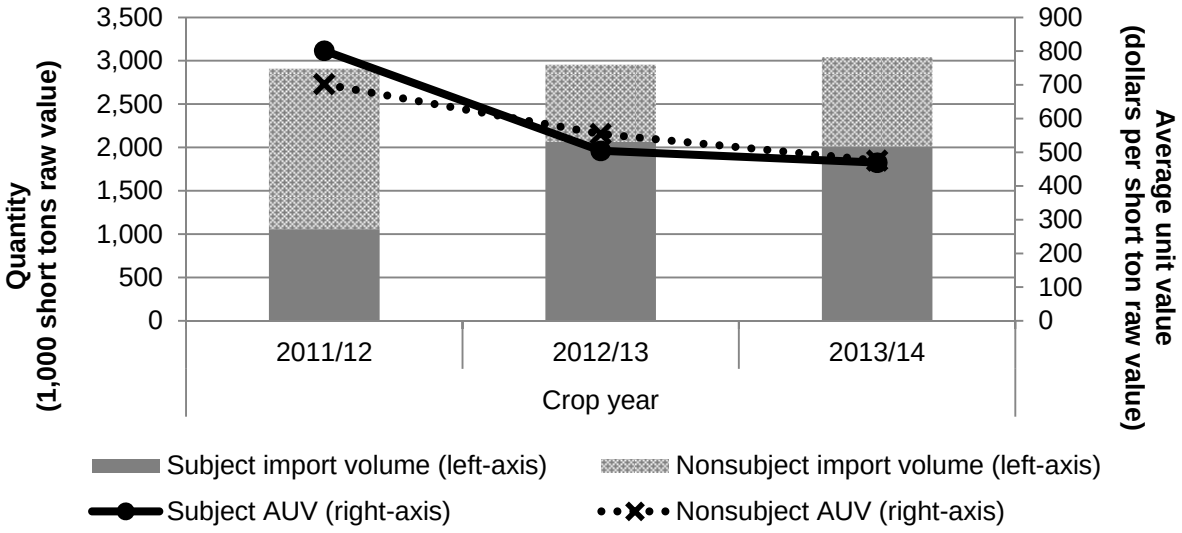
Source: Compiled from official U.S. import statistics.

Table IV-3
Sugar: U.S. imports, by source and type of sugar, crop years 2011/12 through 2013/14

Item	Crop year		
	2011/12	2012/13	2013/14
	Quantity (*1,000 STRV*)		
U.S. imports from Mexico.--			
Raw sugar (as defined by HTS)[1]	167	761	651
Refined sugar (as defined by HTS)[1]	893	1,305	1,361
Other sugars	0	0	0
Total U.S. imports from Mexico	1,060	2,066	2,013
U.S. imports from all other sources.--			
Raw sugar (as defined by HTS)[1]	1,516	803	944
Refined sugar (as defined by HTS)[1]	333	81	79
Other sugars	2	7	7
Total U.S. imports from all other sources	1,850	891	1,030
U.S. imports from all sources.--			
Raw sugar (as defined by HTS)[1]	1,683	1,564	1,596
Refined sugar (as defined by HTS)[1]	1,225	1,386	1,440
Other sugars	2	7	7
Total U.S. imports from all sources	2,910	2,957	3,043
	Share of type by source grouping (*percent*)		
U.S. imports from Mexico.--			
Raw sugar (as defined by HTS)[1]	15.8	36.8	32.3
Refined sugar (as defined by HTS)[1]	84.2	63.2	67.6
Other sugars	0.0	0.0	0.0
Total U.S. imports from Mexico	100.0	100.0	100.0
U.S. imports from all other sources.--			
Raw sugar (as defined by HTS)[1]	81.9	90.1	91.7
Refined sugar (as defined by HTS)[1]	18.0	9.1	7.7
Other sugars	0.1	0.8	0.7
Total U.S. imports from all other sources	100.0	100.0	100.0
	Share of source by product grouping (*percent*)		
U.S. imports of raw sugar (as defined by HTS)[1] from.--			
Mexico	9.9	48.7	40.8
All other sources	90.1	51.3	59.1
Total U.S. imports of raw sugar	100.0	100.0	100.0
U.S. imports of refined sugar (as defined by HTS)[1] from.--			
Mexico	72.9	94.2	94.5
All other sources	27.2	5.8	5.5
Total U.S. imports of raw sugar	100.0	100.0	100.0
U.S. imports of other sugars (as defined by HTS)[1] from.--			
Mexico	0.0	0.0	0.0
All other sources	100.0	100.0	100.0
Total U.S. imports of raw sugar	100.0	100.0	100.0

[1] The HTS defines raw sugar as sugar with a polarity of less than 99.5 degrees.
Source: Compiled from official U.S. import statistics.

Figure IV-1
Sugar: U.S. imports volumes and prices, crop years 2011/12 through 2013/14



Source: Table IV-2.

Table IV-4 presents data for U.S. imports of sugar from the top nonsubject sources. The leading nonsubject source of sugar imports is Brazil, which accounted for 5.3 percent of total imports in 2013/14.

Table IV-4
Sugar: U.S. imports from major nonsubject sources, by source, crop years 2011/12 through 2013/14

Item	Crop year		
	2011/12	2012/13	2013/14
	Quantity (*1,000 STRV*)		
U.S. imports from.--			
Brazil	413	165	160
Philippines	264	60	136
Dominican Republic	222	102	117
Guatemala	159	81	110
Colombia	98	53	71
Australia	136	60	69
El Salvador	68	83	56
Nicaragua	62	55	53
Peru	53	43	47
Panama	46	40	29
South Africa	39	26	26
All other sources combined	290	124	155
Total U.S. imports from nonsubject sources	1,850	891	1,030
	Share of total imports (*percent*)		
U.S. imports from.--			
Brazil	14.2	5.6	5.3
Philippines	9.1	2.0	4.5
Dominican Republic	7.6	3.4	3.8
Guatemala	5.5	2.7	3.6
Australia	3.4	1.8	2.3
Colombia	4.7	2.0	2.3
El Salvador	2.3	2.8	1.8
Nicaragua	2.1	1.9	1.7
Peru	1.8	1.5	1.5
Panama	1.6	1.4	1.0
South Africa	1.3	0.9	0.9
All other sources combined	10.0	4.2	5.1
Total U.S. imports from nonsubject sources	63.6	30.1	33.8

Source: Compiled from official U.S. import statistics.

NEGLIGIBILITY

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.[5] Negligible imports are generally defined in the Tariff Act of 1930, as amended, as imports from a country of merchandise corresponding to a domestic like product where such imports account for less than 3 percent of the volume of all such merchandise imported into the United States in the most recent 12-month period for which data are available that precedes the filing of the petition or the initiation of the investigation. However, if there are imports of such merchandise from a number of countries subject to investigations initiated on the same day that individually account for less than 3 percent of the total volume of the subject merchandise, and if the imports from those countries collectively account for more than 7 percent of the volume of all such merchandise imported into the United States during the applicable 12-month period, then imports from such countries are deemed not to be negligible.[6] Imports of sugar from Mexico accounted for 74.4 percent[7] of total imports of sugar by quantity during the 12-month period of April 2013 through March 2014.

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APPARENT U.S. CONSUMPTION AND MARKET SHARES

Table IV-5 and Figure IV-2 presents data on apparent U.S. consumption and U.S. market shares for sugar over the period examined. Apparent U.S. consumption, based on quantity, increased overall by *** percent from 2011/12 to 2013/14, while apparent U.S. consumption, based on value, decreased by *** during the same period. U.S. producers' share of apparent U.S. consumption, based on quantity, fluctuated within a narrow band from 2011/12 to 2013/14, ranging from *** to *** percent. The market share of imports of sugar by quantity from Mexico increased by *** percentage points over the period, while the market share of nonsubject imports decreased by *** percentage points over the period.

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[5] 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)).

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

[7] Total imports were 3,156,555 metric tons raw value; imports from Mexico were 2,347,873. USDA Sugar and Sweeteners Yearbook, "Table 61 -- U.S. monthly sugar imports, fiscal years (FYs) 2008-14". http://www.ers.usda.gov/data-products/sugar-and-sweeteners-yearbook-tables.aspx.

Table IV-5
Sugar: Apparent U.S. consumption and market shares, crop years 2011/12 through 2013/14

Item	Crop year		
	2011/12	2012/13	2013/14
	Quantity (*1,000 STRV*)		
U.S. producers' U.S. shipments[1]	***	***	***
U.S. imports' from.--			
Mexico	1,060	2,066	2,013
All other sources	1,850	891	1,030
Total U.S. imports	2,910	2,957	3,043
Apparent U.S. consumption	***	***	***
	Value (*1,000 dollars*)		
U.S. producers' U.S. shipments.--[1]			
Domestically grown sugar	***	***	***
Additional U.S. value on imported sugar	***	***	***
Total U.S. producers' domestic value	***	***	***
U.S. imports' from.--			
Mexico	849,302	1,042,073	944,524
All other sources	1,298,565	493,989	489,740
Total U.S. imports	2,147,867	1,536,063	1,434,264
Apparent U.S. consumption	***	***	***
	Share of quantity (*percent*)		
U.S. producers' U.S. shipments	***	***	***
U.S. imports' from.--			
Mexico	***	***	***
All other sources	***	***	***
Total U.S. imports	***	***	***
	Share of value (*percent*)		
U.S. producers' U.S. shipments.--			
Domestically grown sugar	***	***	***
Additional U.S. value on imported sugar	***	***	***
Total U.S. producers' domestic value	***	***	***
U.S. imports' from.--			
Mexico	***	***	***
All other sources	***	***	***
Total U.S. imports	***	***	***

[1] The quantity for U.S. producers' U.S. shipments represents the quantity of refined sugar produced from domestically grown sugar crops, while value reported for U.S. producers U.S. shipments includes both the equivalent value measure for sales of refined sugars that was produced from a domestic sugar crop plus the additional, or marginal, value added captured by U.S. refiners and/or processors from further refining imports of sugar. Forfeitures to the CCC have been removed for purposes of apparent consumption although those transfers to the government are part of the firms' financial experience discussed in Part VI. See part III for a details discussion of U.S. refiners' and processors' refining operations.

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

Figure IV-2
Sugar: Apparent U.S. consumption, crop years 2011/12 through 2013/14

* * * * * * *

Official statistics, compiled by USDA, relating to U.S. production, and consumption of sugar are presented in table IV-6.

Table IV-6
Sugar: U.S. production, imports, and consumption, crop years 2011/12 through 2013/14

Item	Crop year		
	2011/12	2012/13	2013/14
	Quantity (*1,000 STRV*)		
Beginning stocks	1,378	1,979	2,158
U.S. production:			
Beet sugar	4,900	5,076	4,794
Cane sugar	3,588	3,905	3,663
Total production	8,488	8,981	8,457
U.S. imports:			
Mexico	1,071	2,124	2,130
Other non-program imports	14	7	5
TRQ imports	1,883	957	1,302
Other program imports	664	136	305
Total imports	3,632	3,224	3,742
Total U.S. supply	13,498	14,185	14,357
U.S. shipments:			
Food & beverage	11,141	11,511	11,828
Other[1]	173	265	428
Total shipments	11,313	11,776	12,255
U.S. exports	269	274	306
Ending stocks	1,979	2,158	1,796
	Ratio (*percent*)		
Stocks to use ratio	17.18	17.95	14.30
	Share of total U.S. shipments (*percent*)[2]		
U.S. production	75.03	76.27	69.01
U.S. imports	32.10	27.38	30.53

[1] Includes sugar transferred to sugar-containing products and alcohols, intended for re-export, as well as sugar intended for nonhuman consumption (e.g., animal feed).
[2] Due to the presence of sugar stocks (or inventories), total U.S. shipments of sugar may exceed (or be less than) the sum of U.S. sugar production and U.S. sugar imports.

Note.--Due to rounding and statistical adjustments in the original data, items may not add to the totals shown.

Source: Compiled from USDA Sugar and Sweeteners Yearbook, table 24a, retrieved on January 22, 2015 at http://www.ers.usda.gov/data-products/sugar-and-sweeteners-yearbook-tables.aspx.

PART V: PRICING DATA[1]

FACTORS AFFECTING PRICES

Raw material costs

A large majority of the cost of production for both sugarcane milling and sugar beet processing is the cost of raw materials. For millers, raw materials (i.e., sugarcane) fell from *** percent of costs of goods sold in the 2011/12 crop year to *** percent of total costs of goods sold in the 2013/14 crop year. For processors/refiners, raw materials (i.e., raw cane sugar or sugar beets) fell from *** percent of total costs of goods sold down to *** percent of costs of goods sold from the 2011/12 crop year to the 2013/14 crop year.[2]

Producers were more likely than importers to report that raw material prices had increased since October 2011. Fifteen producers and one importer (***) reported that raw material prices had increased, one producer reported that they were unchanged, four producers and one importer (***) reported that they had decreased, and one producer (***) and five importers reported that they had fluctuated. *** described raw sugar prices as falling worldwide (or in the United States due to subject imports) from late 2011 to mid-2013, but then rising in the United States due to USDA's efforts to raise prices and/or due to the institution of these investigations. Nine producers described the prices of nonsugar inputs, such as equipment, seed, labor, and/or fuel, as rising since 2011. In its *** questionnaire, *** attributed fluctuating raw material prices to energy-related fluctuations.

Transportation costs to the U.S. market

Transportation costs to the U.S. market were on average 5.6 percent[3] for sugar from Mexico.

U.S. inland transportation costs

Almost all responding U.S. producers and importers reported that they typically arrange for transportation to their customers. Most U.S. producers reported that their U.S. inland

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[1] ***.

[2] One grower reported that growers' raw materials include seed, fertilizer, and fuel. Hearing transcript, p. 29 (Landry).

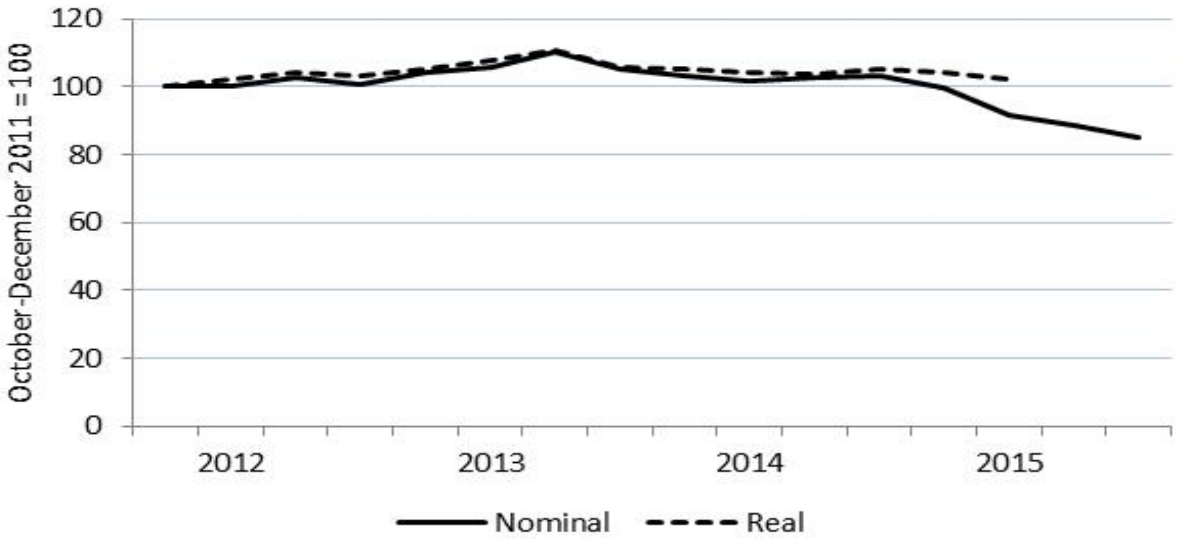
[3] Transportation costs were determined by comparing the 2013/2014 crop year c.i.f. value of imports to the 2013/2014 crop year customs value of imports for HTS statistical reporting numbers 1701.12.1000, 1701.12.5000, 1701.13.1000, 1701.13.5000, 1701.14.1000, 1701.14.5000, 1701.91.1000, 1701.91.3000, 1701.99.1010, 1701.99.1025, 1701.99.1050, 1701.99.5010, 1701.99.5025, 1701.99.5050, and 1702.90.4000.

transportation costs ranged from 3 to 20 percent while importers reported costs ranging from 1 to 13 percent. Seven importers of Mexican sugar shipped their product from a storage location, while four shipped it from the point of importation.

Exchange rates

As shown in figure V-1, the Mexican peso was relatively stable against the U.S. dollar from October 2011 through September 2014, in both real and nominal terms. Since then, the nominal value of the Mexican peso has depreciated 21.4 percent through July 2015. (Data are not available to calculate real values for the Mexican peso after March 2015.)

Figure V-1
Exchange rates: Indices of the nominal and real exchange rates between the Mexican peso and the U.S. dollar, by quarters, October 2011-July 2015



Note.—A decreasing (increasing) value indicates that the Mexican peso is depreciating (appreciating) against the U.S. dollar making Mexican sugar relatively less (more) costly than U.S. sugar.

Source: St. Louis FRED data (retrieved July 15, 2015) and staff calculations.

PRICING PRACTICES

Pricing methods

Negotiations

For U.S. producers, prices are most commonly determined under contracts, although transaction-by-transaction negotiations for spot sales were also reported (table V-1). Four producers noted that their contracts often involved some link to the Intercontinental Exchange's #16 sugar price (described below). Importers often reported more than one price-setting method, and an equal number reported selling sugar by contracts as by transaction-by-transaction negotiations.

Table V-1
Sugar: U.S. producers' and importers' reported price setting methods, by number of responding firms[1]

Method	U.S. producers	U.S. importers
Transaction-by-transaction	7	8
Contract	21	8
Set price list	2	3
Other	4	2

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

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

Twenty-eight purchasers reported that their purchases of sugar usually involve negotiations with their supplier(s), while three indicated that they did not. Most purchasers indicated that price was one of the factors involved in negotiations with suppliers, although almost all purchasers (except ***) indicated that they did not quote competing prices during negotiations. Other factors involved in negotiations include availability, quality, service, and producers' capacity.

Multiple U.S. producers negotiate prices and sell through marketing arms that may sell the sugar of more than one U.S. producer. Producers *** sell through marketing arm ***. ***, serves as the marketing arm for U.S. producers ***.[4] In addition, ***.[5] *** uses *** as its marketing agent.[6] National Sugar Marketing is a joint venture of Amalgamated Sugar and

[4] ***.
[5] See ***.
[6] See ***.

Sucden, selling refined beet sugar from Amalgamated Sugar and imported cane sugar from Sucden.[7]

Cane refiners, as opposed to millers, are focused on the margin between the price of raw sugar that they use as an input and the price of refined sugar that they produce. Imperial described its refining margins as shrinking 82 percent over the period of investigation due to the lower price of refined sugar, even as raw prices were also falling.[8]

Producers and importers were asked what share of their sales fix price at the time of sale, between sale and delivery, or at delivery. Of the twelve responding producers, four indicated that most or all of their sales fix prices at the time of sale, and six indicated that most or all of their sales fix prices between sale and delivery. ***. Of the nine responding importers, all *** indicated that most or all of their sales fix prices at the time of sale.[9]

Reference prices

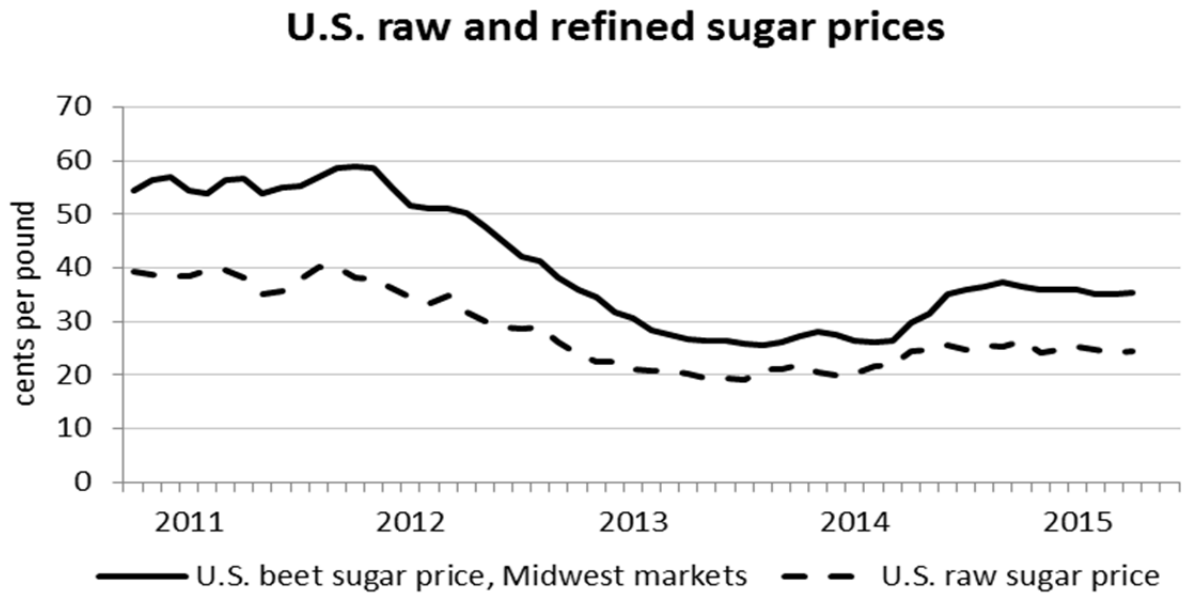
USDA publishes sugar prices as well as forecasts of sugar supply and demand in the monthly World Agricultural Supply and Demand Estimates (WASDE). Figure V-2 shows the USDA's published U.S. raw and refined sugar prices, which in part reflect prices from the Intercontinental Exchange (ICE), described below. Twenty-four purchasers indicated that they and/or sugar suppliers relied on WASDE at least to some extent, with some using it as a general reference. Others specifically described WASDE as an "industry benchmark" (***) or having "substantial influence" (***). *** described WASDE as the only recognized independent source of basic supply and demand information. *** stated that when the stocks-to-use ratio in the WASDE is above 14.5 percent, there is a surplus and prices will decrease, but when the ratio is below 13 percent, there is a deficit and prices will increase. However, five purchasers stated that they do not use the WASDE, with *** describing it as "mostly worthless."

[7] Sucden is a France-based sugar trading group. See "Amalgamated Sugar hopes new venture sweetens sales," Magicvalley.com, downloaded July 22, 2015.

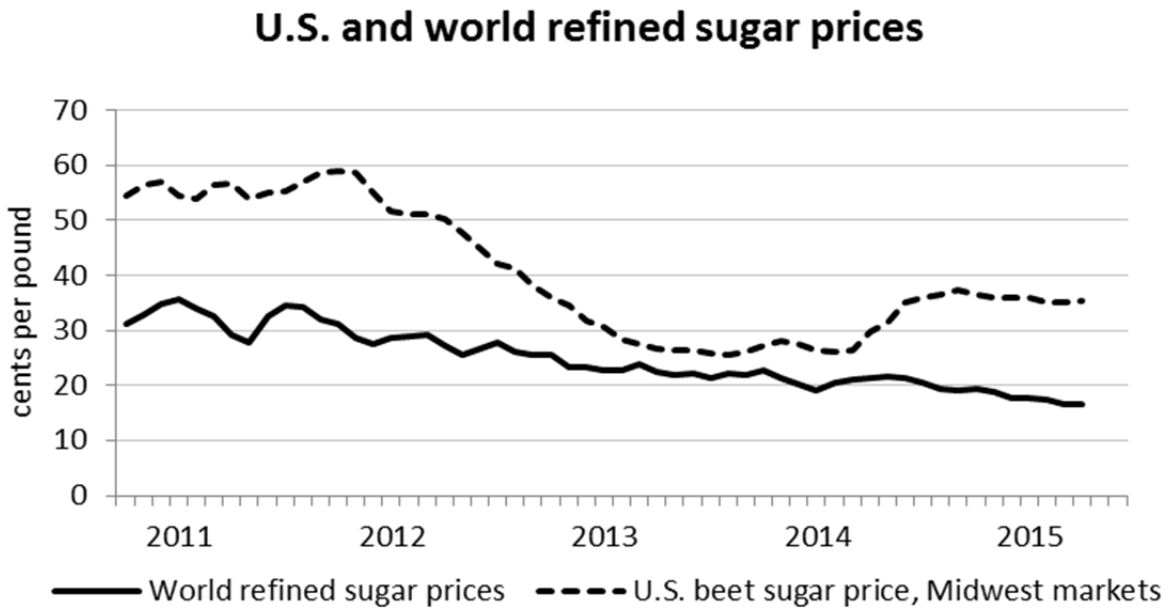
[8] Hearing transcript, pp. 101-102 (Gorrell).

[9] In additional correspondence, *** indicated that U.S. refineries pay mills for approximately 95 percent of the raw sugar cost at the time of delivery, and pay the remaining 5 percent when the refining is complete and the quality of the sugar is known. ***.

Figure V-2
Sugar: USDA published U.S. raw and refined sugar prices, world refined sugar prices, October 2011-April 2015



Source: ERS/USDA.



Source: ERS/USDA.

Raw sugar is traded on the Intercontinental Exchange (ICE) in London, New York, and Singapore.[10] The ICE sugar futures prices are used as references in sugar sales contracts. The most commonly used ICE sugar prices are the "#11" (for world prices of raw sugar) and the "#16" (for U.S. futures prices of raw sugar). Eight producers and four importers noted that at least some of their contracts were linked to the #16 price. Most of these described setting their prices by beginning with a #16 price and then adding costs and margins. For example, ***. Importer ***. Two producers (***) described hedging their sales with the #16 contracts. However, three producers and one importer answered that they did not use futures prices for price-setting or hedging purposes.

Purchasers were asked whether they used the #16 raw sugar price or the published Midwest sugar beet price as a reference when they negotiated the price of the sugar that they purchased. Twenty-six purchasers indicated that they did use at least one, with 15 of these specifically identifying the #16 price, 1 the Midwest beet price, and 3 both. Of the twenty-six that did, various uses included a barometer of the sugar market, a reference point to start negotiations, as a part of their contracts or their own formulas, or a combination of these purposes. Four purchasers indicated that they did not use either price reference.

Fifteen purchasers (including ***) stated that they did not use futures markets to establish the price at which they purchased sugar, while 16 stated that they did. Of these 16, 6 (including ***) used futures markets for 30 percent or less of their purchases, 6 (including ***) used futures markets for 70 percent or more of their purchases, and 3 (***) used futures markets for between 30 and 70 percent of their purchases.

Contracts and spot sales

The majority of sugar sales by U.S. millers are under long-term contracts (table V-2), while a plurality of sugar sales by U.S. refiners/processors and importers of Mexican sugar are under annual contracts. Importers of Mexican sugar had a larger share of their shipments as spot sales than did U.S. producers. For both producers and importers, short-term contracts are typically for periods of 90 to 180 days. Long-term contracts are typically for periods up to two years, although two U.S. producers (***) reported using 10-year contracts. For most U.S.

[10] The Intercontinental Exchange describes the product it trades, the Sugar No. 11 contract, as "the world benchmark contract for raw sugar trading. The contract prices the physical delivery of raw cane sugar, free-on-board the receiver's vessel to a port within the country of origin of the sugar." See https://www.theice.com/products/23/Sugar-No-11-Futures downloaded July 21, 2015. It describes the #16 contract as serving "the hedging needs of U.S. sugar producers, end users and merchants. The contract prices physical delivery of U.S.-grown (or foreign origin with duty paid by deliverer) raw cane sugar at one of five U.S. refinery ports as selected by the receiver." See https://www.theice.com/products/914/Sugar-No-16-Futures downloaded July 22, 2015.

producers and importers, there is no price renegotiation during the contract period,[11] prices are not tied to futures contracts, prices and quantities are fixed during the contract period, and contracts typically do not contain meet-or-release provisions.

Table V-2
Sugar: U.S. producers' and importers' shares of U.S. commercial shipments by type of sale, 2013/14 crop year

* * * * * * *

Four purchasers reported that they purchase product daily, seven purchase weekly, seven purchase monthly, two purchase quarterly, and ten purchase annually. Additionally, three purchasers reported that their purchases vary based on market prices or conditions. Twenty-three purchasers reported that their purchasing frequency had not changed since October 2011, but eight indicated that it had, with three of those indicating that these investigations had changed their purchasing patterns. (Others reported other factors, such as market uncertainty and firm acquisitions as reasons for their changes in purchasing frequency.) Most (22) purchasers contact 1 to 6 suppliers before making a purchase.

Sales terms and discounts

Most responding U.S. producers (18 of 21) and importers (8 of 11) quote prices only on a delivered basis, but a few reported quoting on an f.o.b. basis for some sales. Most U.S. producers and importers do not offer discounts on their sales of sugar, other than some early payment discounts. *** reported offering ***. Typical sales terms for a majority of both responding producers and importers were net 10-20 days.

Time to sale

Petitioners requested collection of data regarding time to sale for U.S. producers of sugar in the most recent crop year.[12] Producers were asked to describe how soon after production (for refiners and mills) their sugar was sold. Millers sold most of their product more than a year prior to production, while processors/refiners had a wider variety of answers (table V-3).

[11] However, at the hearing, counsel for petitioners stated that long-term contracts do reset price "throughout the year." Hearing transcript, p. 167 (Cannon). Purchaser Just Born contradicted this statement by saying that its annual contracts lock prices for a year. Hearing transcript, p. 190 (Jones).

[12] Petitioners' comments on draft questionnaires, pp. 18-19.

Table V-3
Sugar: U.S. millers' and processors'/refiners' time for shipping after harvest or production, 2013/14 crop year

* * * * * * *

In addition, producers were asked to provide monthly detail on the percent of their 2013/14 crop year crops or production were sold in particular months. Their responses are summarized in table V-4.

Table V-4
Sugar: U.S. millers' and processors'/refiners' share of 2013/14 crop year production sold, by month

* * * * * * *

Price leadership

Purchasers were asked to name price leaders, i.e., firms that initiate price changes or have significant impact on prices, in the U.S. sugar market. Nineteen purchasers named Domino/American Sugar Refining, fifteen named United Sugar,[13] five named National Sugar Marketing, three named Imperial/Louis Dreyfus,[14] and two named Cargill/Louisiana Sugar. *** named other ***, with both naming *** and ***. One purchaser, ***, named Mexican producer Zucarmex.

Purchasers often described Domino and United Sugar as leading by being the first firms to announce price changes, usually in a letter, that were then followed by other suppliers. Purchasers described these two firms as able to lead due to their large size. *** described nonsubject imports and CSC Sugar as price leaders in darker-colored liquid sugars. It also described *** as more "flexible" suppliers, and added that *** has the ability to supply other sweeteners as well.

Price and U.S. government interactions

U.S. producers and importers were asked about how the U.S. government interacts with sugar producers and how the U.S. government influences U.S. sugar prices. First, producers and importers were asked to describe interaction with the U.S. government in the areas of data collection, monitoring, and information sharing regarding supply and demand in the U.S. sugar market. Most firms responded that they supplied data to the government, used the government's published data (such as the WASDE), or both.

Next, producers and importers were also asked how the U.S. government interacts with U.S. producers of raw and refined sugar. Firms described the data collection efforts above as well as the U.S. government administration of the sugar quotas and loan programs for sugar, as

[13] United Sugar is the market arm for several U.S. producers; see pricing methods above.

[14] Imperial was recently acquired by Louis Dreyfus. See "Louis Dreyfus to take Imperial Sugar private in $78 million deal," *Reuters*, May 1, 2012.

well as exchange of information with the government regarding sugar market dynamics, agricultural developments, regulatory issues, and international trade agreements.

Finally, producers and importers were also asked to indicate, based on their own experience, how the U.S. government influenced the price of sugar. Most producers and importers answered by describing the U.S. government's role in regulating the U.S. sugar market (see part I) as mandated by the Farm Bill. Several added that because of NAFTA, Mexico is not included in the U.S. government's supply management. Several producers and importers also noted the U.S. government's provision of data on the sugar market.

Price impact of imported sugar

Producers, importers, and purchasers were asked if they paid a premium for sugar from the United States, Mexico, or any third country. Five producers, 5 importers, and 25 purchasers answered that they did not, but 8 producers, 3 importers, and 5 purchasers answered that they did. Five producers and two importers reported paying a premium based on polarity rather than country of origin. Three producers and one importer indicated that some of their customers are willing to pay a little more for U.S.-refined sugar. Among purchasers that reported paying a premium, *** stated that they would pay a premium of 1 to 2 cents per pound for U.S. sugar because of its higher quality, their ability to buy forward, and reduced counter-party risk. *** stated that it pays a premium for domestic white sugar over Mexican sugar because the two products are different. *** stated that because cane sugar is not GMO, it sometimes commands a "slight" premium. It continued that it needed Mexico as a supply source for cane sugar.

A majority of producers, importers, and purchasers indicated that the availability of Mexican sugar in the United States had had a material impact on the price of sugar in the U.S. market over the crop years 2011/12, 2012/13, and 2013/14. Eighteen producers, 5 importers, and 18 purchasers indicated that it had, while 1 producer, 4 importers, and 9 purchasers indicated that it had not.

Producers and importers often described Mexico's "bumper" crop of 2012/13 and/or large Mexican exports to the United States after quota elimination under NAFTA, as lowering U.S. prices, with many producers adding that the reduction and/or price pressure was significant. Among purchasers, seven indicated that increased Mexican sugar imports had led to declines in the price of sugar in the U.S. market during the above crop years. Several others (including ***) described Mexican sugar as creating "supply certainty" (***) or making U.S. prices more "competitive" than U.S. producers' typically "overpriced" offerings (***). Five other purchasers described Mexican prices working with other factors, such as increased U.S. crop yields and the availability of nonsubject imports, to reduce U.S. prices in the crop years listed. However, *** stated that if imports were not coming from Mexico, they would have been available from nonsubject sources. *** described U.S. prices as falling not due to Mexican imports but due to bumper U.S. crops and some purchasers switching back to HFCS.

In additional comments, *** stated that Mexican sugar had probably not played a large role in U.S. price moves since 2011. It explained that large U.S. beet and cane crops, as well as large Mexican crops, had increased supply as purchasers were switching back to HFCS, reducing

demand. It added that these factors had played a larger role in lowering U.S. prices than Mexican sugar prices.

Petitioners and the Sweetener Users Association and Barry Callebaut disagreed over the price impact of imported sugar. Petitioners submitted a correlation analysis concluding that there is a strong inverse correlation over 2011/12 to 2013/14 between the level of Mexican sugar imports and changes in U.S. sugar prices.[15] However, the Sweetener Users Association and Barry Callebaut submitted a correlation analysis finding that there was no consistent relationship between U.S. sugar prices and Mexican import volumes from 2007/08 to the present.[16]

U.S. and global sugar prices

Producers, importers, and purchasers were asked to describe trends in global sugar prices, and how those prices have affected the U.S. price for sugar. Thirteen producers and ten importers described sugar prices as declining between 20 to 50 percent between the 2011/12 and 2013/14 crop years, with three producers and three importers ascribing the price fall to a global sugar surplus. Additionally, *** described falling crude oil prices as driving down sugar prices, because of the use of sugar in Brazilian ethanol when crude oil prices are higher. It added that better growing conditions in Australia, India, and Thailand had contributed to a global surplus.

Responding producers, importers, and purchasers often described U.S. prices as above world prices due to U.S. government regulation of the U.S. sugar industry. Purchaser *** estimated that the U.S. price is usually about $0.10/pound higher than the world price. The American Sugar Alliance, an industry group representing U.S. producers of sugar, described the world sugar market as distorted by numerous subsidies by the governments of sugar-producing nations.[17] As shown in figure V-3, U.S. sugar prices are higher than world prices, although the gap narrowed in late 2012 and 2013 before widening in 2014 to 2011 levels.

At the hearing, U.S. Sugar described U.S. and world sugar prices as "totally unrelated." However, Domino and the Sweetener Users Association also described sugar imports as flowing to the U.S. market when the U.S. price was high enough above the world price to cover transportation costs to the U.S. market.[18]

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[15] Petitioners' prehearing brief, pp. 17-18 and 32, and exhibit 1, p. 29. See also hearing transcript, p. 74 (Cannon). The Sweetener Users Association and Barry Callebaut responded that the fall in the U.S. price of sugar began before imports of Mexican sugar increased. Posthearing brief of Sweetener Users Association and Barry Callebaut, p. 8, and exhibit 1, p. 44.

[16] Prehearing brief of the Sweetener Users Association and Barry Callebaut, pp. 32-33 and exhibit 14. See also hearing transcript, pp. 202-203 (Earley). Petitioners stated that the reason this analysis found no correlation is because it included a time frame from before the period of investigation. See petitioners' posthearing brief, response to written questions, p. 13.

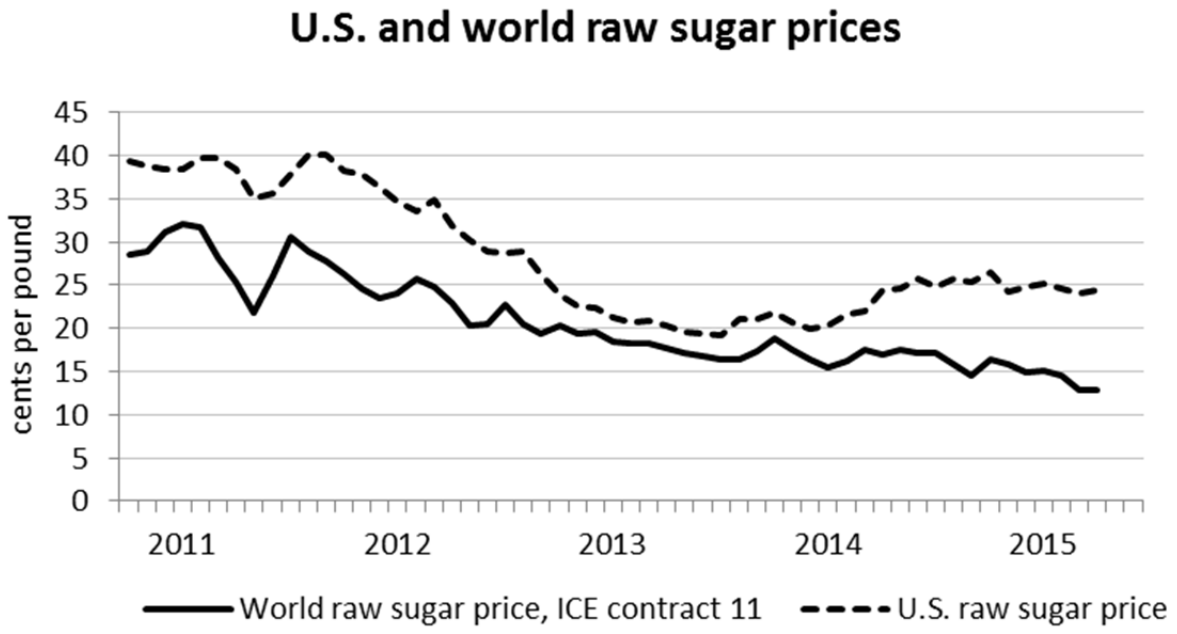
[17] See http://www.sugaralliance.org/get-the-facts/foreign-subsidies/ downloaded May 26, 2015.

[18] Hearing transcript, p. 204 (Earley).

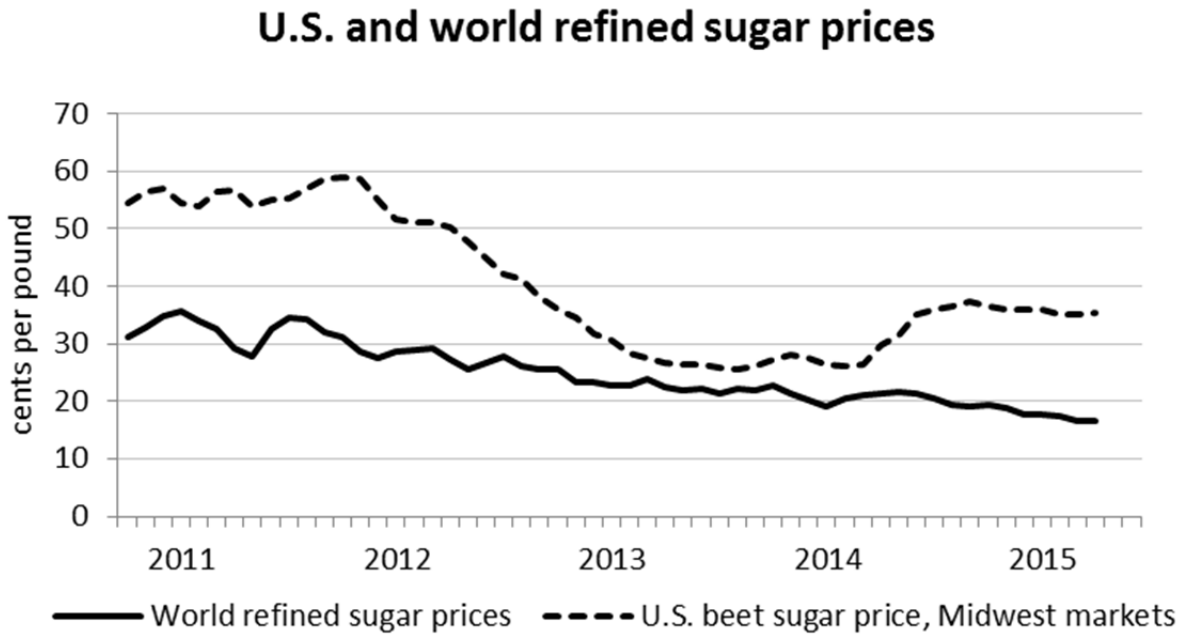
The Sweetener Users Association and Barry Callebaut described historical U.S. raw sugar prices as "fairly stable" over 1981-2008 before rising to "historic high levels" by crop year 2010/11.[19]

[19] Prehearing brief of The Sweetener Users Association and Barry Callebaut, p. 29.

Figure V-3
Sugar: USDA published U.S. and world sugar prices, October 2011-April 2015



Source: ERS/USDA.



Source: ERS/USDA.

Multiple producers, including *** stated that when the published U.S. price rises too much above the world price, there are more imports. Similarly, some importers *** and purchasers ***, indicated that when the margin between U.S. and world sugar prices exceeded the boundaries of its normal range, U.S. exports or imports would increase (with exports increasing due to a low margin and imports increasing due to a high margin). *** described U.S. prices as rising more than world prices since the institution of these investigations.

Some purchasers (including ***) also described U.S. prices as following world prices (albeit at a higher level), and thus undergoing steep declines since October 2011, as shown in USDA published price trends. Many purchasers (including ***) described the likely driver of these world price declines as abundant supply in the rest of the world, especially in Brazil.

Other purchasers (including ***) described U.S. sugar regulations as effectively segregating the U.S. sugar market from the rest of the world, leading to situations in which U.S. price variation is more related to the U.S. crop than to world markets. Similarly, *** stated that there was no correlation between U.S. and world sugar prices.

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 sugar products shipped to unrelated U.S. customers during October 2011 to September 2014. Products 2, 3, 5, and 6 are broken into sub-products based on polarity or branding; henceforth, references to product 2, 3, 5, or 6 refer to all the products under the larger product description (e.g., product 2 refers to products 2A, 2B, and 2C). Values were requested in hundredweight (cwt).

Product 1**.** -- Sugar, less than 99.6 polarity, sold to sugar refiners.

Product 2A**.** -- Sugar, 99.9 polarity and above, sold to industrial producers of food, beverages or other sugar-containing-products (e.g., General Mills, Mars, Coca Cola, Kraft).

Product 2B**.** -- Sugar, 99.6-99.89 polarity, sold to industrial producers of food, beverages or other sugar-containing-products (e.g., General Mills, Mars, Coca Cola, Kraft).

Product 2C**.** -- Sugar, 99.4-99.59 polarity, sold to industrial producers of food, beverages or other sugar-containing-products (e.g., General Mills, Mars, Coca Cola, Kraft).

Product 3A**.** -- Branded refined sugar sold in packages of 50 lbs. or less to grocery chains (e.g., Safeway, Harris Teeter, Walmart, Costco).

Product 3B**.** -- Private label refined sugar sold in packages of 50 lbs. or less to grocery chains (e.g., Safeway, Harris Teeter, Walmart, Costco).

Product 4.-- Refined sugar sold in packages of 50 kgs. (110.23 lbs.) or less to institutional and/or food service providers (e.g., Sysco, restaurant chains, bakeries, schools, hospitals, prisons).

Product 5A.-- Sugar, 99.9 polarity and above, sold in packages of 50 kgs. (110.23 lbs.) or less to distributors (i.e., companies such as Batory Foods that buy sugar to resell to the industrial trade for use as an ingredient).

Product 5B.-- Sugar, 99.6-99.89 polarity, sold in packages of 50 kgs. (110.23 lbs.) or less to distributors (i.e., companies such as Batory Foods that buy sugar to resell to the industrial trade for use as an ingredient).

Product 5C.-- Sugar, 99.4-99.59 polarity, sold in packages of 50 kgs. (110.23 lbs.) or less to distributors (i.e., companies such as Batory Foods that buy sugar to resell to the industrial trade for use as an ingredient).

Product 6A.-- Sugar, 99.9 polarity and above, sold in bulk to distributors (i.e., companies such as Batory Foods).

Product 6B.-- Sugar, 99.6-99.89 polarity, sold in bulk to distributors (i.e., companies such as Batory Foods).

Product 6C.-- Sugar, 99.4-99.59 polarity, sold in bulk to distributors (i.e., companies such as Batory Foods).

Twenty-two U.S. producers and ten importers[20] provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.[21] Pricing data for product 1 reported by these firms accounted for approximately *** percent of U.S. producers' U.S. shipments of raw sugar in the 2013/14 crop year,[22] and pricing data for products 2-6 reported by these firms accounted for approximately *** percent of U.S. producers' U.S. shipments of refined sugar in that crop year. Pricing data, including the

[20] In the preliminary phase of these investigations, an additional three importers reported pricing data: ***. Importer ***. ***. See ***. ***.

[21] 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. ***. Similarly, after investigation and follow-up, five points of pricing data (from ***) remained anomalous (higher than $95/cwt or lower than $4 per cwt) and were removed from the data.

[22] ***.

purchase cost data, submitted by U.S. importers of Mexican sugar accounted for *** percent of U.S. imports from Mexico in the 2013/14 crop year.[23]

Price data for all products are presented in tables V-5 to V-22 and figure V-4. Prices for products 2, 3, 5, and 6 are presented both in aggregate (e.g., product 2) and by subgroup (e.g., products 2A, 2B, and 2C). Importers were also asked to provide their import purchase cost data for product 1, if they imported product 1 for their own use to make refined sugar. Four importers (***) submitted such data. Of these four, the purchase cost data from *** were consistently higher than the data for the other three. Additionally, *** was the only importer to provide purchase cost data before October 2012. These data are summarized in table V-6.[24] [25]

Table V-5
Sugar: Weighted-average f.o.b. prices and quantities of domestic and imported product 1[1] and margins of underselling/(overselling), by month, October 2011-September 2014

* * * * * * *

Table V-6
Sugar: Weighted-average landed duty-paid costs and quantities of imported product 1[1] by firms that consumed the product internally, by month, October 2011-September 2014

* * * * * * *

Table V-7
Sugar: Weighted-average f.o.b. prices and quantities of domestic and imported product 2[1] and margins of underselling/(overselling), by month, October 2011-September 2014

* * * * * * *

Table V-8
Sugar: Weighted-average f.o.b. prices and quantities of domestic and imported product 2A[1] and margins of underselling/(overselling), by month, October 2011-September 2014

* * * * * * *

[23] If pricing data coverage for U.S. producers is calculated by summing all pricing products, the coverage is nearly 100 percent, probably because some shipments of product 1 are refined and then shipped again as other products. If pricing data coverage is similarly calculated for Mexican imports, then pricing data coverage for product 1 is more than 100 percent of U.S. imports of raw Mexican sugar, probably because the definition of product 1 can include some estandar that would be classified as refined sugar in U.S. import data.

[24] ***. ***.

[25] Some producers and importers added comments about the data that they provided. Producers *** described ***. Producer *** indicated that ***. *** indicated that its pricing data excluded nearly *** in USDA loan forfeitures. Importer *** noted that it does not know the polarity of the *** sugar it sells, and so included all such data under ***.

Table V-9
Sugar: Weighted-average f.o.b. prices and quantities of domestic and imported product 2B[1] and margins of underselling/(overselling), by month, October 2011-September 2014

* * * * * * *

Table V-10
Sugar: Weighted-average f.o.b. prices and quantities of domestic and imported product 2C[1] and margins of underselling/(overselling), by month, October 2011-September 2014

* * * * * * *

Table V-11
Sugar: Weighted-average f.o.b. prices and quantities of domestic and imported product 3[1] and margins of underselling/(overselling), by month, October 2011-September 2014

* * * * * * *

Table V-12
Sugar: Weighted-average f.o.b. prices and quantities of domestic and imported product 3A[1] and margins of underselling/(overselling), by month, October 2011-September 2014

* * * * * * *

Table V-13
Sugar: Weighted-average f.o.b. prices and quantities of domestic and imported product 3B[1] and margins of underselling/(overselling), by month, October 2011-September 2014

* * * * * * *

Table V-14
Sugar: Weighted-average f.o.b. prices and quantities of domestic and imported product 4[1] and margins of underselling/(overselling), by month, October 2011-September 2014

* * * * * * *

Table V-15
Sugar: Weighted-average f.o.b. prices and quantities of domestic and imported product 5[1] and margins of underselling/(overselling), by month, October 2011-September 2014

* * * * * * *

Table V-16
Sugar: Weighted-average f.o.b. prices and quantities of domestic and imported product 5A[1] and margins of underselling/(overselling), by month, October 2011-September 2014

* * * * * * *

Table V-17
Sugar: Weighted-average f.o.b. prices and quantities of domestic and imported product 5B[1] and margins of underselling/(overselling), by month, October 2011-September 2014

* * * * * * *

Table V-18
Sugar: Weighted-average f.o.b. prices and quantities of domestic and imported product 5C[1] and margins of underselling/(overselling), by month, October 2011-September 2014

* * * * * * *

Table V-19
Sugar: Weighted-average f.o.b. prices and quantities of domestic and imported product 6[1] and margins of underselling/(overselling), by month, October 2011-September 2014

* * * * * * *

Table V-20
Sugar: Weighted-average f.o.b. prices and quantities of domestic and imported product 6A[1] and margins of underselling/(overselling), by month, October 2011-September 2014

* * * * * * *

Table V-21
Sugar: Weighted-average f.o.b. prices and quantities of domestic and imported product 6B[1] and margins of underselling/(overselling), by month, October 2011-September 2014

* * * * * * *

Table V-22
Sugar: Weighted-average f.o.b. prices and quantities of domestic and imported product 6C[1] and margins of underselling/(overselling), by month, October 2011-September 2014

* * * * * * *

Figure V-4
Sugar: Weighted-average prices, costs, and quantities of domestic and imported product, by quarters, October 2011-September 2014

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Direct Imports (Import Purchase Cost)

The Commission requested information on the additional costs incurred by importers that import raw sugar for making refined sugar (direct imports). (Table V-6 reports the direct import purchase costs for product 1.) Five of six responding importers (including the ***[26])

[26] ***.

indicated that they do not incur additional transaction costs when they import Mexican sugar directly. ***. Firms were also asked to describe the factors that add to the cost of importing directly and estimate the cost of each factor as a share of the purchase price. Factors listed by the responding importer, ***, were internal Mexican logistics expenses and freight to the United States. *** compares these factors to U.S. importers and estimated the additional costs to be *** percent and *** percent, respectively, of the purchase cost.

Importers were also asked if they are able to reduce transaction costs by importing Mexican sugar directly instead of purchasing from a U.S. importer or producer. Four of six responding importers (including ***) indicated that they are not able to reduce transaction costs by importing directly. Firms were asked to describe the factors that reduce the cost of importing directly and estimate the savings of each factor as a share of the purchase price. *** listed freight from *** saves an estimated *** percent of the purchase price. *** stated that the quality of Mexican sugar allows for lower energy usage as well as higher production yields and estimates the savings at *** percent of the purchase price.

Petitioners stated that in this case, there is no difference in the level of trade between U.S. producers' sales of product 1 and direct imports of product 1 from Mexico, because refiners purchase directly from either U.S. millers or from Mexico.[27] They also described the competition between direct imports and U.S. product as important in the U.S. sugar market.[28] However, an economist for the Sweetener Users Association and Barry Callebaut described imports of Mexican product 1 as replacing product traditionally imported by refiners that use TRQ imports, rather than competing with U.S. product.[29]

Price trends

Overall, sugar prices decreased during October 2011-September 2014. Table V-23 summarizes sugar price trends, by country and by product. As shown in the table, domestic price decreases ranged from 16.0 percent to 34.6 percent during October 2011-September 2014 while Mexican price decreases (for products with more than one observation) ranged from 7.8 percent to 47.1 percent.

Table V-23
Sugar: Summary of weighted-average f.o.b. prices for products 1-6 from the United States and Mexico

* * * * * * *

[27] Hearing transcript, pp. 59-60, 102-103 (Cannon), 103 (Buker), 104-105 (Hillman).
[28] Hearing transcript, p. 99 (Cannon).
[29] Hearing transcript, p. 213 (Hudgens).

Price comparisons

Margins of underselling can be calculated separately on all subproducts or for each product in aggregate, as shown in tables V-24 (aggregate) and V-25 (separate subproducts). In both scenarios, there were more instances of Mexican product underselling U.S. product than overselling it, but the overselling took place on greater volumes when the products were considered in groups rather than subgroups.

Table V-24
Sugar: Instances of underselling/overselling and the range and average of margins, calculated for products 1-6 aggregated, October 2011-September 2014.

* * * * * * *

Table V-25
Sugar: Instances of underselling/overselling and the range and average of margins, calculated for products 1-6 by individual sub-product, October 2011-September 2014.

* * * * * * *

Sugar contract data

The Mexican Sugar Chamber requested that the Commission request data for pricing products on a contract basis. The Chamber stated that the Commission's preliminary-phase pricing data did not "control for the impact of forward pricing," i.e., that prices for sales in one quarter might reflect conditions at the time the contract was executed rather than market prices in that quarter.[30]

The Commission requested contract information for products 1 and 2A above. Six firms (***) provided data on only a total of 13 contracts for product 1 in the Commission's requested format.

For product 2A, nine producers and four importers provided data covering 16,711 contracts, in the Commission's requested format. Of these, only 69 were for Mexican sugar and the rest for U.S.-produced sugar. Commission staff calculated an average "contract price" from these contracts, and assigned it to the month in which it was contracted. These data are summarized in table V-26 and figure V-5. Overall, these contract prices show the same general trends as the traditional price data for product 2A.

[30] See Mexican Sugar Chamber's Comments on Questionnaires, December 15, 2014, p. 9. This situation is always the case under the Commission's traditional pricing analysis, as long as there are some contract sales.

Table V-26
Sugar: Weighted-average contract prices of imported product 2A[1], by month, October 2011-September 2014

* * * * * * *

Figure V-5
Sugar: Weighted-average contract prices of domestic and imported product, by quarters, October 2011-September 2014

* * * * * * *

LOST SALES AND LOST REVENUE

Final Phase

In the final phase of these investigations, the Commission requested U.S. producers of sugar to report any instances of lost sales or revenue they experienced due to competition from imports of sugar from Mexico since October 1, 2011. Of the 19 responding U.S. producers, 16 reported that they had to either reduce prices or roll back announced price increases.[31] *** firms submitted lost sales and/or lost revenue allegations. Their *** lost sales allegations totaled $30,128,459 and involved 279,462,156 pounds of sugar, and their *** lost revenue allegations totaled $2,210,511 and involved 51,037,393 pounds of sugar (see tables V-27 and V-28). Staff contacted *** purchasers and a summary of the information obtained follows.

Purchasers responding to the lost sales allegations also were asked whether they shifted their purchases of sugar from U.S. producers to suppliers of sugar from Mexico since October 2011. *** reported that they had shifted purchases of sugar from U.S. producers to subject imports since October 2011; one of these purchasers, ***, reported that price was the reason for the shift, and the other, ***, indicated that price was not.

In addition, purchasers were asked whether U.S. producers reduced their prices in order to compete with suppliers of sugar from Mexico. One of two responding purchasers reported that the U.S. producers had reduced their prices in order to compete with the prices of subject imports since 2011 and the other indicated that they did not know.

[31] ***

Table V-27
Sugar: U.S. producers' lost sales allegations

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Table V-28
Sugar: U.S. producers' lost revenue allegations

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***.

Preliminary Phase

In the preliminary phase of these investigations, the Commission requested U.S. producers of sugar to report any instances of lost sales or revenue they experienced due to competition from imports of sugar from Mexico since October 2010. Of the 16 responding U.S. producers, 14 reported that they had to either reduce prices or roll back announced price increases. These producers provided 128 lost sales allegations that involved 4.0 billion pounds of sugar (about 80 percent of imports of Mexican sugar during the preliminary-phase period of investigation) and 25 lost revenue allegations that totaled $3.2 million and involved 110 million pounds of sugar (see tables V-29 and V-30). U.S. producers did not provide a rejected U.S. price for 44 allegations representing 2.9 billion pounds of sugar, so the total value of lost sales cannot be calculated. The remaining 84 lost sales allegations represented $367 million and involved about 1.0 billion pounds of sugar. Staff attempted to contact all purchasers and a summary of the information obtained follows.

Purchasers responding to the lost sales allegations also were asked whether they shifted their purchases of sugar from U.S. producers to suppliers of sugar from Mexico since October 2010. Seven of the 24 responding purchasers reported that they had shifted purchases of sugar from U.S. producers to subject imports since October 2010; two of these purchasers reported that price was the reason for the shift and four indicated that price was not the reason for the shift.

In addition, purchasers were asked whether U.S. producers reduced their prices in order to compete with suppliers of sugar from Mexico. Four of 19 purchasers reported that the U.S. producers had reduced their prices in order to compete with the prices of subject imports since 2010 and the remainder indicated that U.S. producers had not.

Table V-29
Sugar: U.S. producers' preliminary-phase lost sales allegations

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Table V-30
Sugar: U.S. producers' preliminary-phase lost revenue allegations

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In additional comments, the Sweetener Users Association and Barry Callebaut described purchaser responses to lost sales and lost revenue allegations as not supporting Petitioners' allegations that imports from Mexico have been the cause of declining prices in the U.S. market.[32] Petitioners cite narrative responses which they claim establish that Mexican imports captured significant sales volumes at specific accounts, that price was critical to deciding the outcome of competition, and that domestic producers lost volume or lowered prices.[33]

* * * * * * * [34]

* * * * * * *

[32] Sweetener Users Association and Barry Callebaut post conference brief, pp. 23-24.
[33] Petitioners' postconference brief, pp. 30-31 and exhibit 9.
[34] Staff phone conversation with ***, April 11, 2014.

PART VI: FINANCIAL EXPERIENCE OF U.S. PRODUCERS

BACKGROUND

As noted in Part III of this report, the Commission gathered data from growers of sugarcane and sugar beet; millers, which process sugarcane into raw cane sugar; and processors/refiners, which process sugar beets and raw cane sugar, respectively, into refined sugar. Eighty-four growers of cane and beet, 11 millers of sugar cane, and 14 processors/refiners[1] provided useable financial data. Growers of sugar beets and, to a lesser extent, sugar cane are predominantly members of agricultural co-operative associations ("co-op").[2] Cane millers ship to cane refiners and may be part of a related co-op and/or part of an integrated supply chain; sugar beet processors, which produce refined sugar, are typically part of the cooperative association. Finally, refiners may or may not be stand-alone independent entities.

OPERATIONS ON SUGAR

Aggregated data collected for the period examined (crop years 2011/12, 2012/13, and 2013/14) are presented in table VI-1 for U.S. growers' operations (i.e., sugarcane and sugar beet farms) in relation to sugar, which is presented first. Next in order of presentation (for the full crop years are the aggregated data on U.S. miller's (sugar cane milling) operations in table VI-2, while aggregated data on U.S. processors' and refiners' operations together are presented in table VI-3**.**

[1] Petitioners argued in the preliminary phase of these investigations that two firms, (***), termed "melt houses," should be excluded from the domestic industry. The Commission determined to exclude ADM, but not ***.

[2] Commission staff are not able to consolidate such cooperative entities with their related growers because cooperatives do not maintain their accounting records to record their member-owners' costs of production. The cooperatives reported member distributions as their own raw material costs while the member growers reported distributions received as sales revenue in their questionnaire responses, respectively.

Table VI-1
Sugar: Results of operations of U.S. growers, crop years 2011/12 through 2013/14

Item	Crop year		
	2011/12	2012/13	2013/14
	Quantity (1,000 STRV)		
Total net sales quantity	12,472	14,031	13,290
of which sugar beet growers	2,984	3,445	3,369
of which sugar cane growers	9,488	10,586	9,921
	Value (1,000 dollars)		
Total net sales revenues and incomes[1]	813,288	790,106	576,191
of which sugar beet growers	204,944	216,920	140,734
of which sugar cane growers	608,344	573,186	435,457
Farming expenses: Planting, growing, and harvesting costs	481,332	490,151	477,400
Rent or lease payments	50,769	54,840	52,787
Transportation costs	66,694	63,987	66,842
Total farming expenses	598,795	608,978	597,029
of which sugar beet growers	140,757	155,043	147,700
of which sugar cane growers	458,038	453,935	449,329
Gross profit or (loss)	214,493	181,128	(20,838)
of which sugar beet growers	64,187	61,877	(6,966)
of which sugar cane growers	150,306	119,251	(13,872)
SG&A expenses	20,221	21,117	23,301
of which sugar beet growers	2,682	3,148	3,130
of which sugar cane growers	17,539	17,969	20,171
Operating income or (loss)	194,272	160,011	(44,139)
of which sugar beet growers	61,505	58,729	(10,096)
of which sugar cane growers	132,767	101,282	(34,043)
Other expenses / (incomes), net	(6,051)	1,495	(721)
Net income or (loss)[2]	200,323	158,516	(43,418)
of which sugar beet growers	54,111	50,238	(15,917)
of which sugar cane growers	146,212	108,278	(27,501)
Depreciation/amortization	55,884	63,828	62,063
Cash flow	256,207	222,344	18,645

Table continued on the next page.

Table VI-1--*Continued*
Sugar: Results of operations of U.S. growers, crop years 2010/11 through 2012/13

Item	Crop year		
	2011/12	2012/13	2013/14
	Ratio to net sales (percent)		
Farming expenses:			
Planting, growing, and harvesting costs	59.2	62.0	82.9
Rent or lease payments	6.2	6.9	9.2
Transportation costs	8.2	8.1	11.6
Total farming expenses	73.6	77.1	103.6
Total farming expenses for beet growers	68.7	71.5	104.9
Total farming expenses for cane growers	75.3	79.2	103.2
Gross profit or (loss)	26.4	22.9	(3.6)
SG&A expenses	2.5	2.7	4.0
Operating income or (loss)	23.9	20.3	(7.7)
Operating income or (loss) for beet growers	30.0	27.1	(7.2)
Operating income or (loss) for cane growers	21.8	17.7	(7.8)
Net income or (loss)	24.6	20.1	(7.5)
of which sugar beet growers	26.4	23.2	(11.3)
of which sugar cane growers	24.0	18.9	(6.3)
	Unit value (dollars per STRV)		
Net sales average unit value	65.21	56.31	43.35
Net sales average unit value for beet growers	68.69	62.96	41.77
Net sales average unit value for cane growers	64.11	54.15	43.89
Farming expenses:			
Planting, growing, and harvesting costs	38.59	34.93	35.92
Rent or lease payments	4.07	3.91	3.97
Transportation costs	5.35	4.56	5.03
Total farming expenses	48.01	43.40	44.92
Total farming expenses for beet growers	47.17	45.00	43.84
Total farming expenses for cane growers	48.27	42.88	45.29
Gross profit or (loss)	17.20	12.91	(1.57)
SG&A expenses	1.62	1.51	1.75
Operating income or (loss)	15.58	11.40	(3.32)
Operating income or (loss) for beet growers	20.61	17.05	(3.00)
Operating income or (loss) for cane growers	13.99	9.57	(3.43)
Net income or (loss)	16.06	11.30	(3.27)
of which sugar beet growers	18.14	14.58	(4.72)
of which sugar cane growers	15.41	10.23	(2.77)

Table continued on the next page.

Table VI-1--*Continued*
Sugar: Results of operations of U.S. growers, crop years 2010/11 through 2012/13

Item	Crop year		
	2011/12	2011/12	2011/12
	Number of firms reporting:		
Operating losses	9	9	46
of which sugar beet growers	6	3	32
of which sugar cane growers	3	6	14
Net losses	9	7	55
of which sugar beet growers	6	3	39
of which sugar cane growers	3	4	16
Data	84	84	85
of which sugar beet growers	53	53	54
of which sugar cane growers	31	31	31

[1] includes commercial sales (i.e., non-co-op shipments) and shipments to the member's cooperative and "other revenues" as shown in the folowing tablulation:

Type of sale	2011/12	2012/13	2013/14
Commercial sales value (*$1,000*)	445,202	414,391	319,251
Co-op shipments value (*$1,000*)	311,629	322,139	219,920
Other revenues value (*$1,000*)	56,457	53,576	37,020
Total Net Sales value (*$1,000*)	813,288	790,106	576,191

The structure of the growing parts of the industry differ: All or nearly all of the beet farmers belong to agricultural co-ops while only some of the cane farmers are members of co-ops.

[2] Net income equals gross farming profit minus interest expense and other expense plus other income (e.g., government programs).

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

The quantity of beets and cane delivered by reporting growers to processors/mills rose irregularly between the full crop years 2011/12 and 2013/14 although the unit value and total value of those deliveries fell between those years. Total farming expenses were roughly flat and SG&A expenses increased between those full crop years. As a result, growers as a whole incurred gross, operating, and net losses on their operations in crop year 2013/14. As depicted in the comments in appendix F, many growers noted that growing and harvesting costs rose as sugar prices increased but costs have not fallen with the decline in sugar prices. One grower estimated that farming costs had risen by 40 percent between 2009 and 2013; another commented "we are battling rising labor costs, fuel prices, fertilizer prices, equipment repairs, and insurance costs."[3] Others included land rent and new equipment purchases among rising costs.[4] They also mentioned various farming conditions they encountered in the past three crop years as constraints on production, including variable weather, drought and lack of water

[3] ***.

[4] For example, ***. In regard to new equipment purchases, several growers mentioned recognizing capital purchases as an expense using accelerated depreciation allowed under Section 168 of the Internal Revenue Code.

resources, early freezes, lack of available farm labor, and the like. Each of these undoubtedly affected the costs of growing and harvesting.

As noted earlier, many of the reporting growers belong to agricultural cooperatives. A cooperative is an entity that is legally separate from its members, performs processing and sales services and acts as a pass-through mechanism of sales proceeds and costs.[5] The cooperatives' shipments value shown above is an approximation of the sales proceeds of refined sugar made on behalf of their members. Growers of sugarcane and sugar beets reported commercial sales, cooperative shipments (distributions) and other revenues, which are generally from sales of byproducts or coproducts.

Table VI-2 presents aggregated data for the sugar operations of ten reporting millers and is briefly summarized here. Total net sales include commercial sales and transfers to

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[5] Agricultural cooperatives are voluntary associations of growers and the related miller/processor; they are pass-through entities that remit back to their grower-owners the net proceeds from processing. In other words, sugarcane or sugar beets growers provide the input cane and beets to sugarcane millers and sugar beet processors, respectively, for refining into raw and refined sugar, respectively while the processors and millers provide marketing services for the sugar product and account to their owners for the sales. Several growers stated that they purchase shares in their agricultural cooperative, which gives them the right to grow beets on one acre per share; hence, cooperative members share in the processor's USDA marketing allotment. The agricultural cooperative provides an initial payment to its growers, which represents about 65 percent of the projected final sales price of the refined sugar product, and includes deduction for processing costs, with subsequent payments based on realized prices minus processing costs.

The cooperative acts as a pass-through mechanism for revenues and costs. In other words, growers' reported revenues mainly reflect distributions from the cooperatives with which they are affiliated. Cooperatives' distributions to their members reflect sales revenues minus processing and marketing costs, i.e., cooperatives' distributions to their members reconcile and account for net proceeds from member and nonmember business in their public statements. *See*, for example, Minn-Dak Farmers' Cooperative, 2011 Form 10-K, downloaded April 17, 2014. In this regard, in the preliminary phase ***. All or nearly all of the cooperatives participating in this investigation stated that they did not know their members' growing and harvesting costs. Hence, the actual costs of raw material inputs of the cooperative are unknown and cannot be calculated exactly. When growers made profits, input costs to the cooperatives are understated; when growers made losses, input costs are overstated. The total effect of this relationship between growers and cooperatives is to make more difficult an analysis of the financial results of the industry as a whole. In investigations, the Commission typically examines financial data of related entities on a consolidated basis with sales reported to unrelated parties on a commercial basis and transfers of inputs from related parties on the basis of actual cost. In accounting terms, consolidation of related entities means reconciling intra-firm transfers and eliminating intra-firm profits on those transfers. With regard to using studies of farm costs as a surrogate for planting, growing, and harvesting costs of sugarcane and sugar beets, see preliminary phase staff report, p. VI-5, note 4.

When asked what indicator is the best measure of performance of an agricultural cooperative, several spokespeople answered that it was net proceeds paid to cooperative members. For example, email from ***. The reporting cooperatives reported the majority of their proceeds paid to members under raw materials as patronage.

related firms.[6] The quantity of total sales rose between the full crop years 2011/12 and 2013/14 while the average unit value and total value of sales fell between the two years. Operating income and net income before taxes also fell from a profit in 2011/12 to a loss in 2013/14. Depreciation charges were greater than the net loss in that year and, hence, cash flow was positive, but greatly reduced from the amount in crop year 2011/12.

Table VI-2
Sugar: Results of operations of stand-alone U.S. millers, crop years 2011/12 through 2013/14

* * * * * * *

The value of raw material costs, which are the single largest component of COGS, fell between the full crop-years although the ratio of raw materials to net sales was approximately flat. Eight of the eleven reporting millers reportedly purchase their cane from independent growers or only loosely affiliated growers who are not a part of a formal co-op arrangement. Two of the ten sugarcane millers reporting data are co-ops and reported patronage distributions fell sharply in dollar terms but were approximately flat when considered as a ratio to net sales.[7] As a ratio to total COGS, raw material costs declined from *** percent to *** percent. There were no reported imports of foreign origin raw materials because sugar cane is processed locally.

In the preliminary phase of these investigations, Commission staff compared deliveries of sugarcane reported by grower-members and receipts of sugarcane reported by the co-ops; staff then calculated a "coverage ratio" by dividing the quantity (in short tons) of sugarcane delivered by members of the co-op by the quantity in short tons of sugarcane received reported by the co-op.[8] The subsequent calculations indicated that for both of the reporting co-op millers, estimated raw material costs were lower and estimated operating income was greater than what was reported. The effect on the industry milling sugar cane was estimated as the sum of estimated differences of those two millers.

A table showing the results of operations on sugar by U.S. millers on a firm-by-firm basis is presented in appendix E.

Table VI-3 presents aggregated data for the sugar operations of 14 reporting processors and refiners and is briefly summarized here. Total net sales rose irregularly on a quantity basis between 2011/12 and 2013/14 but fell sharply on an average unit value and total dollar value

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[6] Total net sales of sugarcane millers include commercial sales and transfers to related refiner firms. The latter category accounted for *** percent to *** percent, by quantity, and between *** percent and *** percent, by value, of total net sales between 2011/12 and 2013/14. Total sales also includes approximately $*** in forfeitures to the CCC by two millers, as described earlier.

[7] These are ***; and ***. A number of cane growers reported commercial shipments that accounted for more than 80 to 90 percent of their total shipments (e.g., ***). Additionally, ***.

[8] Staff report in the preliminary phase, p. VI-8-9 and notes 8 and 9. The coverage ratio varied considerably.

basis. Operating income and net income both fell sharply, between the two crop years 2011/12 to 2013/14. Processors and refiners reported larger operating losses in 2013/14 compared with 2012/13 operating losses, and much lower net income compared with the prior two years. Cash flow also fell between the two years.

Table VI-3
Sugar: Results of operations of U.S. processors and refiners,[1] crop years 2011/12 through 2013/14

* * * * * * *

The value of total raw material costs, the single largest component of COGS, fell sharply from 2011/12 to 2013/14. As a ratio to net sales, raw material costs declined from *** percent to *** percent; as a ratio to total COGS, raw material costs fell from *** percent to *** percent. These data include open-market purchases of raw sugar, transfers from related cane millers, and distributions to co-op patrons. Six of the sugar beet processors reporting data are co-ops. As noted earlier, Commission staff are not able to consolidate such co-op entities with their owners but as with two miller co-ops (discussed earlier in this section of the report) calculated a coverage ratio[9] and used that coverage ratio to estimate raw material costs of the co-op in place of the reported distributions to growers in the preliminary phase of these investigations.

A table showing the results of operations on sugar by U.S. processors/refiners on a firm-by-firm basis is presented in appendix E.

Variance analysis

A variance analysis for the operations of U.S. producers of sugar is presented in tables VI-4, VI-5, and VI-6 for growers, millers, and processor/refiners, respectively.[10] The information for these variance analyses is derived from tables VI-1, VI-2, and VI-3.

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[9] In the preliminary phase of these investigations, Commission staff calculated a "coverage ratio" by dividing the quantity (in short tons) of sugar beets delivered by members of the cooperative by the quantity in short tons of sugar beets received as reported by the cooperative. The grower-members reported shipping 100 percent of their crop to the cooperative but coverage ranged from a low of 4 to 5 percent to a high of 15.4 percent during the three yearly periods. Commission staff divided the total costs of planting, growing, harvesting, and transport (cost of goods grown) reported by the grower-members of each processor by the coverage ratio referred to earlier. Staff then compared the resulting number, which is the theoretical raw material costs of the cooperative, against the reported raw material costs of the cooperative and examined the effect on the cooperative's operating income. In most instances, except for two reporting firms, estimated raw material costs were lower and estimated operating income was greater than reported. Similarly, the total effect on the industry processing sugar beets was to increase operating income.

[10] The Commission's variance analysis is calculated in three parts: Sales variance, cost of sales variance (COGS variance), and SG&A expense variance. Each part consists of a price variance (in the case

(*continued*...)

Table VI-4
Sugar: Variance analysis on the operations of U.S. growers, crop years 2011/12 through 2013/14

Item	Between crop years		
	2011/12 to 2013/14	2011/12 to 2012/13	2012/13 to 2013/14
Net sales:			
Price variance	(290,452)	(124,848)	(172,196)
Volume variance	53,355	101,666	(41,719)
Net sales variance	(237,097)	(23,182)	(213,915)
Cost of sales:			
Cost/expense variance	41,050	64,670	(20,206)
Volume variance	(39,284)	(74,853)	32,155
Total cost of sales variance	1,766	(10,183)	11,949
Gross profit variance	(235,331)	(33,365)	(201,966)
SG&A expenses:			
Cost/expense variance	(1,753)	1,632	(3,299)
Volume variance	(1,327)	(2,528)	1,115
Total SG&A expense variance	(3,080)	(896)	(2,184)
Operating income variance	(238,411)	(34,261)	(204,150)
Summarized as:			
Price variance	(290,452)	(124,848)	(172,196)
Net cost/expense variance	39,296	66,302	(23,505)
Net volume variance	12,745	24,285	(8,449)

Note.—This analysis is consistent with the data shown in table VI-1. Unfavorable variances are shown in parentheses; all others are favorable.

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

As shown above, growers' gross profit from farming operations (which is before consideration of other income or expense but nearly the same as reported net income) fell by $238.4 million as reported unit prices declined (but unit costs declined and volume increased) between the full crop years of 2011/12 to 2013/14.

Table VI-5 presents a variance analysis on the operations of sugarcane millers. Similar to the data in table VI-4, the operating income of the reporting millers fell due to an unfavorable price variance (unit prices fell) that was much greater than favorable variances on net cost/expenses (unit costs/expenses fell) and net volume.

(…*continued*)
of the sales variance) or a cost or expense variance (in the case of the COGS and SG&A expense variance), and a volume variance. The sales or cost/expense variance is calculated as the change in unit price or per-unit cost/expense times the new volume, while the volume variance is calculated as the change in volume times the old unit price or per-unit cost/expense. Summarized at the bottom of the table, the price variance is from sales; the cost/expense variance is the sum of those items from COGS and SG&A variances, respectively, and the volume variance is the sum of the volume components of the net sales, COGS, and SG&A expense variances. The overall volume component of the variance analysis is generally small.

Table VI-5
Sugar: Variance analysis on the operations of U.S. millers, crop years 2011/12 through 2013/14

* * * * * * *

Table VI-6 presents a variance analysis for the sugar operations of processors and refiners. Again, operating income fell from 2011/12 to 2013/14 because an unfavorable price variance (unit prices fell) was much greater than the favorable variances on net cost/expense and volume.

Table VI-6
Sugar: Variance analysis on the operations of U.S. processors and refiners, crop years 2011/12 through 2013/14

* * * * * * *

The variance for the processor/refiner industry is similar to that for the millers. Operating income fell between the full yearly periods due to an unfavorable price variance that was much greater than favorable variances on net cost/expense and volume.

CAPITAL EXPENDITURES AND RESEARCH AND DEVELOPMENT EXPENSES

Table VI-7 presents capital expenditures and research and development ("R&D") expenses for growers; tables VI-8 and VI-9 present data on capital expenditures and R&D expenses, by firm, for millers and processors/refiners, respectively.

Table VI-7
Sugar: Capital expenditures and research and development expenses of U.S. growers, crop years 2011/12 through 2013/14

Item	Crop year		
	2011/12	2012/13	2013/14
	Value ($1,000)		
Total capital expenditures (all growers)	255,113	109,411	238,916
of which sugar beet growers	30,388	36,100	23,705
of which sugar cane growers	224,725	73,311	215,211
Total R&D expenses (all growers)	1,663	1,147	1,099
of which sugar beet growers	605	628	556
of which sugar cane growers	1,058	519	543

Table VI-8
Sugar: Capital expenditures and research and development expenses of U.S. millers, by firm, crop years 2011/12 through 2013/14

* * * * * * *

Table VI-9
Sugar: Capital expenditures and research and development expenses of U.S. processors/refiners, by firm, crop years 2011/12 through 2013/14

* * * * * * *

ASSETS AND THE RETURN ON INVESTMENT

Table VI-10 presents data on the U.S. growers' total net assets used in production, warehousing, and sales of sugar, and the ratios of operating income or (loss) and net income or (loss) to total assets.[11] Tables VI-11 and VI-12 present data on U.S. millers' and U.S. processors'/refiners' total assets and their return on investment ("ROI"), respectively.

Table VI-10
Sugar: Total net assets and ratio of operating income and net income to total net assets of U.S. growers, crop years 2011/12 through 2013/14

Item	Crop year		
	2011/12	2012/13	2013/14
	Value ($1,000)		
Total net assets, all growers	893,704	928,469	1,091,992
Total, sugar beet growers	210,614	229,590	231,298
Total, sugar cane growers	683,090	698,879	860,694
	Ratio to total net assets (percent)		
Operating income or (loss), average all growers	21.7	17.2	(4.0)
Average for sugar beet growers	29.2	25.6	(4.4)
Average for sugar cane growers	19.4	14.5	(4.0)
Net income or (loss), average all firms	22.4	17.1	(4.0)
Average for sugar beet growers	25.7	21.9	(6.9)
Average for sugar cane growers	21.4	15.5	(3.2)

Note.—The ratios shown here are calculated using the data in table VI-1.

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

Table VI-11
Sugar: Total net assets of stand-alone U.S. millers, by firm, and industry ratios of operating income and net income to total net assets, crop years 2010/11 through 2012/13

* * * * * * *

[11] These ratios, of operating income or (loss) and net income or (loss) to total assets, or return on assets, are used as a proxy for return on investment. Firms are more likely to estimate the assets used in the production of a domestic like product than their investment, which may include other assets as well as liabilities and is less measurable at the product-line level.

Table VI-12
Sugar: Total assets of U.S. processors/refiners, by firm, and industry ratios of operating income and net income to total net assets, crop years 2011/12 through 2013/14

* * * * * * *

CAPITAL AND INVESTMENT

The Commission requested U.S. producers of sugar to describe any actual or potential negative effects of imports of sugar from Mexico on their firms' growth, investment, ability to raise capital, development and production efforts, or the scale of capital investments. Appendix F presents the responses of U.S. millers, processors, and refiners, as well as those of U.S. growers.

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 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 MEXICO

Introduction

In 2011, the value of sugar production in Mexico totaled about 54 billion pesos (roughly $4.3 billion) and represented 2.4 percent of the value of the Mexican food industry.[3] Sugarcane ranks second among agricultural crops in Mexico, behind corn.[4]

The Mexican sugar industry reportedly provides for 457,000 direct jobs.[5] These include approximately 170,000 sugarcane growers, 147,000 laborers, 69,000 cutters, and 36,000 transporters who grow, harvest, and transport sugarcane to more than 50 sugar mill-refineries, which employ approximately 36,000 workers.

Most Mexican sugarcane growers are represented by two unions—the National Sugarcane Growers and the National Association of Sugarcane Growers.[6] Growers and sugarcane processors enter annual contracts, with sugarcane prices set at 57 percent of a reference price for sugar. The reference price is determined by a formula based on several factors, including the average domestic price of estandar sugar and export prices depending on destination (based on the ICE number 16 contract price for exports to the United States and the ICE number 11 price for exports to the world market).[7] The growers receive initial pre-settlement payments, generally paid monthly during October-May. Final settlement payments begin in June, and a final adjustment is paid during October-December based on updated information.[8]

Mexican sugar mill/refineries are integrated facilities that mill sugarcane and produce refined sugars of various grades. The industry terminology for these grades include estandar, a lower-polarity grade; refinada, a high-polarity grade white sugar; blanca especial, a lower-quality white sugar; and muscovado, a brown sugar. The Mexican sugar refining industry is organized into 12 corporate groups comprising 47 facilities, with an additional 7 independent operations in 2010/11.[9] The largest group is FEESA, which is a collection of nine sugar mills that had been expropriated and administered by the Mexican government. FEESA accounted for about 20 percent of total domestic production capacity in 2010/11. Capacity shares of the

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[3] Campos-Ortiz, Francisco and Mariana Oviedo-Pacheco, *Study on the Competitiveness of the Mexican Sugar Industry*, Banco de México Working Paper No. 2013–16, November 2013, p. 2. The food industry accounted for about 4 percent of Mexican GDP in 2011.

[4] Ibid.

[5] Jasso, Humberto, "Dynamics of an Oversupplied Market," presentation at the 30th International Sweetener Symposium, August 2013.

[6] USDA, FAS, *Mexico Sugar Annual Report*, GAIN Report No. MX5017, April 16, 2015, p. 3.

[7] Jasso, Humberto, "Dynamics of an Oversupplied Market," presentation at the 30th International Sweetener Symposium, August 2013.

[8] Campos-Ortiz, Francisco and Mariana Oviedo-Pacheco, *Study on the Competitiveness of the Mexican Sugar Industry*, Banco de México Working Paper No. 2013–16, November 2013, pp. 30–32.

[9] Campos-Ortiz, Francisco and Mariana Oviedo-Pacheco, *Study on the Competitiveness of the Mexican Sugar Industry*, Banco de México Working Paper No. 2013–16, November 2013, p. 47.

other groups ranged from 2 to 14 percent, with the independent facilities collectively accounting for about 11 percent.[10]

On March 26, 2015, Mexico's Service of Administration and Disposition of Assets (SAE) announced the public tender of the nine sugar mills administered by FEESA. On June 15, 2015, four of the nine mills were sold. The remaining five state-owned sugar mills are expected to be auctioned again at a future date. The nine sugar mills included in the original tender represent 22.2 percent of average annual Mexican sugar production, while the four sugar mills sold represent about 12.4 percent of average annual Mexican sugar production.[11]

Table VII-1 presents data published by the Mexican government concerning Mexican sugarcane and sugar production. The harvested area of Mexican sugarcane increased by over 200,000 acres from 2011/12 to 2013/14, or by 12.3 percent. All Mexican sugar production is refined, but at different quality levels. As shown in table VII-1, the primary refined sugar produced in Mexico is estandar, which accounted for over 66 percent of total production during crop year 2013/14. About 27 percent of annual production was refinada sugar, with the remainder accounted for by blanca especial and muscovado sugar. The Mexican sugar industry also produces alcohol from sugar, generally between three to five million gallons per year; most of this is either for beverage or non-fuel industrial uses.

[10] Campos-Ortiz, Francisco and Mariana Oviedo-Pacheco, *Study on the Competitiveness of the Mexican Sugar Industry*, Banco de México Working Paper No. 2013–16, November 2013, p. 47.

[11] USDA, FAS, "Four Mexican Sugar Mills Sold," GAIN Report No. MX 5025, June 15, 2015.

Table VII-1
Sugar: Mexican production of sugarcane, harvested area, production of sugar, and production of alcohol from sugar, crop years 2011/12 through 2013/14

Item	Crop year		
	2011/12	2012/13	2013/14
Sugarcane:			
Harvested area (*acres*)	1,739,029	1,928,047	1,953,318
Sugarcane crushed, gross (*short tons*)	50,961,207	67,724,395	59,887,514
Sugarcane crushed, net (*short tons*)	49,023,383	65,048,930	57,592,257
Sugarcane crushed per acre (*short tons per acre*)	28.2	33.7	29.5
Sugar production:			
Refinada sugar production (*short tons*)	1,725,136	2,297,750	1,813,337
Estandar sugar production (*short tons*)	3,524,829	4,942,249	4,428,603
Blanca especial sugar production (*short tons*)	264,304	382,164	308,436
Muscovado sugar production (*short tons*)	50,714	66,237	86,962
Total sugar production (*short tons*)	5,564,984	7,688,400	6,637,338
Alcohol:			
Alcohol production (*gallons*)	4,044,278	4,407,964	4,651,502

Source: CONADESUCA, Sistema Infocaña, Resumen Historico Años, available at http://www.campomexicano.gob.mx/azcf/reportes/reportes.php?tipo=OTROS (accessed August 17, 2015).

Table VII-2 presents USDA data on Mexican production and supply of sugar. Mexican sugar production increased overall between 2010/11 and 2014/15 by 15.5 percent, and is forecast to only increase slightly (by less than 1 percent) in 2015/16. Exports of Mexican sugar decreased by 5.3 percent from 2010/11 to 2014/15 and accounted for 20.0 percent of total supply in 2014/15. Imports typically supply a relatively small share of the Mexican sugar market and accounted for approximately 2.0 percent of total supply in 2014/2015.

Table VII-2
Sugar: Mexican production and supply, crop years 2010/11-2014/15, and projected 2015/16

Item	Crop year					
	2010/11	2011/12	2012/13	2013/14	2014/15[1]	2015/16[2]
	Quantity (*1,000 STRV*)					
Beginning stocks	1,073	888	1,128	1,706	971	935
Production	6,057	5,899	8,150	7,036	6,993	7,011
Imports	338	557	253	154	164	182
Total supply	7,467	7,343	9,531	8,895	8,128	8,127
Exports	1,717	1,086	2,305	2,934	1,626	1,552
Human domestic consumption	4,615	4,832	5,009	4,788	5,189	5,259
Other disappearance	247	297	511	202	378	378
Total use	6,579	6,215	7,825	7,924	7,193	7,189
Ending stocks	888	1,128	1,706	971	935	938
Ending stocks/human consumption (*percent*)	19.2	23.3	34.1	20.3	18.0	17.8
Ending stocks/ total use (*percent*)	13.5	18.2	21.8	12.3	13.0	13.0

[1] Estimate.
[2] Projection.

Source: Compiled from USDA Sugar and Sweeteners Yearbook, table 56, updated September 11 2015, http://www.ers.usda.gov/data-products/sugar-and-sweeteners-yearbook-tables.aspx.

Operations on sugar

The Commission issued foreign producers' or exporters' questionnaires to 17 sugar producing groups believed to produce and/or export sugar from Mexico.[12] Useable responses to the Commission's questionnaire were received from all 17 producers or producer groups and exporters of sugar. Table VII-3 presents summary data on the groups and firms that provided responses. These firms' exports to the United States accounted for approximately 98.1 percent[13] of U.S. imports of sugar from Mexico over the period being examined. According to estimates requested of the responding Mexican producers, the production of sugar in Mexico reported in this part of the report accounts for over 97 percent of overall production of sugar in Mexico in crop year 2013/14.

[12] These firms were identified through a review of information submitted in the petition and provided by counsel for respondent Camara Nacional de Las Industriaas Azucarera Y al Alcoholera (Mexican Sugar Chamber) ("Camara").

[13] Coverage was based on total reported exports to the United States from Mexico during October 2010 through December 2013 (5.041 million STRV) versus official U.S. import statistics (5.139 million STRV).

Table VII-3
Sugar: Summary data on firms in Mexico, January 2011 through March 2014

Firm	Production (*1,000 STRV*)	Share of reported production (*percent*)	Exports to the United States (*1,000 STRV*)	Share of reported exports to the United States (*percent*)	Total shipments (*1,000 STRV*)	Share of firm's total shipments exported to the United States (*percent*)
ASR Holdings de Mexico[1]	***	***	***	***	***	***
Azucar Grupo Saenz	***	***	***	***	***	***
Beta San Miguel	***	***	***	***	***	***
Compania Azucarera de los Mochis	***	***	***	***	***	***
ED&F Man de Comercio[2]	***	***	***	***	***	***
Fondo de Empresas Expropiadas del Sector Azucarero (FEESA)	***	***	***	***	***	***
Grupo la Margarita	***	***	***	***	***	***
Grupo Motzorongo	***	***	***	***	***	***
Gruop Porres	***	***	***	***	***	***
Impulsora Azucarera del Noroeste (Zucarmex)[3]	***	***	***	***	***	***
Ingenio el Molino	***	***	***	***	***	***
Ingenio Panuco[4]	***	***	***	***	***	***
Ingenios Santos	***	***	***	***	***	***
Ingenio de Puga	***	***	***	***	***	***
Organizacion Cultiba	***	***	***	***	***	***
Promotora Industrial Azucarera	***	***	***	***	***	***
Promotora Industrial Josela	***	***	***	***	***	***
Total	6,591	100.0	1,969	100.0	7,176	27.4

[1] ASR Holdings de Mexico, S.A. de C.V. ("ASR Mexico") is a subsidiary of ASR Group, which also is affiliated with U.S. producers and importers of sugar. Ingenio San Nicolas, S.A. de C.V. ("ISN") is a subsidiary of ASR Mexico that produces sugar in Mexico. Domino Comercio, S.A. de C.V., is a subsidiary of ASR Mexico that handles exports and domestic sales of sugar produced by ISN and other producers.
[2] ED&F Man de Comercio, S.A. de C.V. ***. The firm reported that ***.
[3] Zucarmex reported that ***.
[4] Ingenio Panuco reported that ***.

Responding Mexican producers were asked to identify changes to their operations since October 1, 2011. One firm, ***, reported a plant closing and expansion. It explained that ***

***. In addition, one firm, *** reported a prolonged production curtailment where ***.

Four other firms, *** reported expansions in production. Of these four firms, two reported actual increases in capacity. *** noted ***. ***.

Eleven firms reported revised labor agreements. According to the responses, the mandatory collective agreement in Mexico for the sugar mills is enforced by law (Contrato Ley). The agreement is negotiated on October 16th each year in relation to salaries and on October 16th every two years in relation to benefits.

One firm reported anticipated changes to their operations. *** reported that it plans ***.

Mexican producers' capacity, production, and shipments

Tables VII-4 and VII-5 present information on the sugar operations of the 17 responding producers in Mexico. Capacity increased by 3.6 percent from crop year 2011/2012 to crop year 2013/14, and is projected to increase another 1.6 percent by crop year 2015/16. No firm reported that it is able to shift production (capacity) between sugar and other products using the same equipment and/or labor. Production increased from 2011/12 to 2012/13 by 38.2 percent, and then decreased by 14.3 percent in 2013/14. Production over the three-year period increased overall by 18.3 percent and is expected to increase another 8.9 percent by crop year 2015/16. Export shipments to the United States increased from 2011/12 to 2012/13, but then decreased slightly following year, increasing overall by 141.0 percent. Mexican producers project that U.S. exports shipments will drop by 14.2 percent by crop year 2015/16.

Table VII-4
Sugar: Data on industry in Mexico, crop years 2011/12 through 2013/14, and projected crop years 2014/15 and 2015/16

Item	Actual experience			Projections	
	Crop year			Crop year	
	2011/12	2012/13	2013/14	2014/15	2015/16
	Quantity (*1,000 STRV*)				
Capacity	8,120	8,538	8,411	8,496	8,542
Production	5,570	7,695	6,591	7,119	7,178
End-of-period inventories	994	1,561	893	827	854
Shipments:					
Home market shipments:					
Internal consumption/ transfers	909	1,087	913	1,092	1,110
Commercial home market shipments	3,696	3,633	3,403	4,000	3,795
Total home market shipments	4,605	4,720	4,316	5,092	4,905
Export shipments to:					
United States	817	2,255	1,969	1,584	1,689
All other markets	0	231	891	531	559
Total exports	817	2,486	2,860	2,115	2,248
Total shipments	5,422	7,206	7,176	7,207	7,153
	Ratios and shares (*percent*)				
Capacity utilization	68.6	90.1	78.4	83.8	84.0
Inventories/production	17.8	20.3	13.5	11.6	11.9
Inventories/total shipments	18.3	21.7	12.4	11.5	11.9
Share of total shipments:					
Home market shipments:					
Internal consumption/ transfers	16.8	15.1	12.7	15.2	15.5
Commercial home market shipments	68.2	50.4	47.4	55.5	53.1
Total home market shipments	84.9	65.5	60.1	70.7	68.6
Export shipments to:					
United States	15.1	31.3	27.4	22.0	23.6
All other markets	0.0	3.2	12.4	7.4	7.8
Total exports	15.1	34.5	39.9	29.3	31.4
Total shipments	100.0	100.0	100.0	100.0	100.0

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

Table VII-5
Sugar: Data on Mexican exports to the United States by polarity and intended end use, crop years 2011/12 through 2013/14, and projected crop years 2014/15 and 2015/16

* * * * * * *

Mexican export markets

The United States is Mexico's principal export market for sugar (table VII-6). Mexico exported sugar to several new markets in 2013 and 2014, including Morocco, Tunisia, and Jamaica (in 2013) and Libya, Lithuania, Ghana, and Mali (in 2014). These shipments were part of an effort by the Mexican government -- in consultation with U.S. government officials -- and industry to redirect exports away from the U.S. market.[14]

Table VII-6
Sugar: Mexican sugar exports, by principal markets, 2009-2014

Market	2009	2010	2011	2012	2013	2014
	Quantity (*short tons, actual weight*)					
United States	1,082,979	965,343	1,512,859	1,099,019	2,606,596	1,584,138
Canada	13,641	0	15,568	71	26,323	129,434
United Kingdom	220	0	22,019	0	17,637	115,169
Morocco	0	0	0	0	31,636	70,989
Libya	0	0	0	0	0	35,020
Lithuania	0	0	0	0	0	34,539
Tunisia	0	0	0	0	4,925	11,828
Ghana	0	0	0	0	0	11,023
Mali	0	0	0	0	0	11,023
Jamaica	0	0	0	0	3,200	7,755
All other	24	19	3,800	50	194,691	15,118
Total	1,096,864	965,362	1,554,245	1,099,140	2,885,009	2,026,037

Note: Includes HS subheadings 1701.11, 1701.12, 1701.13, 1701.14, 1701.91, and 1701.99.

Source: Global Trade Atlas, GTIS Database, based on INEGI (accessed July 16, 2015)

[14] In 2007, the United States and Mexico established a Consultative Committee on Agriculture ("CCA") to coordinate agricultural policy between the two countries, including for sweeteners. The CCA met in August 2013 and addressed diverting sugar from Mexico to alleviate the oversupply of sugar in the United States. Arrangements were subsequently made to divert export shipments to markets other than the United States. USITC, *Sugar from Mexico*, Investigation Nos. 701-TA-513 and 731-TA-1249 (Preliminary), Publication 4467, May 2014, p. VII-10.

Mexican exports are mainly of sugar with 99.5 degrees polarity and above (table VII-7). This type accounted for 51 percent of total Mexican sugar exports in 2014. While sugar below 99.5 degrees polarity excludes refinada sugar and likely is accounted for totally by estandar sugar, the category for sugar 99.5 degrees polarity and above can include both types.

Table VII-7
Sugar: Mexican sugar exports, by principal HS subheadings, 2009-2014

HS subheading	2009	2010	2011	2012	2013	2014
	Quantity (*short tons, actual weight*)					
1701.11	379,505	253,264	302,457	118,556	0	0
1701.12	0	27,012	13,702	11	147	155
1701.13	0	0	0	241	5,325	376
1701.14	0	0	0	83,690	1,264,860	985,303
1701.91	11,450	13,147	4,413	3,710	4,131	4,136
1701.99	705,910	671,939	1,233,676	892,931	1,610,547	1,036,067
Total	1,096,864	965,362	1,554,246	1,099,140	2,885,010	2,026,037

Note.-- Sugar below 99.5 degrees polarity comprises HS subheadings 1701.11, 1701.12, 1701.13, and 1701.14. Other sugar 99.5 degrees polarity and above includes HS subheadings 1701.91 and 1701.99.

Source: Global Trade Atlas, GTIS Database, based on INEGI (accessed July 22, 2015).

U.S. INVENTORIES OF IMPORTED MERCHANDISE

Table VII-8 presents data on U.S. importers' reported inventories of sugar.

Table VII-8
Sugar: U.S. importers' end-of-period inventories of imports by source, crop years 2011/12-2013/14

* * * * * * *

U.S. IMPORTERS' OUTSTANDING ORDERS

The Commission requested importers to indicate whether they imported or arranged for the importation of sugar from Mexico after September 30, 2014. Table VII-9 presents U.S. import shipments of sugar arranged for importation after September 30, 2014.

Table VII-9
Sugar: U.S. importers' arranged imports, after September 30, 2014

Item	Quantity (*1,000 STRV*)
Imports arranged from Mexico	***
Imports arranged from all other sources	***
Total arranged imports	***

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

TRADE REMEDY MEASURES IN THIRD-COUNTRY MARKETS

No Mexican producer reported that it is subject to trade remedy findings, remedies, or proceedings in third-country markets.

INFORMATION ON NONSUBJECT COUNTRIES

In assessing whether the domestic industry is materially injured or threatened with material injury "by reason of subject imports," the legislative history states "that the Commission must examine all relevant evidence, including any known factors, other than the dumped or subsidized imports, that may be injuring the domestic industry, and that the Commission must examine those other factors (including non-subject imports) 'to ensure that it is not attributing injury from other sources to the subject imports.'"[15]

As discussed in Part I of this report, U.S. imports of sugar from sources other than Mexico are currently subject to the WTO TRQs, which have been in place since October 1990, and additional quotas under various FTAs. The TRQs provide one method for managing sugar supplies to avoid forfeitures. The USTR allocates the entire raw cane sugar TRQ on a country-by-country basis, while a portion of the refined sugar TRQ is allocated to specific countries, with the remainder allocated on a global first-come, first-served basis. As shown in Table I-4, fiscal year 2013/14 (the fiscal year corresponds with the crop year), the Dominican Republic received the largest allocation under the TRQ (203,847 MTRV), and fulfilled about half of it, making it the third largest source of imports under the TRQ.[16] Brazil received the second largest allocation under the TRQ (167,942 MTRV), and fulfilled nearly all of it, making it the largest source of imports under the TRQ.[17] The Philippines received the third largest allocation under the TRQ

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

[16] In crop year 2013/14, the Dominican Republic accounted for 3.8 percent of total U.S. imports of sugar.

[17] In crop year 2013/14, Brazil was the largest nonsubject supplier of sugar to the United States, accounting for 5.3 percent of total U.S. imports of sugar.

(156,359 MTRV), and fulfilled 82 percent of it, making it the second largest source of imports under the TRQ.[18] For fiscal year 2014/15, the total raw cane sugar TRQ is set at 1,117,195 MTRV, the minimum amount to which the United States is committed under the WTO agreement, and the same amount it was for fiscal year 2013/14.[19] The Dominican Republic has the largest allocation (185,335 MTRV), followed by Brazil (152,691 MTRV), and the Philippines (142,160 MTRV).[20]

The global sugar market

Sugar is produced in substantial quantities throughout the world. Table VII-10 presents data on global sugar production, for the top 10 producing countries. Global sugar production increased by 14 percent during 2009/10–2014/15 and totaled 192 million STRV (centrifugal basis). Brazil was the leading producer, accounting for 21 percent of the total the latter year. Following Brazil were India (17 percent), the European Union (10 percent), and China (6 percent). The United States was the sixth-leading producer in 2014/15 (4 percent), while Mexico ranked seventh (4 percent). During the period, growth was generally greatest in Asian markets, including Thailand (58 percent), Pakistan (53 percent), and India (43 percent).

[18] In crop year 2013/14, the Philippines accounted for 4.5 percent of total U.S. imports of sugar.

[19] U.S. Trade Representative, "U.S. Trade Representative Froman Announces FY 2015 WTO Tariff-Rate Quota Allocations for Raw Cane Sugar, Refined and Specialty Sugar and Sugar-Containing Products," press release, September 2014, available at https://ustr.gov/about-us/policy-offices/press-office/press-releases/2014/September/USTR-Froman-Announces-FY-2015-WTO-Tariff-Rate-Quota-Allocations-for-Raw-Cane (accessed July 27, 2015). In calendar year 2014, an additional 184,200 metric tons of sugar and sugar-containing products were eligible for duty-free access under various FTAs, with entries under these quotas totaling 153,385 metric tons. U.S. Department of Agriculture, Foreign Agricultural Service, "Sugar Monthly Import and Re-export Data," available at http://usda.mannlib.cornell.edu/usda/fas/SugMonImp//2010s/2014/SugMonImp-11-11-2014.pdf (accessed July 27, 2015).

[20] Ibid.

Table VII-10

Sugar: Global sugar production, by principal suppliers, marketing years 2009/10-2014/15

Country	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
	Quantity (*1,000 STRV, centrifugal basis*)					
Brazil	40,124	42,274	39,849	42,549	41,667	39,518
India	22,748	29,293	31,548	30,134	29,327	32,499
European Union	18,626	17,570	20,194	18,359	17,659	18,464
China	12,598	12,345	13,604	15,433	15,722	12,125
Thailand	7,639	10,652	11,282	11,050	12,492	12,092
United States	7,963	7,831	8,488	8,982	8,461	8,526
Mexico	5,638	6,057	5,898	8,149	7,035	7,011
Pakistan	3,770	4,321	4,982	5,512	6,206	5,765
Australia	5,181	4,079	4,060	4,685	4,828	5,181
Russia	3,796	3,303	6,112	5,512	4,850	4,795
All other	40,767	41,093	43,976	45,351	45,276	46,165
Total	168,851	178,816	189,993	195,715	193,525	192,142

Source: USDA, FAS, PSD Online database, available at http://apps.fas.usda.gov/psdonline/psdQuery.aspx (accessed July 16, 2015).

Table VII-11 shows that global sugar production is dominated by cane sugar, which accounts for approximately 80 percent of the annual total most years. Beet sugar accounts for the remainder. Primary cane sugar producers include Brazil and India, while the leading beet sugar producers include the European Union, China, and the United States.

Table VII-11

Sugar: Global production of beet sugar and cane sugar, marketing years 2009/10-2014/15

Type	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
	Quantity (*1,000 STRV*)					
Beet sugar	36,608	35,139	42,366	40,159	37,189	38,735
Cane sugar	132,243	143,676	147,627	155,556	156,336	153,406
Total	168,851	178,816	189,993	195,715	193,525	192,142
	Share of total (*percent*)					
Beet sugar	21.7	19.7	22.3	20.5	19.2	20.2
Cane sugar	78.3	80.3	77.7	79.5	80.8	79.8
Total	100	100	100	100	100	100

Source: USDA, FAS, PSD Online database, available at http://apps.fas.usda.gov/psdonline/psdQuery.aspx (accessed July 16, 2015).

As shown in table VII-12, global sugar exports have been somewhat steady in recent years, averaging about 53 million short tons annually. Brazil is the leading global exporter, accounting for 52 percent of the total in 2014. Thailand was the second leading exporter that year, with a 13 percent share of the global export market. India ranked third among global exporters in 2014, with a 5 percent share. The United States is a minor sugar exporter. India exhibited the largest growth in exports over this period, or more than 30 times higher in 2014 than in 2009, owing to the very low volume in the earlier year.

Table VII-12

Global sugar exports, by principal sources, 2009-2014

Source	2009	2010	2011	2012	2013	2014
	Quantity (*1,000 short tons, actual weight*)					
Brazil	26,780	30,865	27,954	26,833	29,932	26,595
Thailand	5,570	4,961	7,188	7,554	6,608	6,937
India	86	1,432	4,004	3,817	1,785	2,642
Guatemala	1,754	1,920	1,422	1,687	2,128	2,333
Mexico	1,097	965	1,554	1,099	2,885	2,026
EU28	1,655	2,399	1,507	2,131	1,556	1,669
South Africa	998	466	293	338	687	1,005
Colombia	1,013	887	925	830	684	879
Pakistan	5	2	5	498	1,145	749
Algeria	15	404	367	345	523	525
All other	7,326	8,047	8,196	7,300	16,391	6,257
Total	46,298	52,350	53,415	52,434	64,324	51,619

Note: Includes HS subheadings 1701.11, 1701.12, 1701.13, 1701.14, 1701.91, and 1701.99.

Source: GTIS, Global Trade Atlas database (accessed July 23, 2015).

Global sugar consumption increased by 11 percent during 2009/10 through 2014/15 and totaled 188 million short tons, raw value (centrifugal basis) the latter year (table VII-13). India was the leading consumer market for sugar during the period, accounting for 16 percent of the world total in 2014/15. The European Union followed India, with an 11-percent market share that year. The United States was the fifth-leading global sugar market during the period, with a 6-percent market share in 2014/15. Mexico ranked ninth that year, with a market share of 3 percent. The growth in sugar consumption during the period was greatest in China (22 percent), followed by the India (20 percent), the Indonesia (17 percent), and Pakistan (15 percent). Mexican consumption of sugar fell by 2 percent during the period, but rebounded in 2014/15 after falling the previous year.

Table VII-13

Sugar: Global sugar consumption, by principal markets, marketing years 2008/09-2013/14

Supplier	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
	(*1,000 STRV, centrifugal basis*)					
India	24,802	25,408	26,654	27,558	28,660	29,762
European Union	19,412	19,886	20,062	20,117	20,393	20,613
China	15,763	15,432	15,653	16,645	18,188	19,180
Brazil	13,007	12,627	12,677	12,346	12,412	12,456
United States	10,870	11,212	11,140	11,487	11,819	11,859
Russia	6,283	6,088	6,283	6,283	5,952	6,283
Indonesia	5,181	5,512	5,567	5,952	6,008	6,063
Pakistan	4,519	4,685	4,740	4,850	4,960	5,181
Mexico	5,087	4,615	4,833	5,009	4,612	4,966
Egypt	2,898	3,086	3,142	3,131	3,164	3,230
All other	62,090	62,751	64,921	68,415	67,614	68,461
Total	169,912	171,302	175,670	181,793	183,782	188,054

Note.-- Includes human consumption only, beet and cane sugar.

Source: USDA, FAS, PSD Online database, available at http://apps.fas.usda.gov/psdonline/psdQuery.aspx (accessed July 16, 2015).

Table VII-14 presents data on global sugar imports, showing sugar imports fell irregularly during 2009–2014 to 36 million tons the latter year. The European Union regained its top importer spot in 2014, with an 11 percent share, after falling behind China the previous year. China and the United States ranked second and third in 2014 with 11 and 9 percent import market shares, respectively. Mexico is a minor global sugar importer. Growth in global sugar imports during 2009–14 was greatest in Asian markets, led by China (227 percent) and India (112 percent). Global sugar imports became more concentrated among the 10-leading markets during 2009 through 2014, as the global share for all other markets declined by 43 percent during the period.

Table VII-14

Sugar: Global sugar imports, by principal markets, 2009-2014

Market	2009	2010	2011	2012	2013	2014
	Quantity (*1,000 short tons, actual weight*)					
EU28	3,370	3,268	4,851	3,998	4,575	3,949
China	1,173	1,947	3,218	4,131	5,011	3,842
United States	2,748	3,213	3,816	3,340	3,225	3,374
Indonesia	1,536	1,968	2,759	3,104	3,686	3,269
Malaysia	1,727	1,890	1,981	1,963	2,023	2,358
Algeria	1,339	1,351	1,710	1,844	1,974	2,096
South Korea	1,820	1,808	1,816	1,951	2,072	2,081
India	2,454	1,971	83	809	1,396	1,519
Japan	1,433	1,221	1,470	1,351	1,546	1,477
Canada	1,164	1,149	1,289	1,239	1,158	1,360
All other	19,457	36,449	23,791	17,669	30,430	10,910
Total	38,222	56,236	46,784	41,399	57,096	36,236

Note: Includes HS subheadings 1701.11, 1701.12, 1701.13, 1701.14, 1701.91, and 1701.99.

Source: GTIS, Global Trade Atlas database (accessed July 23, 2015)

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
79 FR 18697 April 3, 2014	*Sugar From Mexico; Institution of Antidumping and Countervailing Duty Investigations and Scheduling of Preliminary Phase Investigations*	https://federalregister.gov/a/2014-07420
79 FR 22790 April 24, 2014	*Sugar From Mexico: Initiation of Countervailing Duty Investigation*	https://federalregister.gov/a/2014-09362
79 FR 22795 April 24, 2014	*Sugar From Mexico: Initiation of Antidumping Duty Investigation*	https://federalregister.gov/a/2014-09363
79 FR 28550 May 16, 2014	*Sugar From Mexico*	https://federalregister.gov/a/2014-11301
79 FR 51956 September 2, 2014	*Sugar From Mexico: Preliminary Affirmative Countervailing Determination and Alignment of Final Countervailing Duty Determination With Final Antidumping Duty Determination*	https://federalregister.gov/a/2014-20834
79 FR 65189 November 3, 2014	*Sugar From Mexico: Preliminary Determination of Sales at Less Than Fair Value and Postponement of Final Determination*	https://federalregister.gov/a/2014-26077
79 FR 75591 December 18, 2014	*Countervailing Duty and Antidumping Duty Investigations; Sugar From Mexico; Scheduling of the Final Phase*	https://federalregister.gov/a/2014-29648
79 FR 78039 December 29, 2014	*Sugar From Mexico: Suspension of Antidumping Investigation*	https://federalregister.gov/a/2014-30396
79 FR 78044 December 29, 2014	*Sugar From Mexico: Suspension of Countervailing Duty Investigation*	https://federalregister.gov/a/2014-30392

Citation	Title	Link
80 FR 25278 May 4, 2015	*Sugar From Mexico: Continuation of Antidumping and Countervailing Duty Investigations*	https://federalregister.gov/a/2015-10253
80 FR 28009 May 15, 2015	*Sugar From Mexico; Revised Schedule for the Subject Investigations*	https://federalregister.gov/a/2015-11777
80 FR 57337 September 23, 2015	*Sugar From Mexico: Final Affirmative Countervailing Duty Determination*	https://federalregister.gov/a/2015-24195
80 FR 57341 September 23, 2015	*Sugar From Mexico: Final Determination of Sales at Less Than Fair Value*	https://federalregister.gov/a/2015-24189

APPENDIX B

LIST OF HEARING WITNESSES

CALENDAR OF PUBLIC HEARING

Those listed below are scheduled to appear as witnesses at the United States International Trade Commission's preliminary conference:

Subject: Sugar from Mexico

Inv. Nos.: 701-TA-513 and 731-TA-1249 (Final)

Date and Time: September 16, 2015 - 9:30 a.m.

Sessions will be held in connection with these investigations in the Main Hearing Room (room 101), 500 E Street, S.W., Washington, DC.

CONGRESSIONAL WITNESS:

The Honorable Collin C. Peterson, U.S. Representative, 7th District, Minnesota

EMBASSY WITNESSES:

Embassy of Mexico
Washington, DC

Kenneth Smith Ramos, Head of the Trade and NAFTA Office of the Ministry of Economy in Washington, DC

Salvador Behar, Legal Counsel for International Trade

OPENING REMARKS:	**TIME ALLOCATION:**
Petitioner (**Robert C. Cassidy**, Cassidy Levy Kent (USA) LLP)	5 minutes
Respondents (**Paul Rosenthal**, Kelley Drye & Warren LLP)	5 minutes

In Support of the Imposition of Antidumping and Countervailing Duty Orders:	**TIME ALLOCATION:**

Cassidy Levy Kent (USA) LLP — 60 minutes
Washington, DC
on behalf of

American Sugar Coalition and its members

Todd Landry, Farmer, Loreauville Harvesting, LLC

John Snyder, President, American SugarBeet Growers Association

Robert H. Buker, President and CEO, United States Sugar Corp.

Brian F. O'Malley, President and CEO, Domino Foods, Inc.

David Berg, President and CEO, American Crystal Sugar Company

Dr. Colin Carter, Professor, University of California, Davis

Daniel Colacicco, Member, Cicco Commodities LLC

Deirdre Maloney, Senior Trade Advisor, Cassidy Levy Kent (USA) LLP

Robert C. Cassidy)
Charles S. Levy)
) – OF COUNSEL
James R. Cannon, Jr.)
Jennifer A. Hillman)

White & Case LLP
Washington, DC
on behalf of

Imperial Sugar Company ("Imperial Sugar")

Michael A. Gorrell, President and Chief Executive Officer,
Imperial Sugar

Patrick Henneberry, Senior Vice President, Imperial Sugar

Gregory J. Spak)
) – OF COUNSEL
K**ristina Zissis**)

In Opposition to the Imposition of Antidumping and Countervailing Duty Orders:	**TIME ALLOCATION:**
Kelley Drye & Warren LLP Washington, DC on behalf of The Sweetener Users Association ("SUA") Barry Callebaut USA LLC	60 minutes

Tim Jones, Senior Manager of Procurement & Operations,
Just Born, Inc.

John Brooks, Jr., Chief Operating Officer, Adams & Brooks, Inc.

Tom Earley, Vice President, Agralytica

Brad Hudgens, Economist, Georgetown Economic Services, LLC

Paul Rosenthal)
John Herrmann) – OF COUNSEL
Grace Kim)

REBUTTAL/CLOSING REMARKS:

Petitioner (**Robert C. Cassidy**, Cassidy Levy Kent (USA) LLP)
Respondents (**Paul Rosenthal**, Kelley Drye & Warren LLP)

-END-

APPENDIX C

SUMMARY DATA

Table C-1
Sugar: Summary data concerning the U.S. market, crop years 2011/12 through 2013/14
(Quantity=1,000 STRV; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per STRV; Period changes=percent--exceptions noted)

	Reported data			Period changes		
	Crop year			Comparison years		
	2011/12	2012/13	2013/14	2011/12-2013/14	2011/12-2012/13	2012/13-2013/14
U.S. consumption quantity:						
Amount	***	***	***	***	***	***
Producers' share (fn1)	***	***	***	***	***	***
Importers' share (fn1):						
Mexico	***	***	***	***	***	***
All others sources	***	***	***	***	***	***
Total imports	***	***	***	***	***	***
U.S. consumption value:						
Amount	***	***	***	***	***	***
Producers' share (fn1):						
Fully domestic value	***	***	***	***	***	***
Value added to imports	***	***	***	***	***	***
Total value for refiners and processors	***	***	***	***	***	***
Importers' share (fn1):						
Mexico	***	***	***	***	***	***
All others sources	***	***	***	***	***	***
Total imports	***	***	***	***	***	***
U.S. imports from:						
Mexico:						
Quantity	1,060	2,066	2,013	89.9	94.9	(2.6)
Value	849,302	1,042,073	944,524	11.2	22.7	(9.4)
Unit value	$801	$504	$469	(41.4)	(37.0)	(7.0)
Ending inventory quantity	***	***	***	***	***	***
All other sources:						
Quantity	1,850	891	1,030	(44.3)	(51.8)	15.6
Value	1,298,565	493,989	489,740	(62.3)	(62.0)	(0.9)
Unit value	$702	$554	$475	(32.3)	(21.0)	(14.2)
Ending inventory quantity	***	***	***	***	***	***
Total imports:						
Quantity	2,910	2,957	3,043	4.6	1.6	2.9
Value	2,147,867	1,536,063	1,434,264	(33.2)	(28.5)	(6.6)
Unit value	$738	$519	$471	(36.1)	(29.6)	(9.3)
Ending inventory quantity	***	***	***	***	***	***
U.S. processors' and U.S. refiners':						
Average capacity quantity	***	***	***	***	***	***
Production quantity	***	***	***	***	***	***
Capacity utilization (fn1)	***	***	***	***	***	***
U.S. shipments:						
Fully domestic origin shipments:						
Quantity	***	***	***	***	***	***
Value	***	***	***	***	***	***
Unit value	***	***	***	***	***	***
Additional value on sugar imported from Mexico:						
Quantity	***	***	***	***	***	***
Value attributable to imports from MX	***	***	***	***	***	***
Value captured by domestic firms	***	***	***	***	***	***
Value of shipped merchandise	***	***	***	***	***	***
Unit value attributable to imports MX	***	***	***	***	***	***
Unit value captured by domestic firms	***	***	***	***	***	***
Unit value of shipped merchandise	***	***	***	***	***	***
Additional value on sugar imported from other sources:						
Quantity	***	***	***	***	***	***
Value attributable to imports AOS	***	***	***	***	***	***
Value captured by domestic firms	***	***	***	***	***	***
Value of shipped merchandise	***	***	***	***	***	***
Unit value attributable to imports AOS	***	***	***	***	***	***
Unit value captured by domestic firms	***	***	***	***	***	***
Unit value of shipped merchandise	***	***	***	***	***	***
Total value attributable to refiners and processors:						
Value	***	***	***	***	***	***
Export shipments:						
Quantity	***	***	***	***	***	***
Value	***	***	***	***	***	***
Unit value	***	***	***	***	***	***

Table continued next page

Table C-1--Continued
Sugar: Summary data concerning the U.S. market, crop years 2011/12 through 2013/14
(Quantity=1,000 STRV; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per STRV; Period changes=percent--exceptions noted)

	Reported data			Period changes		
	Crop year			Comparison years		
	2011/12	2012/13	2013/14	2011/12-2013/14	2011/12-2012/13	2012/13-2013/14
U.S. processors and U.S. refiners:--Continued						
Ending inventory quantity	***	***	***	***	***	***
Inventories/total shipments (fn1)	***	***	***	***	***	***
Production workers	***	***	***	***	***	***
Hours worked (1,000s)	***	***	***	***	***	***
Wages paid ($1,000)	***	***	***	***	***	***
Productivity (short tons per 1,000 hours)	***	***	***	***	***	***
Unit labor costs	***	***	***	***	***	***
Net Sales:						
Quantity	***	***	***	***	***	***
Value	***	***	***	***	***	***
Unit value	***	***	***	***	***	***
Cost of goods sold (COGS)	***	***	***	***	***	***
Gross profit or (loss)	***	***	***	***	***	***
SG&A expenses	***	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***	***
Net income or (loss)	***	***	***	***	***	***
Capital expenditures	***	***	***	***	***	***
Unit COGS	***	***	***	***	***	***
Unit SG&A expenses	***	***	***	***	***	***
Unit operating income or (loss)	***	***	***	***	***	***
Unit net income or (loss)	***	***	***	***	***	***
COGS/sales (fn1)	***	***	***	***	***	***
Operating income or (loss)/sales (fn1)	***	***	***	***	***	***
Net income or (loss)/sales (fn1)	***	***	***	***	***	***
U.S. millers:						
Average capacity quantity	***	***	***	***	***	***
Production quantity	***	***	***	***	***	***
Capacity utilization (fn1)	***	***	***	***	***	***
U.S. shipments:						
Quantity	***	***	***	***	***	***
Value	***	***	***	***	***	***
Unit value	***	***	***	***	***	***
Export shipments:						
Quantity	***	***	***	***	***	***
Value	***	***	***	***	***	***
Unit value	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***
Inventories/total shipments (fn1)	***	***	***	***	***	***
Production workers	***	***	***	***	***	***
Hours worked (1,000s)	***	***	***	***	***	***
Wages paid ($1,000)	***	***	***	***	***	***
Productivity (short tons per 1,000 hours)	***	***	***	***	***	***
Unit labor costs	***	***	***	***	***	***
Net Sales:						
Quantity	***	***	***	***	***	***
Value	***	***	***	***	***	***
Unit value	***	***	***	***	***	***
Cost of goods sold (COGS)	***	***	***	***	***	***
Gross profit or (loss)	***	***	***	***	***	***
SG&A expenses	***	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***	***
Net income or (loss)	***	***	***	***	***	***
Capital expenditures	***	***	***	***	***	***
Unit COGS	***	***	***	***	***	***
Unit SG&A expenses	***	***	***	***	***	***
Unit operating income or (loss)	***	***	***	***	***	***
Unit net income or (loss)	***	***	***	***	***	***
COGS/sales (fn1)	***	***	***	***	***	***
Operating income or (loss)/sales (fn1)	***	***	***	***	***	***
Net income or (loss)/sales (fn1)	***	***	***	***	***	***

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

Source: Compiled from data submitted in response to Commission questionnaires and official U.S. imports statsitics. See parts III, IV, and VI for details.

APPENDIX D

HFCS PRODUCER DATA

Table D-1
HFCS: U.S. producers, their position on the petition, production locations, and share of reported production, 2012-14

Firm	Position on petition	Production location(s)	Share of HFCS production (*percent*)
Archer Daniels Midland[1]	***	Decatur, IL Clinton, IA Columbus, OH Marshall, MN Cedar Rapids, IA	***
Cargill[2]	***	Blair, NE Dayton, OH Eddyville, IA Memphis, TN Wahpeton, ND	***
Ingredion[3]	***	Bedford Park, IL Stockton, CA Winston-Salem, NC	***
Roquette America[4]	***	Keokuk, IA	***
Tate & Lyle[5]	***	Decatur, IL Lafayette, IN Loudon, TN	***

[1] Archer Daniels Midland ***.
[2] Cargill ***.
[3] Ingredion ***.
[4] Roquette America ***.
[5] Tate & Lyle ***.

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

Table D-2
HFCS: U.S. producers' capacity, production, and capacity utilization, 2012-14

Item	Calendar year		
	2012	2013	2014
	Quantity (*1,000 pounds dry weight*)		
Capacity	23,686,461	23,808,891	23,808,891
Production	19,477,806	18,051,078	17,999,723
	Ratio (*percent*)		
Capacity Utilization	82.2	75.8	75.6

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

Table D-3
HFCS: U.S. producers' U.S. shipments, exports shipments, and total shipments, 2012-14

Item	Calendar year		
	2012	2013	2014
	Quantity (*1,000 pounds dry weight*)		
Commercial U.S. shipments	15,475,498	14,962,486	14,985,495
Internal consumption	***	***	***
Transfers to related firms	***	***	***
Subtotal, U.S. shipments	15,743,767	15,117,592	15,249,847
Export shipments	3,614,407	3,026,738	2,658,867
Total shipments	19,358,174	18,144,330	17,908,714
	Value (*1,000 dollars*)		
Commercial U.S. shipments	2,911,816	3,002,476	2,099,471
Internal consumption	***	***	***
Transfers to related firms	***	***	***
Subtotal, U.S. shipments	2,937,159	3,020,531	2,122,810
Export shipments	685,363	533,608	384,783
Total shipments	3,622,522	3,554,139	2,507,593
	Unit value (*dollars per pound dry weight*)		
Commercial U.S. shipments	0.19	0.20	0.14
Internal consumption	***	***	***
Transfers to related firms	***	***	***
Subtotal, U.S. shipments	0.19	0.20	0.14
Export shipments	0.19	0.18	0.14
Total shipments	0.19	0.20	0.14
	Share of quantity (*percent*)		
Commercial U.S. shipments	79.9	82.5	83.7
Internal consumption	***	***	***
Transfers to related firms	***	***	***
Subtotal, U.S. shipments	81.3	83.3	85.2
Export shipments	18.7	16.7	14.8
Total shipments	100.0	100.0	100.0
	Share of value (*percent*)		
Commercial U.S. shipments	80.4	84.5	83.7
Internal consumption	***	***	***
Transfers to related firms	***	***	***
Subtotal, U.S. shipments	81.1	85.0	84.7
Export shipments	18.9	15.0	15.3
Total shipments	100.0	100.0	100.0

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

Table D-4

HFCS: U.S. producers' inventories, 2012-14

Item	Calendar year		
	2012	2013	2014
	Quantity (*1,000 pounds dry weight*)		
U.S. producers' end-of-period inventories	949,192	846,205	932,592
	Ratio (*percent*)		
Ratio of inventories to.--			
U.S. Production	4.9	4.7	5.2
U.S. shipments	6.0	5.6	6.1
Total shipments	4.9	4.7	5.2

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

Table D-5

HFCS: U.S. producers' employment related data, 2012-14

Item	Calendar year		
	2012	2013	2014
Production-Related Workers (PRWs) (*number*)	1,589	1,596	1,608
Total hours worked (*1,000 hours*)	3,455	3,479	3,524
Hours worked per PRW (*hours*)	2,174	2,180	2,192
Wages paid *($1,000*)	150,580	151,113	154,298
Hourly wages (*dollars per hour*)	$43.58	$43.44	$43.78
Productivity (*1,000 pounds dry weight per hour*)	5.6	5.2	5.1
Unit labor costs (*dollars per 1,000 pounds dry weight*)	$7.73	$8.37	$8.57

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

Table D-6

HFCS: U.S. producers' channels of distribution, 2012-14

Item	Calendar year		
	2012	2013	2014
	Share of quantity (*percent*)		
U.S. producers' commercial shipments to:			
Distributors	2.0	2.0	2.1
Grocery chains	1.0	1.0	1.0
Restaurants and restaurant chains	0.0	0.0	0.0
Industrial end users	97.0	97.0	96.9

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

Table D-7
HFCS: U.S. prices, 2012-14 and first quarter 2015

Date	Spot HFCS-42	Wholesale list HFCS-42	Wholesale list HFCS-55
	Price (*cents per pound, dry weight*)		
2012:			
1st quarter	24.47	32.92	36.20
2nd quarter	24.47	32.92	36.20
3rd quarter	24.47	32.92	36.20
4th quarter	24.47	32.92	36.20
Calendar year 2012	24.47	32.92	36.20
2013:			
1st quarter	28.70	36.44	39.45
2nd quarter	28.70	36.44	39.45
3rd quarter	28.70	36.44	39.45
4th quarter	28.70	34.12	37.31
Calendar year 2012	28.70	35.86	38.91
2014:			
1st quarter	22.08	29.80	32.71
2nd quarter	23.06	29.93	32.79
3rd quarter	23.06	29.93	32.79
4th quarter	23.35	30.16	33.01
Calendar year 2012	22.89	29.96	32.83
2015:			
1st quarter	26.58	32.75	35.39

Source: Compiled from USDA Sugar and Sweeteners Yearbook, table 9, retrieved on May 26, 2015 at http://www.ers.usda.gov/data-products/sugar-and-sweeteners-yearbook-tables.aspx.

Table D-8
HFCS: U.S. supply and use,[1] 2012-14

Item	Calendar year		
	2012	2013	2014
	Quantity (*1,000 short tons, dry weight*)		
U.S. production:			
HFCS-42	2,956	2,741	2,593
HFCS-55	6,148	5,842	5,925
Total production	9,104	8,583	8,518
U.S. imports	97	87	89
Total U.S. supply	9,200	8,670	8,606
U.S. shipments:			
HFCS-42	2,844	2,674	2,596
HFCS-55	4,639	4,570	4,670
Total U.S. shipments	7,483	7,244	7,266
U.S. exports	1,717	1,426	1,340

[1] Includes Puerto Rico.

Source: Compiled from USDA Sugar and Sweeteners Yearbook, table 30, retrieved on May 26, 2015 at http://www.ers.usda.gov/data-products/sugar-and-sweeteners-yearbook-tables.aspx.

Table D-9

HFCS: Results of operations of U.S. producers, fiscal years 2012-14

Item	Fiscal year		
	2012	2013	2014
	Quantity (*1,000 pounds dry weight*)		
Total net sales	19,355,771	18,616,020	17,854,109
	Value (*1,000 dollars*)		
Total net sales	3,515,960	3,573,626	2,840,752
Cost of goods sold.-- Raw materials	2,236,962	2,318,459	1,667,851
Direct labor	90,291	91,633	90,067
Other factory costs	663,308	691,529	681,304
Total COGS	2,990,561	3,101,621	2,439,222
Gross profit	525,399	472,005	401,530
SG&A expense	171,754	172,253	175,977
Operating income or (loss)	353,645	299,752	225,553
Other expense or (income), net	(1,073)	3	(292)
Net income or (loss)	354,718	299,749	225,845
Depreciation/amortization	74,423	68,532	67,515
Cash flow	429,141	368,281	293,360
	Ratio to net sales (*percent*)		
Cost of goods sold.-- Raw materials	63.6	64.9	58.7
Direct labor	2.6	2.6	3.2
Other factory costs	18.9	19.4	24.0
Average COGS	85.1	86.8	85.9
Gross profit	14.9	13.2	14.1
SG&A expense	4.9	4.8	6.2
Operating income or (loss)	10.1	8.4	7.9
Net income or (loss)	10.1	8.4	8.0
	Unit value (*dollars per pound dry weight*)		
Total net sales	0.18	0.19	0.16
Cost of goods sold.-- Raw materials	0.12	0.12	0.09
Direct labor	0.00	0.00	0.01
Other factory costs	0.03	0.04	0.04
Average COGS	0.15	0.17	0.14
Gross profit	0.03	0.03	0.02
SG&A expense	0.01	0.01	0.01
Operating income or (loss)	0.02	0.02	0.01
Net income or (loss)	0.02	0.02	0.01
	Number of firms reporting:		
Operating losses	***	***	***
Data	5	5	5

Note.—***.

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

Table D-10
HFCS: Results of operations of U.S. producers, by firm, 2012-14

Item	Fiscal year		
	2012	2013	2014
	Net sales quantity (*1,000 pounds dry weight*)		
Archer Daniels Midland Company	***	***	***
Cargill, Inc	***	***	***
Ingredion Incorporated	***	***	***
Roquette America, Inc.	***	***	***
Tate & Lyle Ingredients Americas LLC	***	***	***
Total	19,355,771	18,616,020	17,854,109
	Net sales value (*1,000 dollars*)		
Archer Daniels Midland Company	***	***	***
Cargill, Inc	***	***	***
Ingredion Incorporated	***	***	***
Roquette America, Inc.	***	***	***
Tate & Lyle Ingredients Americas LLC	***	***	***
Total	3,515,960	3,573,626	2,840,752
	COGS (*1,000 dollars*)		
Archer Daniels Midland Company	***	***	***
Cargill, Inc	***	***	***
Ingredion Incorporated	***	***	***
Roquette America, Inc.	***	***	***
Tate & Lyle Ingredients Americas LLC	***	***	***
Total	2,990,561	3,101,621	2,439,222
	Gross profit or (loss) (*1,000 dollars*)		
Archer Daniels Midland Company	***	***	***
Cargill, Inc	***	***	***
Ingredion Incorporated	***	***	***
Roquette America, Inc.	***	***	***
Tate & Lyle Ingredients Americas LLC	***	***	***
Total	525,399	472,005	401,530

Table continued on the next page.

Table D-10--*Continued*
HFCS: Results of operations of U.S. producers, by firm, 2012-14

Item	Fiscal year		
	2012	2013	2014
	SG&A expenses (*1,000 dollars*)		
Archer Daniels Midland Company	***	***	***
Cargill, Inc	***	***	***
Ingredion Incorporated	***	***	***
Roquette America, Inc.	***	***	***
Tate & Lyle Ingredients Americas LLC	***	***	***
Total	171,754	172,253	175,977
	Operating income or (loss) (*1,000 dollars*)		
Archer Daniels Midland Company	***	***	***
Cargill, Inc	***	***	***
Ingredion Incorporated	***	***	***
Roquette America, Inc.	***	***	***
Tate & Lyle Ingredients Americas LLC	***	***	***
Total	353,645	299,752	225,553
	COGS as a ratio to sales (*percent*)		
Archer Daniels Midland Company	***	***	***
Cargill, Inc	***	***	***
Ingredion Incorporated	***	***	***
Roquette America, Inc.	***	***	***
Tate & Lyle Ingredients Americas LLC	***	***	***
Average	85.1	86.8	85.9
	Gross profit as a ratio to sales (*percent*)		
Archer Daniels Midland Company	***	***	***
Cargill, Inc	***	***	***
Ingredion Incorporated	***	***	***
Roquette America, Inc.	***	***	***
Tate & Lyle Ingredients Americas LLC	***	***	***
Average	14.9	13.2	14.1

Table continued on the next page.

Table D-10--*Continued*
HFCS: Results of operations of U.S. producers, by firm, 2012-14

Item	Fiscal year		
	2012	2013	2014
	SG&A expenses as a ratio to sales (*percent*)		
Archer Daniels Midland Company	***	***	***
Cargill, Inc	***	***	***
Ingredion Incorporated	***	***	***
Roquette America, Inc.	***	***	***
Tate & Lyle Ingredients Americas LLC	***	***	***
Average	4.9	4.8	6.2
Operating Income:	**Operating income or (loss) as a ratio to sales (*percent*)**		
Archer Daniels Midland Company	***	***	***
Cargill, Inc	***	***	***
Ingredion Incorporated	***	***	***
Roquette America, Inc.	***	***	***
Tate & Lyle Ingredients Americas LLC	***	***	***
Average	10.1	8.4	7.9
	Net sales unit value (*dollars per pound dry weight*)		
Archer Daniels Midland Company	***	***	***
Cargill, Inc	***	***	***
Ingredion Incorporated	***	***	***
Roquette America, Inc.	***	***	***
Tate & Lyle Ingredients Americas LLC	***	***	***
Average	0.18	0.19	0.16
	COGS per unit (*dollars per pound dry weight*)		
Archer Daniels Midland Company	***	***	***
Cargill, Inc	***	***	***
Ingredion Incorporated	***	***	***
Roquette America, Inc.	***	***	***
Tate & Lyle Ingredients Americas LLC	***	***	***
Average	0.15	0.17	0.14

Table continued on the next page.

Table D-10--*Continued*
HFCS: Results of operations of U.S. producers, by firm, 2012-14

Item	Fiscal year		
	2012	2013	2014
	Gross profit or (loss) per unit (*dollars per pound dry weight*)		
Archer Daniels Midland Company	***	***	***
Cargill, Inc	***	***	***
Ingredion Incorporated	***	***	***
Roquette America, Inc.	***	***	***
Tate & Lyle Ingredients Americas LLC	***	***	***
Average	0.03	0.03	0.02
	SG&A expense per unit (*dollars per pound dry weight*)		
Archer Daniels Midland Company	***	***	***
Cargill, Inc	***	***	***
Ingredion Incorporated	***	***	***
Roquette America, Inc.	***	***	***
Tate & Lyle Ingredients Americas LLC	***	***	***
Average	0.01	0.01	0.01
	Operating income or (loss) per unit (*dollars per pound dry weight*)		
Archer Daniels Midland Company	***	***	***
Cargill, Inc	***	***	***
Ingredion Incorporated	***	***	***
Roquette America, Inc.	***	***	***
Tate & Lyle Ingredients Americas LLC	***	***	***
Average	0.02	0.02	0.01

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

Table D-11
HFCS: Variance analysis for U.S. producers, fiscal years 2012-14

Item	Between fiscal years		
	2012-14	2012-13	2013-14
	Value (*1,000 dollars*)		
Net sales:			
Price variance	(402,432)	192,041	(586,614)
Volume variance	(272,776)	(134,375)	(146,260)
Net sales variance	(675,208)	57,666	(732,874)
Cost of sales:			
Cost/expense variance	319,325	(225,355)	535,457
Volume variance	232,014	114,295	126,942
Total cost of sales variance	551,339	(111,060)	662,399
Gross profit variance	(123,869)	(53,394)	(70,475)
SG&A expenses:			
Cost/expense variance	(17,548)	(7,063)	(10,774)
Volume variance	13,325	6,564	7,050
Total SG&A expense variance	(4,223)	(499)	(3,724)
Operating income variance	(128,092)	(53,893)	(74,199)
Summarized as:			
Price variance	(402,432)	192,041	(586,614)
Net cost/expense variance	301,777	(232,418)	524,683
Net volume variance	(27,437)	(13,516)	(12,268)

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

Table D-12
HFCS: Capital expenditures and research and development expenses for U.S. producers, by firm, 2012-14

Item	Fiscal year		
	2012	2013	2014
	Capital expenditures (*1,000 dollars*)		
Archer Daniels Midland Company	***	***	***
Cargill, Inc	***	***	***
Ingredion Incorporated	***	***	***
Roquette America, Inc.	***	***	***
Tate & Lyle Ingredients Americas LLC	***	***	***
Total	71,482	62,615	130,753
	R&D expenses (*1,000 dollars*)		
Archer Daniels Midland Company	***	***	***
Cargill, Inc	***	***	***
Ingredion Incorporated	***	***	***
Roquette America, Inc.	***	***	***
Tate & Lyle Ingredients Americas LLC	***	***	***
Total	1,315	1,414	1,628

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

Table D-13
HFCS: Value of assets used in production, warehousing, and sales, and ratio of operating income or (loss) to total assets for U.S. producers, by firm, 2012-14

Firm	Fiscal years		
	2012	2013	2014
	Total net assets (*1,000 dollars*)		
Archer Daniels Midland Company	***	***	***
Cargill, Inc	***	***	***
Ingredion Incorporated	***	***	***
Roquette America, Inc.	***	***	***
Tate & Lyle Ingredients Americas LLC	***	***	***
Total	1,521,217	1,490,202	1,455,212
	Ratio of operating income or (loss) to total net assets (*percent*)		
Archer Daniels Midland Company	***	***	***
Cargill, Inc	***	***	***
Ingredion Incorporated	***	***	***
Roquette America, Inc.	***	***	***
Tate & Lyle Ingredients Americas LLC	***	***	***
Average	23.2	20.1	15.5

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

APPENDIX E

RESULTS OF OPERATIONS OF MILLERS, PROCESSORS, AND REFINERS, BY FIRM

Table E-1
Sugar: Results of operations of stand-alone U.S. millers, by firm, crop years 2011/12 through 2013/14

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Table E-2
Sugar: Results of operations of U.S. processors and refiners, by firm, crop years 2011/12 through 2013/14

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APPENDIX F

CAPITAL AND INVESTMENT

The Commission requested U. S. producers of sugar to describe any actual or potential negative effects of imports of sugar from Mexico on their firms' growth, investment, ability to raise capital, development and production efforts, or the scale of capital investments. The comments of responding sugar millers, processors, and refiners are provided first, followed by those of responding growers.

U. S. MILLERS, PROCESSORS, AND REFINERS

Actual injury

U. S. millers', refiners', and processors' responses to the Commission's question on actual negative effects of imports are shown as follows:

Table F-1
Sugar: U. S. millers, refiners, and processors reporting actual negative effects of imports

Reporting	Firms reporting (number)
Cancellation, postponement, or rejection of expansion project	12
Denial or rejection of investment proposal	4
Reduction in size of capital investments	13
Rejection of bank loans	3
Lowering of credit rating	2
Problem related to the issue of stocks or bonds	1
Other	16
Reporting at least one item	23

Note. —Two firms stated "no" to this question.

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

Table F-2 presents these firms' narrative statements on the actual negative effects of imports.

Table F-2
Sugar: U. S. millers', refiners', and processors' narrative discussion of actual negative effects of imports

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Anticipated negative effects of imports

Table F-3 provides the narrative responses of millers, refiners, and processors with regard to the anticipated negative effects of imports.

Table F-3
Sugar: U. S. millers', refiners', and processors' narrative discussion of anticipated negative effects of imports

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U. S. GROWERS

Actual injury

Growers' responses to the Commission's question on actual negative effects of imports are shown as follows:

Table F-4
Sugar: U. S. growers' responses to actual negative effects of imports

Reporting	Firms reporting (number)		
	All growers	Sugar beet growers	Sugar cane growers
Cancellations, postponement, or rejection of expansion project	58	46	12
Denial or rejection of investment proposal	15	13	2
Reduction in size of capital investments	57	44	13
Rejection of bank loans	6	5	1
Lowering of credit rating	13	12	1
Problem related to the issue of stocks or bonds	3	2	1
Other	39	19	20
Reporting at least one item	84	54	30

Note. —One firm answered "no" to this question.

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

Growers' narrative statements on the actual negative effects of imports are shown as follows:

Table F-5
Sugar: U. S. growers' narrative statements on actual negative effects of imports

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Anticipated negative effects of imports

Growers' narrative statements on the anticipated negative effects of imports are shown as follows:

Table F-6
Sugar: U. S. growers' narrative discussion of anticipated negative effects of imports

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